Faculty of Mass Media Communication
University of Ss. Cyril and Methodius
in Trnava, Slovakia

MARKETING IDENTITY
2021

Marketing Identity: New changes, new challenges

Ľudmila Čábyová
Zuzana Bezáková
Adam Madleňák
(eds.)

FMK
Fakulta masmediálnej komunikácie
Faculty of Mass Media Communication

NEW CHANGES
NEW CHALLENGES

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Conference Proceedings
from the International Scientific Conference
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MARKETING IDENTITY: NEW CHANGES, NEW CHALLENGES

International Scientific Conference, 9th November 2021
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The international scientific conference held annually by the Faculty of Mass Media Communication, University of Ss. Cyril and Methodius in Trnava has become a traditional event supported and attended by renowned mass media communication theorists and researchers as well as by media and marketing professionals.

The aim of the conference is to discuss the latest knowledge and trends in the field of marketing communication and to create a space for sharing and disseminating up-to-date scientific knowledge and practical experience in the fields of marketing, media studies and communication sciences while outlining the importance of innovations and supporting the critical dialogue between scholars affiliated with academic institutions and professionals with practical experience. The annual international conference Marketing Identity (formerly called New Trends in Marketing and re-named in 2013), which was held for the seventeenth time, but due to pandemic situation for the first time online and offline, is organised by the Faculty of Mass Media Communication UCM in Trnava. The conference took place on 9th November 2021 in Trnava. It was attended by nearly 100 participants coming from 6 countries who were affiliated with more than 20 different academic and research institutions and professional organisations.

The main theme of the conference was concisely expressed by its subtitle: New changes, new challenges. Marketing Identity has always tried to react to the latest trends in marketing communication and media production.

More information on the Marketing Identity conference, programme schedules, deadlines and photo galleries related to previous years are available at:

Conference website:
https://marketingidentity.fmk.sk

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https://fmk.sk

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Preface

Faculty of Mass Media Communication UCM in Trnava annually organizes the conference Marketing Identity. The conference aspires to respond to current topics in the field of marketing and marketing communication. The world of marketing has changed in the last two years, and this is the reason why the conference topic bears the subtitle “New Changes, New Challenges”.

We speak about the period before and after the pandemic. The pandemic itself has affected many areas of our lives. Our view of the healthcare system, school system, culture, and all other areas of our lives has changed. We have changed as a society, but also as individuals. Our shopping behaviour has also been affected by the pandemic. We were forced to give up on brick-and-mortar stores and move to online stores, and our shopping behaviour began to change.

Also, companies have had to adapt to this situation. They have been aware of the changes brought by the pandemic, but many of them have been unable to respond to these changes. Others, on the contrary, have experienced growth. People have found new hobbies, started to do sports, and taken care of their households. If companies want to respond to customer changes, they have to adapt to them as well as to adapt their marketing communication to these new changes.

It is this conference proceeding that deals with the new challenges and changes that have occurred in the field of marketing communication. Colleagues were looking for answers to what the pandemic brought in the field of marketing communication, but also to what can be expected in the future.

Our conference has also been affected by these changes. In 2020, the conference had to shift from the offline to the online world. However, this presented us with a challenge that came thanks to the changes. The challenge was to organize both an online and offline conference during the pandemic in accordance with the rules. We managed to interconnect the two worlds and our conference took a hybrid form. This is also proof that the world is constantly changing and all we can do is to adapt to it because new changes are new challenges.

Conference Organizing Team

CHANGES IN ONLINE GROCERY SHOPPING: THE NEW NORMAL FOR GENERATION Z?

Radka Bauerová – Lucie Vavrušková

Abstract
The acceleration of online grocery shopping in recent years shows the widening acceptance of this way of shopping for grocery. Despite the fact that millennials are among the largest customer segment in this area, companies should not only focus on them, but also start strategically targeting the emerging generation of shoppers known as Generation Z. Therefore, the aim of this paper is to explore the potential of online grocery shopping among Generation Z and identify the most significant factors influencing the online retailer choice of these potential customers. To obtain primary data, an experiment was conducted in which 66 Generation Z individuals participated. It was found that as many as 77.2% of the experiment participants would purchase groceries online for their household in the future. The three most important decision factors influencing the implementation of online grocery shopping within Generation Z are price, WOM (family, friends and acquaintances) and service quality. Based on our research, it can be said that the potential of Generation Z in online grocery shopping is high and companies should start paying attention to this customer segment in the near future. Moreover, it is important that companies tailor their offerings to the wishes of this researched generation, and of course not only in terms of the identified decisive factors.

Key words:
Consumer Behaviour. Generation Z. Grocery shopping. Retailing.

Introduction

Customer attitudes towards online grocery shopping have changed significantly over the last five years. Online grocery shopping become increasingly important as shopping for products in all categories has expanded, but it has even accelerated more recently in the wake of the effects of the covid-19 pandemic. Customers have increasingly turned to online as a safer environment where, even at the beginning of the pandemic, there were no shortages of staple foods as there were in traditional retail chains. Research from France, Germany, Italy, Spain and the UK showed that during the pandemic, around 15% of consumers surveyed shopped for grocery on websites they had never used before, and even more than 50% said they intended to continue shopping on the newly discovered sites for at least part of their grocery needs.[1] Online grocery shopping represents a very small part of the overall grocery retail market, but it is one of the fastest growing segments, with an estimated $ 187.7 billion in U.S. dollars by 2024 alone, double the amount of sales by 2020.[2] Today, it is now commonplace that online grocery shopping is not only the domain of millennials, but Baby Boomers shoppers have also taken a liking to this method. Generation Z has been a neglected generation in this field so far, and has not formed a large customer group. However, this generation is the new emerging generation of customers in the industry that would be good to target and understand how service offerings can be tailored to enable companies to meet their specific requirements. Therefore, the research question is to investigate how Generation Z perceives online grocery shopping and what factors influence potential customers of this generation when choosing an e-shop. Thus, the aim of this paper is to explore the potential of online grocery shopping among Generation Z and to identify the most significant factors influencing these potential customers' choice of online retailer.

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[1] *McKinsey&Company*. [online]. [2021-15-11]. Available at: <https://www.mckinsey.com/industries/retail/our-insights/how-european-shoppers-will-buy-groceries-in-the-next-normal>.
[2] *Statista.* [online]. [2021-15-11]. Available at: <https://www.statista.com/statistics/293707/us-online-grocery-sales/>.

The paper is structured into four chapters. First, the evolution of online grocery shopping in the pandemic era is introduced followed by the Generation Z perspective on this situation. Then, the research conducted and its methods are presented. In the next chapter, the most significant findings of the survey are presented graphically, which are then discussed and summarised in the last chapter.

1 Developments and changes in online grocery shopping during the pandemic

The development of online grocery shopping shows that it is a new way to develop the agri-food sector to maintain classic standards and targets. There is a new Food for Earth toolkit that has been developed in Italy, which focuses on the new agri-food sector and especially on online shopping. Many consumers, too, have welcomed the fact that online shopping saves them a lot of time when buying grocery.[3] During the covid-19 pandemic last year and this year, it was harder for customers to get grocery than in the past. During the pandemic, public transportation, store hours, or limited access to business units were limited. Due to these steps, some countries, such as the USA, decided that citizens could focus on buying grocery online.[4] Many customers have found that online grocery shopping can also serve to protect public health, meaning that it avoids the movement and turnover of customers who would meet in the business unit and could spread the disease covid-19. For this reason, consumers choose to shop for groceries in an online environment. Consumer awareness of the extent of the pandemic continues to grow and online grocery shopping is becoming increasingly information seeking. Large scale disruptions in grocery supply are becoming more frequent and it is evident that because of this, customers have started to buy non-perishable food items to stock up (pasta, rice etc.) which has led and is leading to a negative impact on supply chains in retail units and customers are looking elsewhere for grocery.[5]

The online grocery shopping industry is at a unique stage in its long-term evolution. Many people did not anticipate that the growth of this trend would be so direct and rapid, for some retailers this move is a dominant challenge they will have to deal with. Prior to the covid-19 pandemic, online purchases were typically less than 5% of total grocery shopping opportunities.[6,7,8] In Korea, for example, consumers chose to make impersonal online purchases much earlier. The pandemic of impersonal shopping has sped up the world a bit.

3 ALAIMO, L. S., FIORE, M., GALATI, A.: How the Covid-19 Pandemic Is Changing Online Food Shopping Human Behaviour in Italy. In *MDPI Open Access Journals*, 2020, Vol. 12, No. 22, p. 9594. [online]. [2021-09-07]. Available at: <https://doi.org/10.3390/su12229594>.

4 HUNG-HAO, CH., MEYERHOEFER, CH. D.: COVID-19 and the Demand for Online Food Shopping Services: Empirical Evidence from Taiwan. In *American Journal of Agricultural Economics*, 2020, Vol. 103, No. 2, p. 448. [online]. [2021-09-01]. Available at: <https://onlinelibrary.wiley.com/doi/full/10.1111/ajae.12170>.

5 IVANOV, D.: Predicting the impacts of epidemic outbreaks on global supply chains: A simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. Transportation Research Part E: Logistics and Transportation Review. In *Journal of Business Research,* 2020, Vol. 116. [online]. [2021-09-02]. Available at: <https://www.sciencedirect.com/science/article/pii/S0148296320303209>.

6 *The Future of Grocery*. [online]. [2021-09-03]. Available at: <https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/nielsen-global-e-commerce-new-retail-report-april-2015.pdf>.

7 *China's Online Grocery Market to More than Double by 2020.* [online]. [2021-09-21]. Available at: <https://www.igd.com/articles/article-viewer/t/igd-chinas-online-grocery-market-to-more-than-double-by-2020/i/16582#:~:text=Last%20year%2C%203.1%25%20of%20all,(CAGR)%20of%2031.8%25>.

8 REDMAN, R.: *Online Grocery Sales to Grow 40 % in 2020*. [online]. [2021-09-03]. Available at: <https://www.supermarketnews.com/online-retail/online-grocery-sales-grow-40-2020>.

This acceleration led to impersonal shopping even for fresh food, which consumers wanted to see in the first place. Lately, consumers do not need this and it is not as important to them.[9] Thanks to the pandemic, many consumers have also realized that they are wasting their grocery. Many of them have developed a positive attitude towards buying grocery, via the internet, and have told their friends who have realised that they are doing it too because they are buying too much. This realization came about because of the covid-19 crisis, there was reduced grocery availability, restricted movement or loss of funds. Therefore, people are thinking about what to buy and for how much and not having to go from store to store.[10] Online shopping has not only positive aspects, but also negative ones. For example, the possibility of reduced quality of goods, or on some products can not be applied discounts or promotions.[11]

1.1 Online grocery shopping from a Generation Z perspective and the use of skippable ads in this context

Generation Z is specific in that it has started to use information technology (computers, internet, or smartphones) at a very young age. These customers are more likely to use and demand the use of digital technology and social media. In particular, they use smartphones to find the grocery they want for their homes, which have become part of their lives.[12] The presence of the internet among this generation may increase consumer trust in retailers.[13] In recent times, there has been an increased demand for grocery delivered directly to consumers' doorsteps. This is mainly due to the covid-19 pandemic.[14] It was found that Generation Z students clearly used online grocery shopping during the pandemic. Many of them did not return to the traditional brick-and-mortar store and stayed online. However, because of these purchases, the generation has become more thoughtful about what they buy and how much they buy it for. In fact, their financial resources have been kept to a minimum.[15] Skipping ads can also be used to encourage online grocery shopping among Generation Z. It has been confirmed that skippable ads do not have a negative impact on the customer and the customer

[9] LEE, S. H., KWAK, M. K., CHA, S. S.: Consumers´Choice for fresh food at online shopping in the Time od Covid19. In *Korea Open Access Journals*, 2020, Vol. 18, No. 9, p. 46. [online]. [2021-09-07]. Available at: <https://doi.org/10.15722/jds.18.9.202009.45>.

[10] SARRA, J., HANEN, B. I., DOGGUI, D., DEBBABI, H.: COVID-19 virus outbreak lockdown: What impacts on household food wastage? In *Springer Link*, 2020, Vol. 22, p. 3940. [online]. [2021-09-02]. Available at: <https://link.springer.com/article/10.1007/s10668-020-00740-y#Abs1>.

[11] LEE, S-H., KWAK, M-K., CHA, S-S.: Consumers´Choice for fresh food at online shopping in the Time od Covid19. In *Korea Open Access Journals*, 2020, Vol. 18, No. 9, p. 46. [online]. [2021-09-07]. Available at: <https://doi.org/10.15722/jds.18.9.202009.45>.

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[13] VIEIRA, J., FRADE, R., ASCENSO, I., PRADES, MARTINHO, F.: Generation Z and Key-Factors on E-Commerce: A study on the Portuguese Tourim Sector. Administratice Sciences. In *MDPI Open Access Journals*, 2020, Vol. 10, No. 4, p. 103. [online]. [2021-09-03]. Available at: <https://www.mdpi.com/2076-3387/10/4/103>.

[14] ROGGEVEEN, A. L., SETHURAMAN, R.: How the Covid-19 pandemic may change the world of Retailing. Journal of Retailing. In *Journal of Retailing*, 2020, Vol. 96, No. 2, p. 169. [online]. [2021-09-03]. Available at: <https://www.sciencedirect.com/journal/journal-of-retailing/vol/96/issue/2>.

[15] ASPITMAN, A., KARACSONYI, B., UTHMAN, D.: *Changes in online shopping activities of Generation Z students,* p. 57. [online]. [2021-09-07]. Available at: <https://www.diva-portal.org/smash/get/diva2:1559844/FULLTEXT01.pdf>.

realises that the product is interesting to him.[16] Skip-able video ads alone work far better for Generation Z than other forms of advertising. If an ad has the option to skip for a few seconds, the brand and message in the ad will be remembered by the viewer just as well as watching the entire ad, which is not skippable.[17] The shopping generation itself is very much escapist in the online environment, meaning that young people are putting themselves under more stress and pressure in normal life. This makes Generation Z more likely to seek out the virtual world to a more stress-free traditional life.[18]

2 Methods

In the survey, the type of advertising was selected as one of the factors influencing the decision to choose a retailer. Therefore, an experiment was conducted in which participants viewed advertisements for selected retailers offering online grocery shopping. The variable in the experiment was the type of advertisement, where the effect of the untranslatable advertisement on recall and subsequent choice of the retailer from which participants would purchase groceries was examined. Given the research objective, this experiment was supplemented with two questionnaires. The first questionnaire focused on retailers' knowledge prior to viewing the ads and investigated the factors that participants thought influenced them in their decision to choose a particular e-retailer. The second questionnaire tracked the influence of having seen the advertisements on participants' subsequent choice of retailer from which they would purchase groceries online. The experiment was conducted using software capturing the participants' viewing of the advertisements so that they would feel that they were not being observed while watching the advertisements. A total of 66 students of the Silesian University, School of Business Administration in Karvina, aged between 20 and 25, participated in the experiment. The experiment investigated TOP 3 e-shops offering online grocery on the Czech market. At the beginning of the survey, participants were asked whether they had brand awareness of these e-shops. The highest brand awareness was found for the Tesco e-shop, which operates as a hybrid retailing chain and therefore the participants already know this retailer as a brick-and-mortar store. Every second participant is also familiar with the Rohlik e-shop, which is the largest pure e-tailer in this sector on the Czech market. The lowest brand awareness was recorded for the e-shop Košík, which is the second largest pure e-tailer. The individual results are shown in Table 1.

Table 1: Brand awareness

Age	Tesco	Rohlík	Košík
20	88.9%	55.6%	33.3%
21	100.0%	58.1%	35.5%
22	100.0%	62.5%	12.5%
23	100.0%	63.6%	18.2%
24	100.0%	20.0%	0.0%

[16] CHAKRABORTY, S., BASU, S., RAY, S., SHARMA, M.: *Advertisement revenue management: Determining the optimal mix of skippable and non – skippadle ads for online video sharing platforms.* In *European Journal of Operational Research*, Vol. 292, No. 1, p. 213. [online]. [2021-09-21]. Available at: <https://www.sciencedirect.com/science/article/pii/S0377221720308882>.

[17] VROEGRIJK, M.: *Online video advertisements: How to bridge the gap between skippable and non-skippable.* [online]. [2021-09-21]. Available at: <https://www.dvj-insights.com/online-video-advertisements-how-to-bridge-the-gap-between-skippable-and-non-skippable/>.

[18] SZABO L.: *Attitudes and preference of Generation Z towards YouTube advertising formats.* [online]. [2021-09-21]. Available at: <https://essay.utwente.nl/81812/1/Szabo_BA_BMS.pdf>.

25	100.0%	50.0%	50.0%
Generation Z	98.5%	56.1%	27.3%

Source: Own processing.

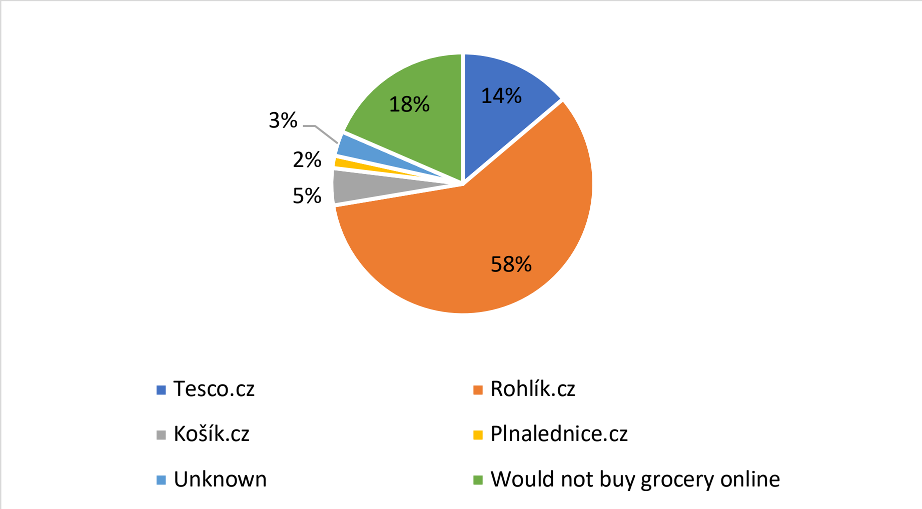
Participants were unaware of the variable being changed in the experiment. As part of the experimental design, participants were told that they would be watching a short film, which might also be preceded by advertisements for various e-shops. Two categories were created in the experiment with different types of advertisements. The first category only showed participants a skippable type of advertisement. In this category, participants were free to skip the ad and go straight to watching the movie. In the second category, participants did not have the option of skipping the ad and thus had to watch it to the end before the announced short film played.

The data analysis first investigated, using frequency analysis, which e-retailers the participants in the experiment would purchase grocery online from and what factors influence them to choose a particular e-shop. Next, the effect of skippability on the popularity and memorability of advertising was examined as another possible factor in the decision to choose a particular retailer. This influence was examined using a nonparametric test (Kruskal-Wallis test) given a small sample size. Because it is not appropriate to assess the assumption of normality in studies with small sample sizes and therefore nonparametric tests are the only choice and should be used when analysing studies with small sample sizes[19].

3 Results

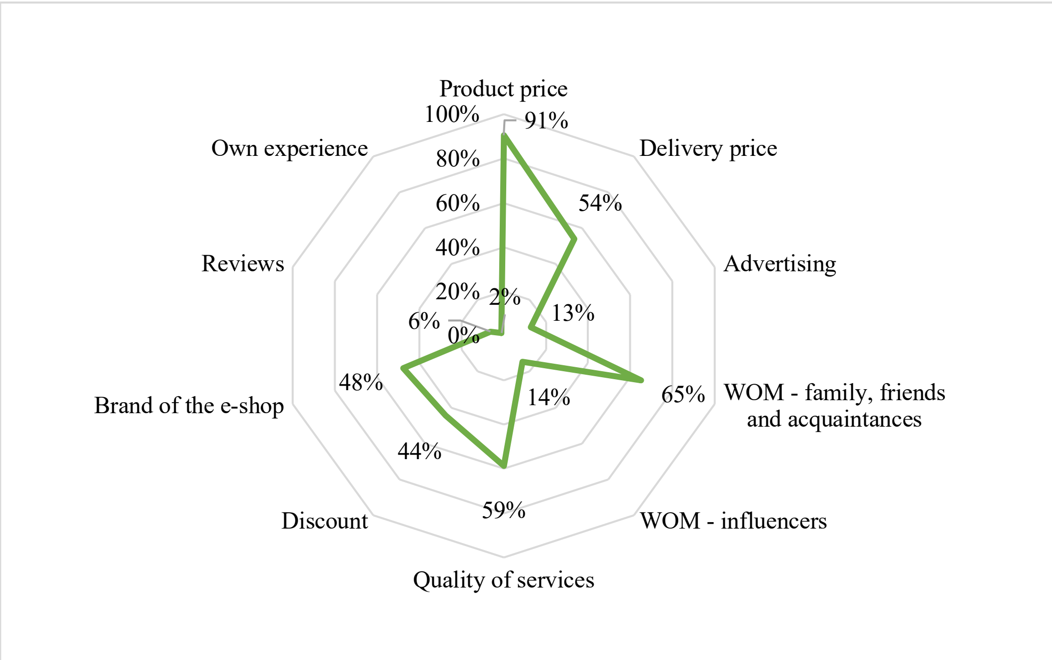
This chapter shows the results of an experiment conducted on online grocery shopping within Generation Z. Firstly, the potential of online grocery shopping among Generation Z itself was investigated. The results of the analysis show that only 18.2% of the participants in the experiment would not purchase grocery online for their household in the future. Furthermore, 4.5% of the participants responded that they did not know. Thus, overall, 77.2% of the Generation Z participants in the experiment would purchase grocery online for their household in the future. The specific selection of each retailer they would make this purchase from is shown in the following figure.

[19] DWIVEDI, A. K., MALLAWAARACHCHI, I., ALVARADO, L. A.: Analysis of small sample size studies using nonparametric bootstrap test with pooled resampling method. In *Statistics in Medicine*, 2017, Vol. 36, No. 14, p. 2187-2205. [online]. [2021-11-15]. Available at: <https://onlinelibrary. wiley.com/doi/epdf/10.1002/sim.7263>.



Picture 1: Selected e-shops for online grocery shopping
Source: Own processing.

The analysis of primary data has shown a great potential for the use of online grocery sales services within Generation Z. Subsequently, the factors that influence potential Generation Z customers in choosing a particular e-shop were examined. The revealed factors are shown in the following figure.



Picture 2: Factors influencing the choice of e-shop
Source: Own processing.

The most important factor is the price of the product, which is the decisive factor for 90.5% of the Generation Z participants. Since our research focuses on the area of fast moving consumer goods (food), we can say that this factor may not have a real significant influence on the choice of e-shop, since prices are very competitively priced for this range of goods. The second most important deciding factor is WOM in the case of family, friends and acquaintances. These are important for 65.1% of the participants in the experiment when choosing a retailer. The third most important factor is the quality of service, this is important for 58.7% of the experiment participants. Subsequently, the data analysis examined the effect of skippability on the popularity and memorability of an advertisement as another possible factor in the decision to choose a particular retailer. To determine whether skippable ad type has an effect on the popularity of shows, the Kolmogorov-Smirnov Test was first conducted. This test determines if the data is normally distributed. H0 in this case is: *the data has a normal distribution*. The results of this test are shown in the following table.

Table 2: Results of the Kolmogorov-Smirnov Test

	Type of ad	**Popularity of the Tesco.cz ad**	**Popularity of the Rohlík.cz ad**	**Popularity of the Košík.cz ad**
Kolmogorov-Smirnov Z	2.023	1.885	1.898	1.668
Asymp. Sig.	0.001	0.002	0.001	0.008

Source: Own processing.

Since the measured significance is less than 0.05, we reject H0. Therefore, it can be said that the data does not have a normal distribution and the Kruskal-Wallis Test can be used to analyze this data. H0 in this case is: *the popularity of an ad is not affected by the type (skippable/non-skippable) of the ad*. The results of this test are shown in Table 3.

Table 3: Results of the Kruskal-Wallis Test

	Popularity of the Tesco.cz ad	**Popularity of the Rohlík.cz ad**	**Popularity of the Košík.cz ad**
Chi-Square	0.902	1.474	1.089
Df	2	2	2
Asymp.Sig.	0.637	0.479	0.580

Source: Own processing.

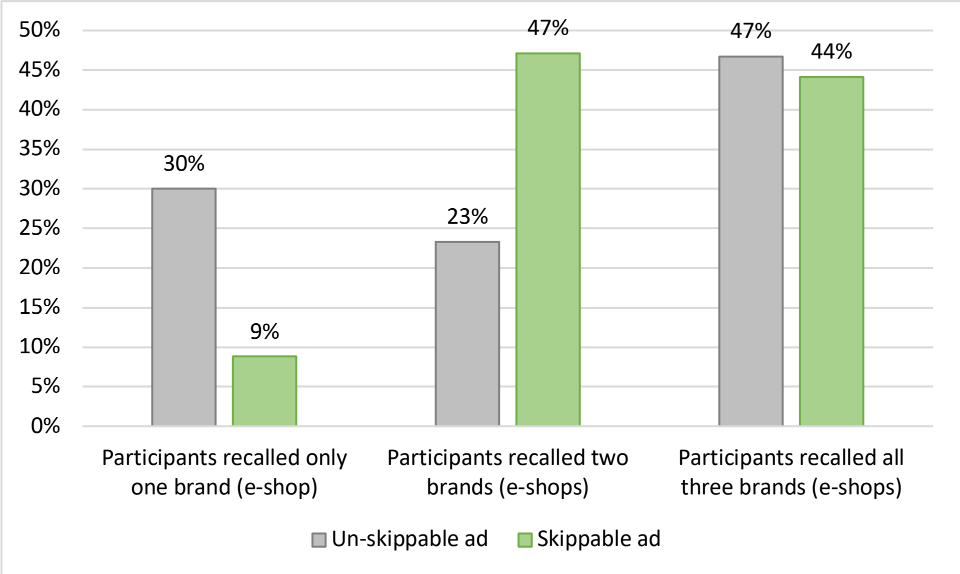
Based on the analysis of the results, the null hypothesis cannot be rejected. Therefore, the type of advertising (skippable/non-skippable) does not affect the popularity of online food retailers' advertising among Generation Z. The effect of skippability on the memorability of the ad was also investigated. In this case, H0 is formulated as: *the type of the displayed ad does not affect its memorability*. According to the test result shown in the following table, H0 can be rejected ($P<0.05$).

Table 4: Results of the Pearson Chi-Square Test

	Value	**df**	**Asymp.Sig.**
Pearson Chi-Square	6.331	2	0.042
Likelihood Ratio	6.541	2	0.038

Source: Own processing.

Thus, based on the results, the memorability of an ad depends on the type of ad that the research participant viewed. The following graph shows the specific effect of skippable and non-skippable ads on ad recall.



Picture 3: The impact of skippability on ad memorability
Source: Own processing.

The graph shows that when participants view a skippable ad, they show a higher recall of the e-shop brands that appeared in the ads. We see the largest differences when participants remembered only one brand. Almost one-third of respondents who viewed the unskippable ad were only able to recall one brand out of the three that appeared in the ads. In contrast, only 9% of participants who viewed the skippable ad could not recall more than one brand.

Conclusion

The paper focused on the changes in online grocery shopping, exploring whether this way of shopping could become the new norm for Generation Z. By analysing the survey results, the research question can be answered, which investigated how Generation Z perceives online grocery shopping and what factors influence potential customers of this generation when choosing an e-shop. The analysis of the survey results showed that there is a great potential for online grocery shopping within Generation Z. A total of 77.2% of survey participants indicated that they would shop for groceries online at a specific retailer in the future. Only 18.2% of participants would not purchase food in this way. This finding suggests the importance of online retailers being prepared for this new generation of shoppers. Moreover, it suggests that these 'digital nomads', as this customer segment is often referred to, are very positive about this way of buying grocery and can therefore be expected to use this way of shopping in their households in the future. Another part of the research focused on encouraging online grocery shopping among Generation Z through skippable ads. In doing so, it was hypothesized that the ability to skip an ad may have a positive effect on the ad's popularity ratings. However, this effect has not been demonstrated. Thus, it cannot be said that the skippability of an ad has an effect on the ad's popularity rating. An important finding, however, is that the ability to skip an ad has an effect on brand recall. In the case of skippable ad viewing, participants showed higher recall of the e-shop brands that appeared in the ad. Therefore, the use of skippable type of advertising is a good step to enhance brand memorability and equip it in the decision-making process of a potential Generation Z customer. This finding is in line with the theory of Chakraborty, Basu, Ray and Sharma[20] who argue that customers remember the product but not the final e-shop they saw the advertisement from the non-skippable ad. Also, Vroegrijk[21] reinforces the claim that skippable ads are more memorable to the viewer and lead to online purchases. Thus, it is important to use appropriate impulses and brand visibility in the first seconds of the ad to increase this brand memorability, which is positively influenced by the very type of ad chosen (skippable/non-skippable). For Generation Z, the choice of a particular retailer is primarily influenced by product price, delivery price, WOM among family, friends and acquaintances, the quality of the retailer's service and the retailer's brand. Further, under the separate factor of type of advertisement, it was found that there is no effect of skippability of advertisement on the rating of its popularity. However, an important finding is that the type of advertisement has an effect on brand recall. In the case of viewing a skippable ad, participants showed higher memorability of the e-shop brands that appeared in the ads. This finding is consistent with the theory by Chakraborty, Basu, Ray, and Sharma[22], who argue that from an unskippable ad, customers remember the product but not the final e-shop they saw the ad for. Vroegrijk[23], too, reinforces the claim that skippable ads are more memorable to the viewer and lead to online purchases. While online grocery shopping is still the domain of millennials, a new generation of Generation Z shoppers is already entering the market and companies should slowly start preparing to set up their processes for this new customer segment. Therefore, there is a need to strategically focus on the decision-making process of this new generation of customers and what factors and motives influence it. Only in this way can companies be prepared for the differences of this generation in the near future, which they can use to their advantage when preparing their offer for this particular customer segment. The limitations of the study are associated with examining a small sample size, which stems from the use of the experimental method. In addition, the research participants were students at the Silesian University, School of Business Administration in Karvina, and therefore the results cannot be generalized to the entire Generation Z consumer base. For this reason, the results of the study may be somewhat biased and can only be considered as a pilot survey of the problem. In the future, the authors plan to expand the study to a representative sample of Generation Z as the core population. Also, nuances between online shopping categories will be examined, not just within the online grocery shopping category.

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APPLICATION OF SOCIALLY RESPONSIBLE MARKETING IN COMPANIES IN SLOVAKIA

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Abstract
The world nowadays faces many challenges. Economic, environmental, and social ones. Not only individuals but also companies must respond accordingly. Corporate social responsibility is a solution not only to the economic well-being of the companies but also to the well-being of society. The deteriorating situation in the world also needs to be addressed by economic subjects, as government organizations are not able to solve problems on their own. Working together is more than desirable, and it is corporate social responsibility that can be the solution. Building a competitive advantage can be an incentive for companies to implement a given concept. The paper aims to present the results of a pilot project focused on applying socially responsible marketing in Slovakia in medium-sized companies.

Key words:
Business. Corporate Social Responsibility. Marketing Communication. Socially Responsible Marketing.

Introduction

Companies are part of the existence of various relationships and therefore, it is necessary for them to be interested in global events in society. Society is struggling with significant social disparities, the economic crisis and, at the same time, the deteriorating state of the environment. A socially responsible company represents opportunities to solve problems located in this field. The world is constantly moving forward and for this reason, this concept has been transformed into marketing in the form of socially responsible marketing.

1 Socially responsible marketing

A socially responsible company is the starting point for socially responsible marketing. The concept defines the company's involvement in the environmental, social, but also economic areas. A. Caroll was an important author in the field of socially responsible business. In 1979, he stated that: "*Corporate social responsibility includes the economic, legal, ethical and discretionary expectations that a company has in an organization at a given time*."[1] We can say that it should be a commitment to improving the well-being of the community through discretionary business practices and contributions from corporate resources.[2] We can talk about a socially responsible company if it is active in all areas, but it chooses specific activities itself.[3] Each company has a different focus, requirements from stakeholders and, based on that, approaches its activities within these activities. The company should be involved in all pillars, but it is often the case that it is more strongly involved in a certain area.

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These environmental, social and economic principles are later transferred to marketing within the framework of socially responsible marketing. The authors of Kotler et al. are described as such activities, which aim to support the solution of social problems, support the business itself, and fulfill obligations arising from this activity.[4] We can say that socially responsible marketing often involves a specific education and an effort to spread awareness of a particular problem concerning society while using marketing tools. However, we should not forget to focus the company on the interests of the whole society, mainly on the social, environmental, ethical, legal and cultural ones.[5] Corporate social responsibility and, also, socially responsible marketing are becoming increasingly important nowadays. The NYU Stern's Center for Sustainable Business research has provided data that references and confirms this particular concept's growing importance and potential. Between 2013 and 2018, 50% growth in consumer packaged goods was recorded for products sold as sustainable. Further research found that sales of such products increased by 23% compared to 2018, which represented $ 114 billion. In total, they reached 16.6% of the market.[6] We can therefore conclude that this concept and form of marketing has a progressive trend. In addition, it can be a real competitive advantage for a company while bringing economic benefits. When financial markets were collapsing, from February to March 2020 due to the Covid-19 pandemic, Professor Serefeim of Harvard was conducting research. He focused on companies facing the current bad economic situation and found that companies perceived as socially responsible had less negative stock returns than their competitors. In this research, they reached a sample of 3,000 companies.[7] Environmental, social and corporate governance (ESG) is increasingly in demand from investors. Some use them in the basic analysis and look only for those companies that show high numbers in these areas.[8] Thus, a company that operates within the concept of socially responsible business and triple bottom line theory can create an image of a sustainable and strong company that maintains good relationships with its stakeholders. This can also be a competitive advantage.

This concept is increasingly in demand by consumers themselves, forcing companies to consider implementing this concept. A company actively contributes to the well-being of the whole society, thus gaining customers willing to prioritize it over others. In addition, customers are willing to pay more for such products. This fact is supported by the research, where 66% of consumers said that they are willing to pay more for products and services if the company has implanted the principles of socially responsible strategy and stick to it. Also, in the research, the authors found that consumer product brands operating following these principles outperform those not following the principles of a socially responsible company.[9] We want to point out several studies confirming the importance of applying this concept and introducing socially responsible marketing.

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2 Aim

The aim of the presented primary research was to verify the issues that should be part of the research focused on the analysis of socially responsible marketing in medium-sized companies with a view to increasing competitiveness. With the given research we will get an initial view of the described issues and verify the questions in practice.

3 Methodology

The theoretical part of the paper was prepared while using foreign literature, ie monographs, scientific papers from journals and conferences, and Internet sources. All findings were adequately studied and selected based on relevance, as well as topicality. The paper is processed while using the inductive-deductive method, as well as concretization and description. The method of analysis and synthesis was also used.

To get the resources, we conducted a primary survey, in particular a quantitative one. We implemented the pilot project in the period from October to November 2020. The online inquiry method was used, resulting in faster collection and processing of the obtained data. The aim was to obtain a basic view of the researched issues in Slovakia and verify the questions' relevance for further processing and implementation of the research itself. 75 responses were obtained. We mainly addressed medium-sized companies that have implemented corporate social responsibility and therefore represent a higher chance of applying socially responsible marketing. Questionnaires were sent to the marketing department and management, so these employees should have information regarding socially responsible marketing. The main criterion in determining the medium-sized enterprise was the number of employees. We did not regulate the industry or geographical location at this stage - the pilot project.

Before the actual implementation, we set the hypotheses that the pilot project results should either confirm or reject.

1. *more than 50% of respondents perceive CSR as a competitive advantage.*
2. *more than 30% of respondents use social networks to communicate CSR activities.*
3. *more than 70% of respondents use the communication of CSR activities in their marketing communication.*

After collecting the questionnaires, selecting and sorting them was necessary, as they included subjects not meeting the criterion of size or implemented socially responsible company. In addition, after the check, it was necessary to discard several questionnaires that were not filled in correctly, i.e., contained errors. After this step, we got a sample of 33 respondents. Therefore these were the objects that were medium-sized and at the same time had the mentioned concept introduced. The obtained results from the primary research are processed using graphic methods.

4 Results

Our sample consisted mainly of industrial companies, specifically with a share of 24%. We also received responses from companies in agriculture, forestry, construction, freight and manufacturing services, and the answers were not from the companies active in education or culture.

The most significant number of medium-sized companies was from the Bratislava Region. The second most represented geographical location was the Žilina Region, and the Trnava region represented 3%.

In other questions, we focused on the individual pillars of a socially responsible company. The first pillar was the economic pillar, and we researched what activities and actions the company does and implements within this pillar.

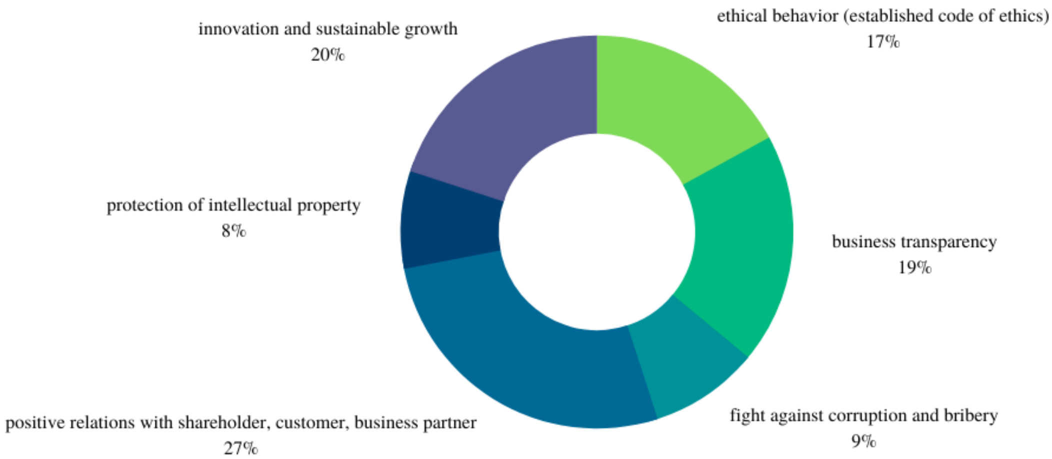

Chart 1: Economic pillar
Source: Own processing.

The most represented area was to create positive relationships with shareholders, customers and also business partners. Areas of innovation and sustainable growth were also represented by 20% of respondents on a large scale. The least represented share with 9% was fighting against corruption and bribery.

Another area was the protection of the environment and the steps that lead to development and protection. Companies have more ways to develop this pillar of a socially responsible company.

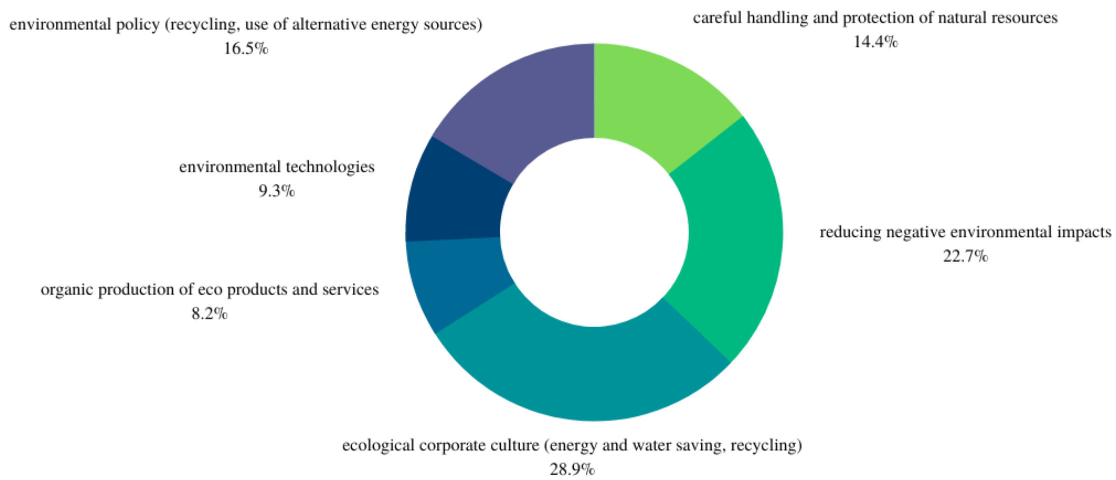

Chart 2: Environmental pillar
Source: Own processing.

29% of respondents stated that they are committed to ecological corporate culture, representing energy and water savings and recycling. On the contrary, the least represented area was the ecological production of eco-products and services. Therefore, we can observe that only a few companies focus on this area of environmentally corporate social responsibility in our sample. The research mentioned above proves that there is a rising trend in demand for sustainable products. For this reason, we conclude that there is a space for improvement and an opportunity for businesses to start focusing on this area as well.

An integral part of corporate social responsibility is the social pillar. In the questionnaire, we also focused on this area and tried to determine what steps companies are taking.

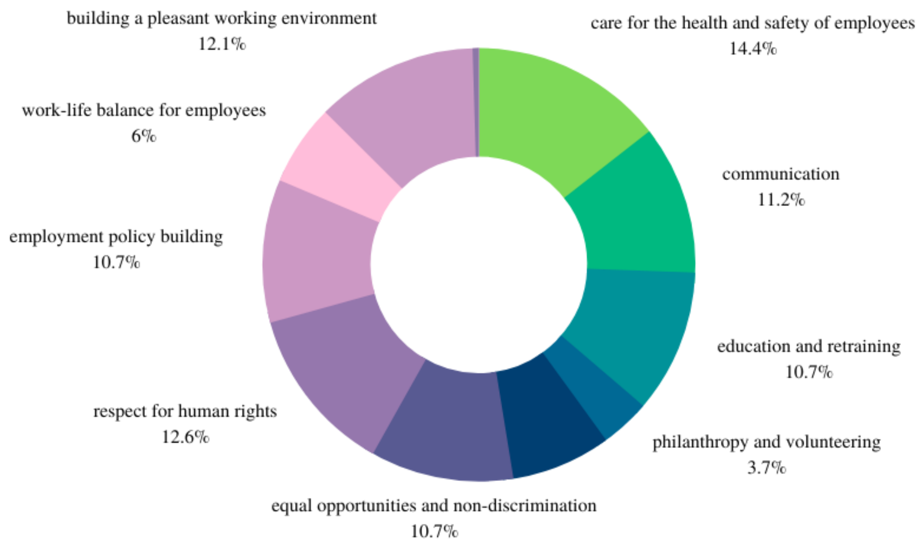

Chart 3: Social pillar
Source: Own processing.

The Health and safety of employees was the most represented area within this issue. Nowadays, the importance of work-life balance is often mentioned, i.e., the effort to balance work and personal life for employees. Unfortunately, this area was among the most represented. Only 6% of companies stated that they are trying to undertake activities building this balance.

A socially responsible company is a managerial concept, but we observe an inevitable overlap in this area within socially responsible marketing. Based on the above theoretical knowledge, we can assess that this is a significant area in business, with growing importance. It is essential that companies, on the one hand, have it implemented correctly in the whole business and all its components. On the other hand, companies must use their marketing potential and build a competitive advantage. For this reason, we also researched a pilot project in charge of activities within a socially responsible company.

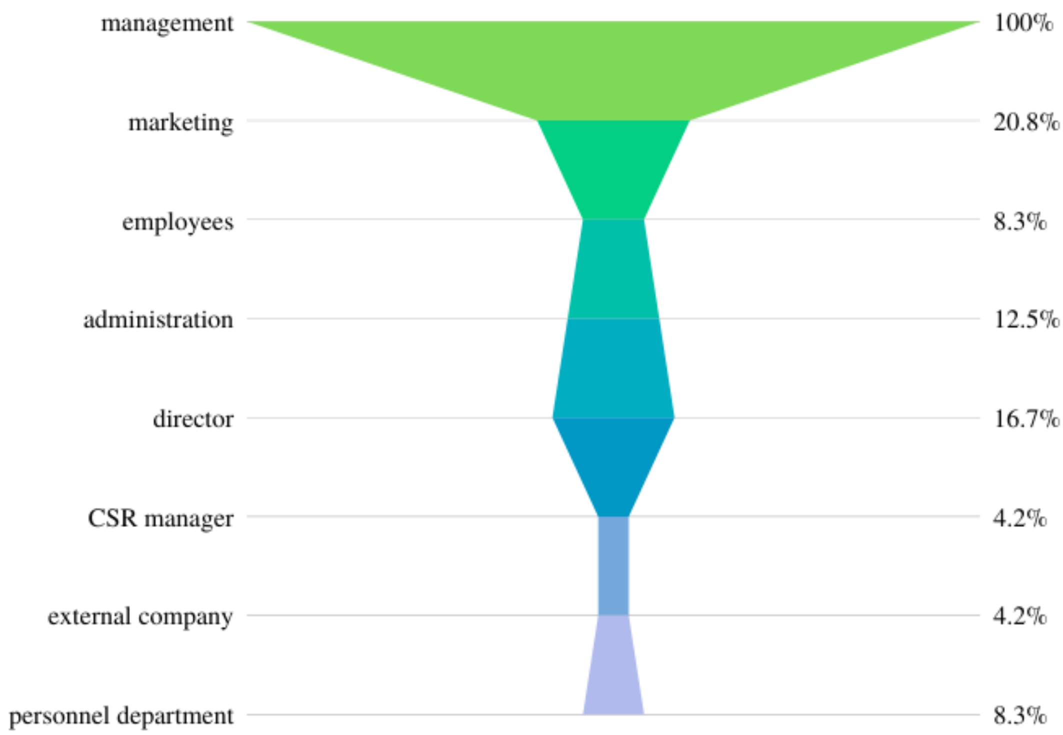

Chart 4: Implementation of activities within the company structure
Source: Own processing.

We conclude that 57% of respondents stated that activities within corporate social responsibility are carried out by management. We see that the marketing department was represented by only 12%, representing a significant disparity between the individual options. Therefore, it is possible that companies do not yet place such expectations in terms of marketing communication in these activities, which can be considered a real lack. As mentioned above, corporate social responsibility is a tool for building a competitive advantage. Considering this point of view, it is essential that this concept is understood as beneficial and implemented in marketing communication, i.e., the application of socially responsible marketing. We also researched whether companies communicate these activities as part of marketing communication. On the contrary, up to 76% of respondents stated that they do so, and 24% do not communicate any activities within this concept in marketing communication.

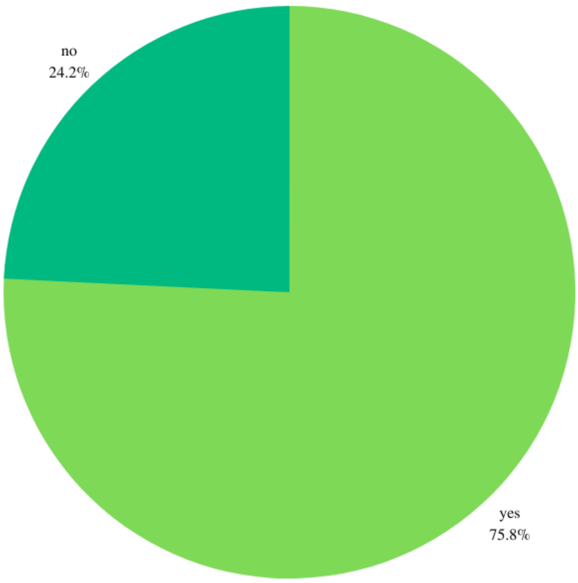

Chart 5: Communication of socially responsible activities within marketing communication
Source: Own processing.

The next question focused on the tools/media used to communicate activities within a corporate social responsibility. In this question, respondents had the opportunity to select more than one answer, and social media was the most used. In addition, prints were also strongly represented. Furthermore, we can see the influencer marketing or podcasts already active in this area, representing extensive marketing communication possibilities.

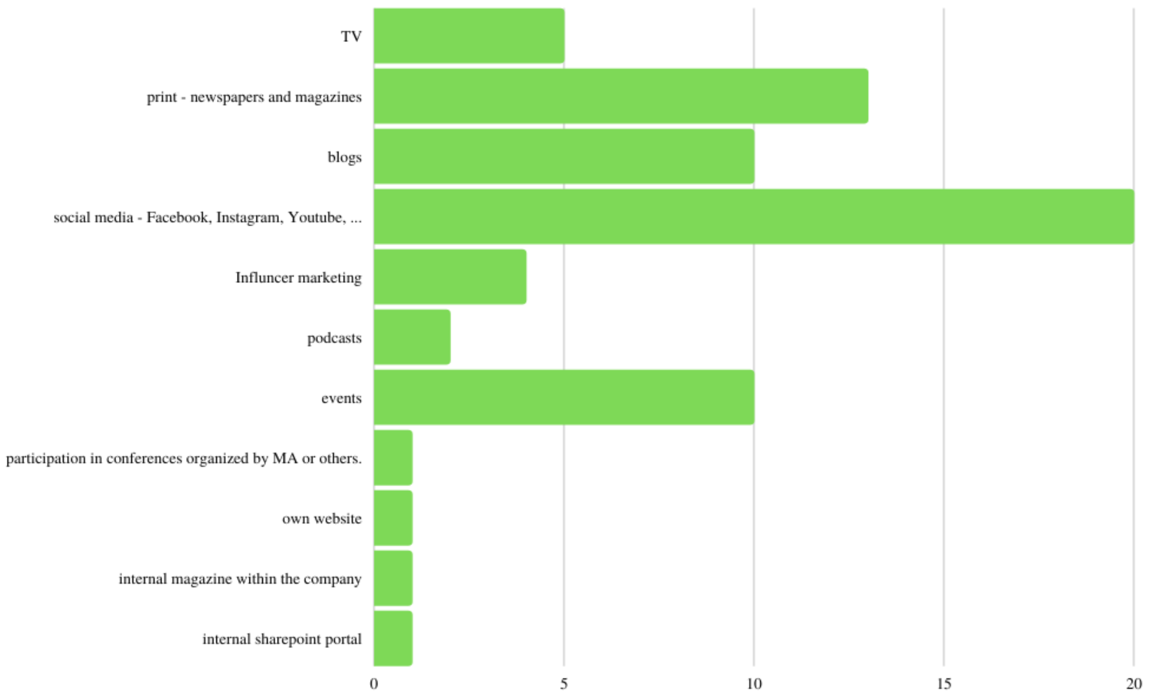

Chart 6: Tools used to communicate activities within the socially responsible company
Source: Own processing.

It was essential to find out how companies use the results from the activities. 70% of respondents stated that they use them further as a basis for other activities, and the rest of the respondents do not use them. We were also interested in how they specifically use the results of the activities. The graph shows that almost half of the respondents use them for further activities, which is very positive news. The possibility of social networks and annual reports were significantly represented as well. Here, too, it was possible to indicate option „others“.

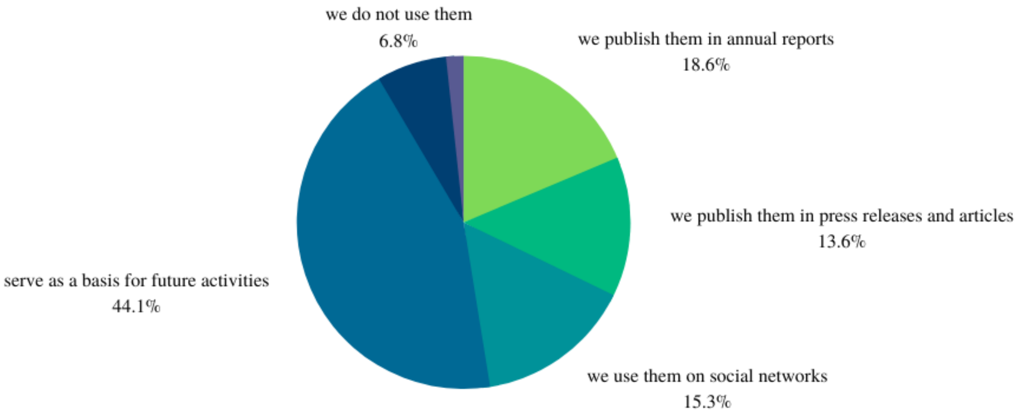

Chart 7: Work with results from activities within the socially responsible company
Source: Own processing.

Another question concerns the profit that a corporate social responsibility brings to a company. As many as 87% of respondents stated that they perceive a certain profit from applying this concept.

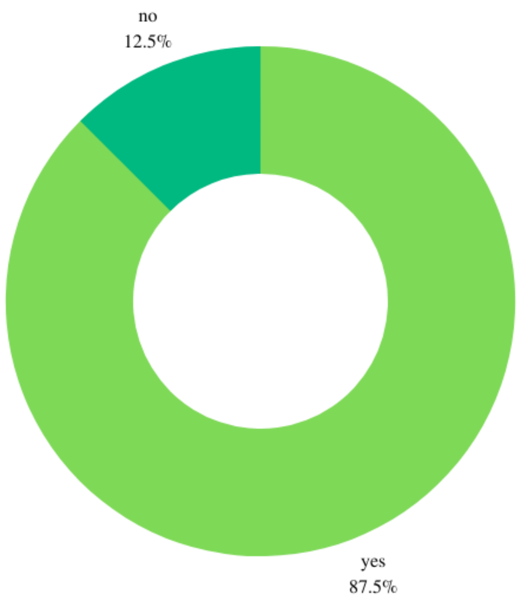

Chart 8: Perceived profit from the application of the conception
Source: Own processing.

We developed the question above and asked specifically how they perceive or how the non-financial profit from corporate social responsibility manifests itself in their company. Exactly half of the respondents stated that corporate social responsibility helps them create a positive image. Another option represented was to increase the attractiveness of the company and subsequently positively WOM.

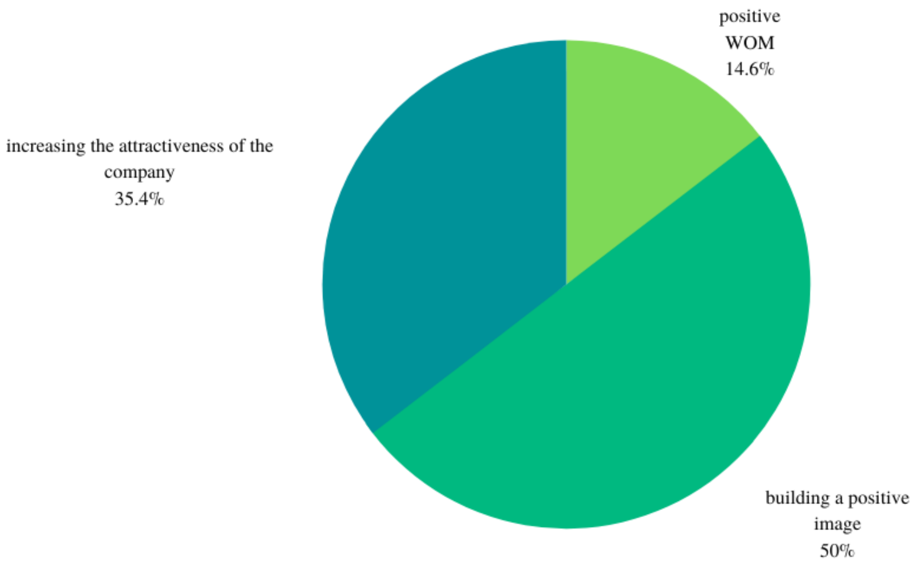

Chart 9: Non - financial profit from the application of the concept
Source: Own processing.

Financial profit can be perceived based on various factors and in various forms. 64% of respondents stated that they perceive the main increase in competitiveness. 33% of respondents pointed to the influx of new customers thanks to the socially responsible company, which is confirmed by previous research by other authors.

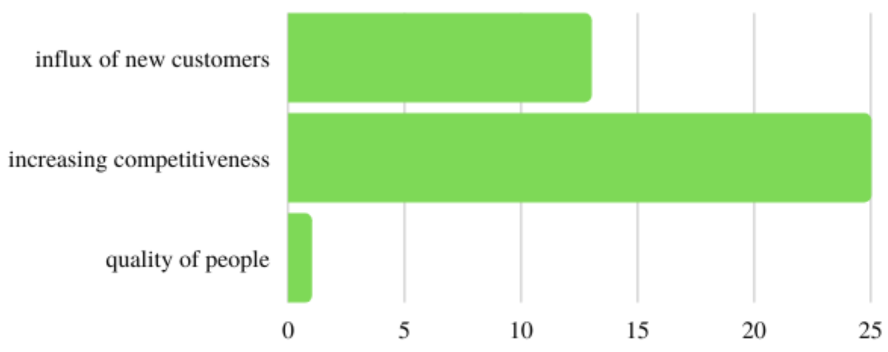

Chart 10: Financial profit from the application of the concept
Source: Own processing.

In the end, we directly asked the respondents whether they perceive a particular competitive advantage that this concept brings along or it should bring it to them. We can see a significant advantage, as 88% of respondents said this concept provides them with the aforementioned competitive advantage.

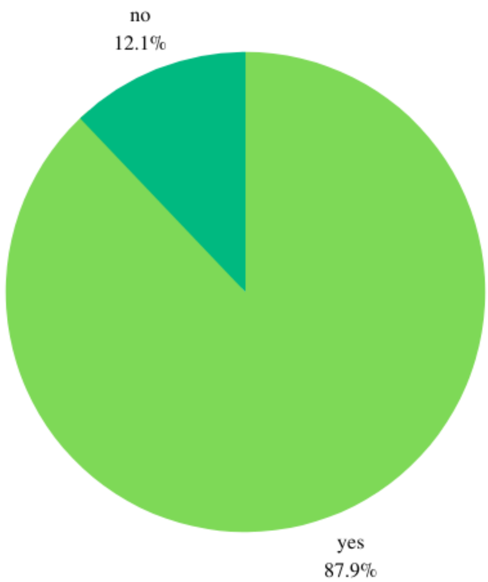

Chart 11: Perception of the socially responsible company as a competitive advantage
Source: Own processing.

Finally, we can proceed to the confirmation or rejection of our initial hypotheses.

1. more than 50% of respondents perceive CSR as a competitive advantage
We can say that up to 88% of respondents concluded that they perceive corporate social responsibility as a competitive advantage. These results are positive for our future research, but it is essential to pay more attention to this area and the understanding of competitive advantage as such.

2. more than 30% of respondents use social networks to communicate CSR activities
We could not confirm this hypothesis, as 29% of respondents stated that they use social networks to communicate corporate social responsibility activities. Social networks are widely used and can be seen as trending in communicating sustainability activities. In addition, we have researched that traditional media such as prints are still strongly represented, which is considered not a very ecological form. It is necessary to explore this area in more detail and focus more on formats and media.

3. more than 70% of respondents use the communication of CSR activities in their marketing communication
We confirmed the last, third assumption, as 77% of respondents stated they use marketing communication to communicate activities within a corporate social responsibility or implement them.

5 Discussion

Socially responsible companies and, of course, socially responsible marketing, which has transformed or developed from the already mentioned concept, have an integral place in the company sphere. Their importance is growing, which is confirmed by many types of research.

We can see what results socially responsible business achieves in terms of building competitive advantage. However, given the deteriorating situation, it would be appropriate for the application of socially responsible business to be based automatically from within the company. Based on our findings, we conclude that we could verify the questions in practice with the respondents. In addition, we got an initial picture of the state of implementation of corporate social responsibility into business practice. We found out what activities companies implement within the specific pillars and how much they implement this concept into marketing communication. Interesting findings were brought by the area focused on the media and tools used in marketing communication. The questionnaire also focused on the benefits, financial and non-financial, that the company can achieve by implementing this concept. As we mentioned in theory, CSR can give a company a truly competitive advantage. Our sample supported this theory and even in the conditions of our respondents, we can talk about the perceived competitive advantage. The limit of the research is a very small sample. However, it was a pilot project; the main aim was to verify the issues and reveal the lacks that would lead to a correction. It would also be appropriate to limit the sample on a sectoral basis in order to obtain more accurate results applicable to a specific sector. Another option is to delimit the sample based on its geographical location. Some specification would help to apply the results more concretely.

Conclusion

We can predict that this trend will be increasing, which is certainly a strong incentive for companies that are serious about socially responsible marketing. A socially responsible company can be one of the answers to unacceptable social conditions, economic disparities and the deteriorating state of the environment. Based on their purchasing decisions, consumers are a determining force that can support a company that implements activities leading to the overall improvement of well-being in society. This preference can ultimately be a significant step that, on the one hand, will support a company doing so in the pursuit of sustainability. At the same time, it will confirm the correctness of this step and can be encouraged to take further action. On the other hand, this preference of the company may lead to the fact that the other company, based on such action, will proceed to the later implementation of corporate social responsibility in management and marketing communication.

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NEW APPROACHES IN MARKETING COMMUNICATIONS: THE CASE OF SKODA AUTO INDIA

Martina Beránek – Emil Velinov

Abstract
The paper aim is to investigate new approaches in marketing communications of a global car maker in emerging market. The study addresses theoretical streams on modern marketing communications such as customer experience, personalization and customization by outlining the importance of these factors for implementing strategic marketing tools localized for the Indian market. The goal of the article is based on implementation analysis to determine the success of the communication strategy ŠKODA AUTO India, reveal the strongest marketing tools at present and find out how they affect the operation of the company on the Indian market. The study suggests how to improve communication strategies of ŠKODA AUTO India. The paper sheds a light on the new approaches in marketing communications at SKODA AUTO India, which has been emerging recently. Study's results show that the company has selected alternative ways of organizing its own approaches towards the customers on the Indian market. Paper results show that the firm targets wide variety of customers through different communication channels and marketing campaigns specific for the automotive market in India.

Key words:
New Challenge for Marketing Communication. Specifics of the Indian Market. ŠKODA AUTO India.

Introduction

Marketing communication strategy is an important condition for success promotion of goods and services provided by the enterprise. Marketing communication The strategy has a comprehensive impact on the internal and external environment and creates a favorable one conditions for ensuring profitability for the company. Some authors have described marketing communication strategies as a strategy that a company or an individual uses to reach his target market through different types of communication, which includes everything from paid marketing to media relations (PR). It includes information (what is to be said), medium (where to be said) and target group. But for this strategy to pay off, it is important to do so implementation to obtain the opposite information about the reaction of potential customers to the impact proposed strategic activities.

1 Specifics of the Indian Market

Today, the Indian market has changed dramatically and is developing rapidly due to large one's social forces, which have resulted in many new consumer abilities, and companies. India is not a transnational, culturally or religiously unified medium. There are a large number of social groups living in the country. Some are very rich, prone to Western values and are suitable candidates for targeted advertising. Others, on the contrary they lead a life that has not changed much in recent centuries. This causes a need take into account not the whole country, but individual regions when compiling a communication strategy with customers because the broadcast of the product to the whole country as a whole, without taking into account regional specificities, may lead to failure. India has about 800 television channels, 14,000 newspapers, 60-65,000 magazines in India, 12-13,000 cinemas and 1,000 radio stations. Although India is by far not the richest country, IT technology is insane It is developing and therefore it is one of the fastest growing online markets in the world. The mobile market in India is in a phase of development and growth, and this allows for cooperation with foreign one's companies, enabling many companies to take a strong position in the market, because the potential audience of one billion people can bring huge financial profits. India is one of the most attractive countries with significant potential in almost all fields of activity. The dynamically developing economy also offers a promising market for the dominant branch of Czech industry, which is automotive. In connection with the less successful entry of some cars into the Indian market in the past, it is necessary to emphasize certain differences and specifics of the Indian market, including differences in the car market[1]. In addition to machinery and technologies for the energy sector, passenger cars are among the Czech Republic's main export items to India. Proof of how difficult it is to establish itself in the Indian automotive market and maintain its position is evidenced by Ford's recent decision to close production and close its factory in Chennai in mid-2022[2]. Škoda Auto's first entry into India was not as successful as management assumed. The activities were started by the import of the Octavia model in 1999. This was followed by a change in customs regulations by India, which led to a rapid change in the carmaker's strategy of carrying out the assembly of cars directly in India. This meant both the construction of a new factory and an increase in the share of local components. The impact was also in the area of logistics, where the average time of container transport was six weeks. At the same time, experience has shown the need to adapt some technical parameters of cars to local conditions. Despite the failure in the form of cooperation with the Indian carmaker Tata, Skoda Auto comes in 2018 with the India 2.0 strategy. An important element of the strategy is, among other things, the creation of a new development centre in Pune.[3] The SARS-Cov2 global pandemic is a very negative factor affecting global economic activity. In connection with the success rate of SA car sales, it is necessary to analyse the impacts of the pandemic and related measures on the production and sale of cars, as well as the impact on the level of communication. The important question thus remains whether another autumn wave of the pandemic awaits India and what restrictions it may bring. The Indian population has so far been inoculated insufficiently and the daily gains infected in the first half of October this year are worrying. Restrictions and measures are expected in the long term.[4] Experience from the previous wave suggests that virtual business dealings have become very widespread in India, and it can be stated that the use of this method of communication is at a similar level as in the Czech Republic. The effects of the pandemic on the Indian economy can be identified mainly in the rising unemployment rate, the fall in GDP, but with a view to returning to the growth trajectory in 2022[5]. The automotive industry as a cyclical sector may be affected by this development. In such a highly competitive industry, it is necessary to evaluate the marketing strategy and adjust the communication mix all the more carefully. On the other hand, the Indian market for more expensive and generally luxury goods is one of the fastest growing[6], which could partially offset the positive pressure on the demand side affected by the adverse effects of the pandemic. Another study of the Indian market looks at the degree of market volatility based on the impact of macroeconomic indicators, and such volatility would suggest the possibility of a negative

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impact on the automotive sector[7]. From the above, it is clear that in the current turbulent times caused by the effects of the pandemic, it is very difficult to choose a marketing strategy to dampen these side effects.

2 Models and tools of marketing communication

Effective marketing communication is one of the basic prerequisites for success. In a highly competitive field such as the automotive industry, this activity cannot be approached other than through integrated marketing communication. Although the uniform structure of the IMC is clear[8], the development of the IMC does not logically involve a single correct concept, as it is necessary to understand the specifics of a given market and to adapt the IMC to them. The creators of global advertising content are thus faced with the decision whether to go the way of standardization or adaptation. The main risks of standardization then lie in the absence of a standardized recipient of the communication. Recipients of the message they are targeted may not fully understand or even understand at all, or the message is comprehensible to the recipient, but does not trigger action, which is caused by gaps in knowledge of the cultural specifics of the addressed customer group. Other negative factors include the effect of communication noise when the message is decoded by the recipient. The cultural context must be fully taken into account[9]. In the architecture of marketing communication, it is appropriate to take into account emerging phenomena such as personalization[10], both in terms of more precise targeting of a specific customer and in terms of participation of celebrities. This is followed by the phenomenon of intensive entry of artificial intelligence into the marketing communication process and allows the use of virtual reality, working with big data, deploying automated systems for online shopping. Last but not least, it is the so-called eventization of marketing communication. In the case of SA India, the main goal of IMC is to constantly increase brand awareness, increase image[11]. The carmaker's specific approach can be declared by such steps as the development of cars intended only for the Indian market. The first car to do so is an SUV called the Kushaq. This should be followed by the Slavia model, which refers to the history of the carmaker. The design of the car was chosen as the winning design from the competition and the author of the winning design is an Indian designer[12]. An integral part of contemporary communication is digital communication. A number of studies focusing on the Indian market have yielded research on the impact of digital communications on the sale of consumer products such as clothing, footwear, etc., but there has been no research on automotive. One of the first results is the study by Rekha Dahiya[13], which took place in 2017 and used the survey method to obtain data on the perception of digital communication in the car purchase process by Indian customers. Customers clearly accept this type of communication positively. Here you can

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identify an opportunity for intensive development of the use of virtual configurator and virtual sales assistant. According to Kotler and Keller[14], the study declares that up to a third of online customers are interested in the ability to customize the product they intend to purchase through an interactive tool. Another not yet fully used element of marketing communication is product placement. This tool can be used in both film and television programs, including Reality Show. The study, launched in February this year, focuses on uncovering the potential of product placement in this type of program and identifies a large untapped space for this marketing tool[15]. Advertising as a traditional communication tool must take into account the specifics of customer perception in emerging markets, where the role of relevance is as important as divergence. In general, significantly creative design leads to a better perception of the product itself and brand awareness, and advertising with a high degree of divergence has supported consumers' intention to share the message and de facto move into the viral category. Conversely, standardized global advertising may have limited effectiveness over the above[16]. Important outputs are captured by research into factors influencing the decisions of young Indian consumers. India currently has the world's largest population of young people, combined with the fact that it is one of the fastest growing markets. There is a positive relationship between exposure and the way information is processed and the purchasing and decision-making process itself[17].

3 Methodology

Case ŠKODA Auto India is based on an analysis of the preparatory steps and the subsequent campaign in connection with the launch of the new Octavia on the Indian market, which posed a new challenge for the carmaker after a less successful period until 2018. The first step is the analysis of emerging markets from the automotive perspective. The following is the definition of priorities for the market entry activity and the setting of priorities. Furthermore, attention is focused on threat identification and competition analysis. The next step is to analyze the customer and the key factors for purchasing decisions and the resulting new challenges. The case study ends with an analysis of the campaign implemented within the launch of new Octavia.

4 Results

When comparing the results of the global sales between 2017 and 2018 in emerging markets, a significant difference can be identified between the growth dynamics in Eastern European countries, including Russia, on the one hand, and countries such as China and India, on the other. The following table shows an overview.

[14] KOTLER, P., KELLER, K. L.: *Marketing Management*, Harlow : Pearson, 2016, p. 394.
[15] NATARAJAN, T., JAVAPAL, J., GANGADHARAN, N.: The Television Cult: Prevalence of Brand Placements in an Indian Reality Show. In *Journal of Promotion Management*, 2021, Vol. 27, No. 7, p. 971.
[16] BILLORE, A., JAVASIMBA, K. R., SADH, A., NAMBUDIRI, R.: Divergence or Relevance in Advertisements: What Works in Emerging Markets? Evidence from Indian Consumers. In *Journal of Global Marketing*, 2020, Vol. 33, No. 4, p. 228.
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Table 1: Percentage change on car deliverables by market in percentage

Fast growing sales		Intermediate growing sales		Slightly growing Sales	
Russia	+30,7 %	China	+4,9 %	India	+0,8 %
Romania	+13,4 %				
Baltic States	+7,4 %				
Serbia	+10,2 %				
Bosnia	+13,7 %				
Bulgaria	+21,9 %				
Kazakhstan	+105 %				

Source: Own processing.

The results confirm the negative deviation of the expected sales dynamics in India and the need for a restart. As part of the new entry strategy, an analysis of strategic launch priorities structured by product, market and customers is performed.

Table 2: SKODA Octavia Launch Communication Campaign in India

Product	Market	Customers

▪ Classic and robust look; built the image of ŠKODA in India; competes with premium brands
▪ High build-quality perception and considered a tough car
▪ Key Highlights of OCTAVIA A7 FL
  ▪ Full LED Headlights with AFS
  ▪ New Infotainment 8”
  ▪ Auto Park Pilot
  ▪ Fatigue Detection
  ▪ Panoramic Sunroof
  ▪ 8 Airbags
	▪ OCTAVIA Segment de-grew by -24.4% from 2015 to 2016. Showing similar trend in 2017
	▪ Main threat coming from pseudo-SUVs and Crossovers
	▪ New threat also comes from premium models: Mercedes CLA and Audi A3
	▪ Chevy Cruze and VW Jetta slowly becoming irrelevant
	▪ Segment leader Toyota Corolla Altis operates at a much lower price-point and mainly operates in the Fleet/Taxi segment
		▪ “Reputation”, “Exterior Styling” and “Equipment Level” – are the main reasons for purchase for OCTAVIA A7 (NCBS)
		▪ Preferred by Businessmen, Entrepreneurs and Senior Management (72%)
		▪ OCTAVIA A7 Customers are mostly married - 88%: men - 92% and average age is 38 Years

Source: Own processing.

The basic goal is to continue with safeguarding volumes in the period from 2018 to 2020. The derived goals are defined as:

- Design refresh,
- update of technology,
- improving the ownership experience,
- more buzz for upcoming RS.

The transformation of the goals into the decision-making process are three equipment specifications for the Indian market, namely Ambition, Style, and Style plus, which reflect the customer requirements identified based on the conducted surveys. As one of the direct threats

to the Octavia, representing the sedan class, is undoubtedly the growth trend of the SUV class, with an increase of almost 70% between 2015 and 2016. The sedan class thus has clear competition in the SUV class, even though many cars declared as SUVs can be considered more of a SUV.
The comparison of the Octavia sedan and selected models reveals that the equipment elements identified among customers as the most important are in the case of the Octavia are at least 60% at a higher level. The Octavia is the best in terms of the following items:
- Auto Park Pilot – First in segment,
- Fatigue Detection - First in segment,
- Panoramic Sunroof - First in segment,
- Full LED Integrated twin headlights with AFS – First in segment,
- 8 Airbags - First in segment,
- RSE / WLAN - First in segment,
- Ambient Lighting - First in segment.

The next step in deciding on the final form of the launch new Octavia campaign is the analysis of customers, their specifics and profile. Customer description: modern business elite, age under 40, premium educated, manager or owner of a technological company, with lot of hobbies, family, rational priorities but emotional about self-image, wants a practical, clever car, with modern design, latest technology, lots of equipment, currently drives a Honda Civic and He needs convincing that the new Octavia is not just beautiful but has more equipment, better technology, and performance to score over SUVs. Customer´s frame of mind:
- Customer has grown up in a liberalised economy, where good, solid education opens door to a secure career.
- In the classical set-up, he would have moved up from hatchbacks to sedans and then to bigger, more premium sedans.
- The recent surge in preference for SUVs in India has also caught his fancy.
- He carries an impression that SUVs are more suited for the Indian conditions and are more practical and this has led to sedans being dropped from his active consideration set as his research is restricted to SUVs.

We need to address this mindset by presenting the Octavia as a very accomplished and credible alternative to SUVs and a car that 'makes the most sense from every point of view' (Everything that you need and nothing that you don't). The great new Challenge for Škoda Auto India is shown to position the new Octavia as a relevant and credible alternative towards SUVs, although the new Octavia is not only built as strong as an SUV but also has a range of innovative features which are absent in competing SUVs.

As part of the analysis of our own campaign carried out in connection with the launch of the new Octavia, it is possible to initially compare the elements used with commonly used elements. The campaign is based predominantly on advertising and direct marketing. In the case of advertising, the following media are used:
- TV advertising,
- sponsorship,
- magazines, newspapers, digital media,
- outdoor advertising,
- social networks.

Direct marketing is realized through SMS and e-mail correspondence. In the case of television advertising, it focused on all markets with high affinity genres for branding and visibility for national and regional coverage:

- High frequency campaign with average of 300 spots per day across 56 channels (9,000+ spots in total).
- Duration: 5 weeks with a mix of 40, 30 and 20 seconds.
- 2 TVCs – Showroom & Office.
- High Affinity Genres like News (National & Regional), Movies (SD & HD), English Entertainment (SD & HD) and Infotainment (SD & HD).
- Regional markets in focus are Maharashtra, TN, Gujarat, Karnataka, AP, and Kerala (with News).
- Mega Block on Sony Pix (SD & HD).
- Mega Block on Times English Entertainment (SD & HD).
- Mega Block on Movies Now 2 (SD & HD).

The sponsorship was realized in the form of a" Driven-by" sponsorship of the TV series Suits and as a title sponsor on the House of Cards. Also, through TV spots on Wimbledon Finals and other various sport events, festivals etc. In the case of newspapers and magazines, Full page, and half page with a minimum of 6 - 8 insertions per market were predominantly used. Main titles:

- Times of India,
- Economic Times,
- Hindustan Times (Mum),
- Hindustan Times (Del).

The campaign of course included digital media with key premium publishers, such as Forbes India, National Geographic Traveller, CQ and others. Outdoor advertisement was mainly represented by big boards in dozens of variants. Facebook - videos, Twitter - Promoted trend, You Tube - Bumper Burst, Masthead, videos were used for digital advertising.

5 Discussion

All the above conditions of ŠKODA AUTO a.s. observes in his advertising campaigns, trying to follow the trends of marketing communication. For the company uses more communication channels (ATL, TTL, BTL) to promote its cars, such as digital media, print media, Word of Mouth media, outdoor media or sponsorship. They use neuromarketing channels to influence their customers: sight (coughing color tones, warm and pleasant colors, play of lights), hearing (Indian motives), tactile feeling (showing car equipment, details). Indians love details, such as bright interior, equipment, spaciousness of cars, customers like such details, which simplifies life and improves the feeling of driving. ŠKODA AUTO a.s. in India Four layers of content marketing in creating your marketing campaigns: acts on emotions, inspire, carry useful information and carry proof of why the brand is ŠKODA AUTO a.s. better than others. The company uses Influence for communication Marketing because in India they put on personalities and follow their opinions. It is the same It is important to adapt to the interests of the country, such as cricket in India, and that is why ŠKODA is AUTO a.s. sponsor of cricket in India. It is important to say that society communicates not only with its customers who have already bought cars but are trying to attract potential customers through mobile applications, social networks and billboards. Proof successful communication on the market is the growth of sales of the ŠKODA AUTO a.s. brand, satisfaction 50 customers in the Indian market who receive the necessary information and their advertising contains all brand values. Overall, ŠKODA AUTO a.s. acts relatively actively from the point of view of marketing communication, adheres to legal and ethical standards and is It is important that he develops his ways of communicating with customers every year.

Conclusion

Based on the analysis of steps related to the restart of ŠA India with the ambition to avoid less successful, the operation until 2017 can be stated that there was a shift in the perception of the importance of identifying and reflecting the specifics of the Indian market. These specifics are included in decision-making processes, their goal is to best define the decisive factors leading to the strengthening of the image of SKODA in India. From the analysis of world marketing communication processes, communication India processes, analysis of communication strategy and processes of ŠKODA AUTO a.s. and analysis of its campaign, we can conclude that ŠKODA AUTO a.s. creates effective communication that fully adapts to cultural differences. Proof of this are the positive results of the brand, customer satisfaction with products, services and applications. Another proof is the ever - increasing sales in India and India growing brand success with customers.

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USING MOBILE APPLICATIONS TO THEIR FULL POTENTIAL IN TERMS OF SUSTAINABILITY IN THE SELECTED SEGMENT

Zuzana Bezáková

Abstract
Thanks to technological development as well as the widespread adoption of mobile devices, mobile applications have become an important marketing tool. Companies do business in a competitive environment full of digital technologies, strategies and methods that are aimed at increasing operational efficiency and strategic competitiveness as well as improving customer targeting. Thanks to the technologies available to the general masses, the possibilities for disseminating information and education have been expanded across various scientific disciplines and various fields of a commercial or non-commercial nature. The usual secondary effect of using mobile applications is spread of information. Knowing this, brands try to influence and educate customers about various topics and at the same time strengthen their position in the market, also through sustainability. The paper deals with the issue of mobile applications in the context of the groundswell, reviews in the field of sustainable fashion in particular. The paper provides theoretical background and, based on an analytical approach, seeks to confirm some previous research using variety of data, in particular user reviews and results of popularity evaluation of individual applications in the field of sustainable fashion (using statistical methods). The paper made use of data obtained from the Appbot application and the method of statistical regression. It has been confirmed that there is dependence between the sentiment of the reviews and the stars awarded.

Key words:
Environmental Protection. Fashion. Groundswell. Management. Mobile application. Review.

Introduction

The fashion industry, as a global business,[1] represents a significant economic force in global GDP. Fashion makes up to 2% of world GDP,[2] and it is considered to be the industry[3] with the most negative impact on the environment.[4,5] As Fung[6] points out, many of the negative effects the fashion industry has on the environment are down to geography, i.e. geographical location of stakeholders. The so-called fast fashion (i.e. products launched on the market in a short period of time)[7] is also a prominent problem. The result is high demands on rapid production, logistics and subsequent production of carbon emissions,[8] which account for 10% of global emissions. Organizations face the challenging task of creating strategies in favour of sustainability[9,10] (these should lie at the heart of the company strategy). Thanks to the current

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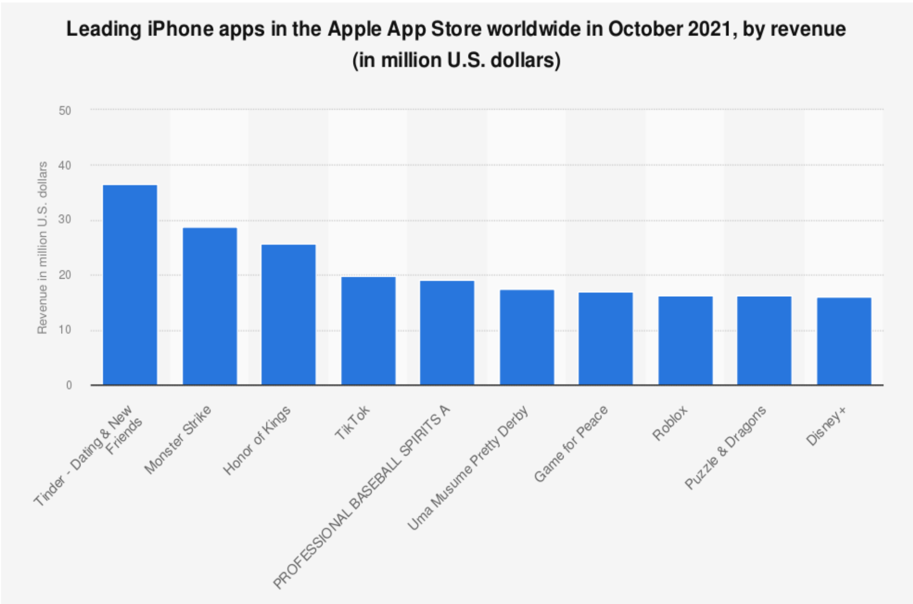
[1] GAZZOLA, P., PAVIONE, E., PEZZETTI, R., GRECHI, D.: Trends in the Fashion Industry. The Perception of Sustainability and Circular Economy: A Gender/Generation Quantitative Approach. In *Sustainability*, 2020, Vol. 12, No. 7.
[2] *Global fashion industry statistics - International apparel*. [online]. [2021-09-23]. Available at: <https://fashionunited.com/global-fashion-industry-statistics/>.
[3] ANGUELOV, N.: *The Dirty Side of the Garment Industry*. Taylor & Francis Group, 2016, p. ix.
[4] KUNZ, G., GARNER, M: *Going Global: The Textile and Apparel Industry*. New York : Fairchild Books, 2011.
[5] FUNG, YI-N., CHAN, H-L., CHOI, T-M., LIU, R.: Sustainable product development processes in fashion: Supply chains structures and classifications. In *International Journal of Production Economics*, 2021, Vol. 231. [online]. [2020-09-23]. Available at: <https://www.sciencedirect.com/science/article/pii/S0925527320302711>.
[6] Ibidem.
[7] BHARDWAJ, V., FAIRHURST, A.: Fast fashion: response to changes in the fashion industry. In *The International Review of Retail, Distribution and Consumer Research*, 2010, Vol. 20, No. 1, p. 166.
[8] HORNE, L: *New Product Development in Textiles*. Cambridge, UK : Woodhead Publishing, 2012, p. 17.
[9] KUPEC, V., PISAR, P.: Auditing and Controlling as a Tool for SME Marketing Risk Management. In *Marketing and Management of Innovations*, 2021, No. 1, p. 225-235.

availability of information, it might seem that issue of sustainable fashion is new. The opposite is true, however. The issue of sustainable fashion has been discussed since early 1970s.[11]

1 Mobile applications as part of the fashion industry

Important changes in the fashion industry have been brought by digitalization[12] and introduction of related digital platforms, marketing strategies, as well as e-commerce, which have enabled businesses entities to engage consumers through virtual reality.[13] The fashion industry has very quickly found its place in the digital world,[14] as it is a great place to show and present products and interact with customers. Based on data from the website Statista.com it is clear that the most popular (or most downloaded) mobile applications (Picture 1) are the global social network Tinder, which holds the lead on the IOS platform, followed by gaming applications such as Monster Strike, Honor of Kings and others. The list of applications points to the preferences of users and thus it could be concluded that the priority is given to social interaction and entertainment.



Graph 1: Leading iPhone apps in the Apple App Store worldwide in October 2021, by revenue (in million U.S. dollars)

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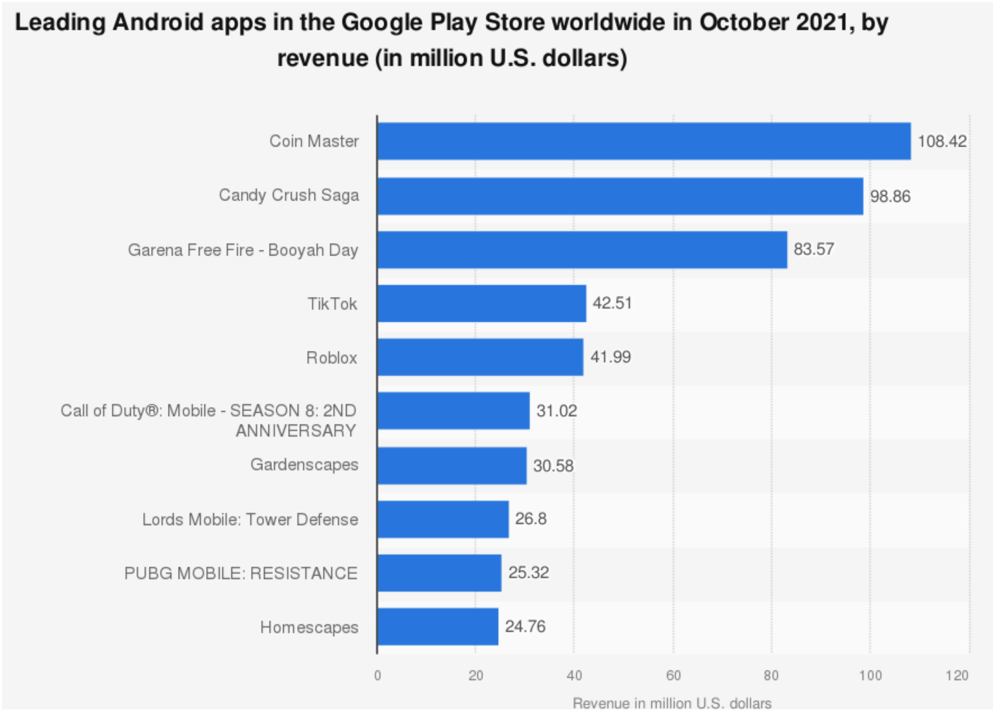
[10] ŠVEC, M., MADLEŇÁK, A.: Legal frameworks for the phygital concept. In *European Journal of Science and Theology*, 2017, Vol. 13, No. 6, p. 212.
[11] OBREGÓN, C.: *Sustainable Fashion: from Trend to Paradigm*? p. 11. [online]. [2021-09-23]. Available at: <https://aaltodoc.aalto.fi/bitstream/handle/123456789/6286/optika_id_691_obreg%C3%B3n_carolina_2012.pdf?sequence=1>.
[12] ANTIKAINEN, M., UUSITALO, T., KIVIKYTÖ-REPONEN, P.: Digitalisation as an Enabler of Circular Economy. In *Proceedia CIRP*, 2018, Vol. 73, p. 45-49. [online]. [2021-10-11]. Available at: <https://www.sciencedirect.com/science/article/pii/S2212827118305432>.
[13] GAZZOLA, P., PAVIONE, E., PEZZETTI, R., GRECHI, D.: Trends in the Fashion Industry. The Perception of Sustainability and Circular Economy: A Gender/Generation Quantitative Approach. In *Sustainability*, 2020, Vol. 12, No. 7.
[14] HLADÍKOVÁ, V.: Komunikácia v kyberpriestore a jej špecifiká. In BUČKOVÁ, Z. et al. (eds.): *Megatrendy a médiá: Realita & Mediálne bubliny*, Trnava : FMK UCM v Trnave, p. 34.

Source: *Leading iPhone apps in the Apple App Store worldwide in October 2021, by revenue*. [online]. [2020-09-23]. Available at: <https://www.statista.com/statistics/271103/top-iphone-apps-worldwide-by-revenue/>.

Users of Android and IOS prefer different applications. However, it should be noted that these apps are similar in their nature. According to Kang,[15] users prefer social contact and entertainment when downloading apps.



Graph 2: Leading Android apps in the Google Play Store worldwide in October 2021, by revenue (in million U.S. dollars)

Source: *Leading Android apps in the Google Play Store worldwide in October 2021, by revenue*. [online]. [2020-09-23]. Availabe at: <https://www.statista.com/statistics/271674/top-apps-in-google-play-by-revenue/>.

Hirsch-Pasek et al.[16] addressed the potential of mobile applications for purposes other than commercial and profit tracking. Currently, there are (and many more will enter the market) environmental applications which promote sustainable fashion, which according to Čábyová[17] include various concepts such as organic, green, fair trade, sustainable, slow, ecological, etc. Even though mobile applications are not an immediate solution, Cui et al.[18] states that small steps are the way to implement individual sustainability-oriented activities. Environmentally oriented or sustainable fashion applications can help in building habits and rethinking everyday decisions in favour of greener ones and may also make users think more sustainably.

[15] KANG, S.: Factors influencing intention of mobile application use. In *Home International Journal of Mobile Communications*, 2014, Vol. 12, No. 4, p. 363.

[16] HIRSH-PASEK, K., ZOSH, J. M., GOLINKO, R. M., GRAY, J. H., ROBB, M. B., KAUFMAN, J.: Putting Education in "Educational" Apps: Lessons From the Science of Learning. In *Psychological Science in the Public Interest,* 2015, Vol. 16, No. 1, p. 3-34.

[17] ČÁBYOVÁ, Ľ.: The research into environmental behaviour in the field of fashion industry and sustainable fashion. In ČÁBYOVÁ, Ľ., RYBANSKÝ, R., BEZÁKOVÁ, Z. (eds.): *Marketing Identity : Digital Mirrors - part I. : Digital Mirrors - part I.*, Trnava : Fakulta masmediálnej komunikácie UCM v Trnave, 2018, p. 268.

[18] CUI, Y. M., PAN, S., MENG, X.: Study of Application of „Green" Design Concept to Fashion Design. In *Advanced Materials research*, 2012, Vol. 524-527, p. 3881-3883. Available at: <https://www.scientific.net/AMR.524-527.3880>.

2 The influence and importance of the groundswell concept in sustainable fashion applications

With regard to groundswell, data on customer interactions with brands in the digital environment are very important as such data allows managers to make data-based decisions in various areas. The concept of the groundswell includes user reviews, the analysis and understanding of which can help in making informed decisions and subsequently in product improvements. User reviews as an element of the groundswell is also an important part of the mobile application market. Whether it's the Microsoft Store, Google Play Store, App Store, or other platforms, users can rate downloaded apps in various ways, be it a verbal rating in the form of a review (the user verbally describes their own user experience and benefits or negatives of the application) or a star-based ratings using various symbols that express the degree of user satisfaction.[19] Rating reflects user experience and data obtained based on user rating analysis represents valuable material for other users as well as for the creator of the application.

There are currently several tools available that can be used to extract and then analyze online content (created by users). These are various programming techniques and specific tools and applications.[20] A suitable method for determining user preferences is, for example, sentiment analysis, which is used to measure the opinions of an individual or group, brand's audience or an individual customer in online communication. Sentiment analysis (opinion mining) based on a scoring mechanism monitors conversations and evaluates the text to quantify attitudes, opinions and emotions[21] related to the product or brand. With the growing amount of unstructured textual information available in the online environment, sentiment analysis is also of scientific interest.[22] Sentiment analysis generally attempts to automate the classification of textual materials[23] expressing either positive, neutral, or negative sentiment. Such a classification is interesting given the amount of textual information available and the online-form of WOM as a result of product reviews, discussions, comments, and various texts available in the online environment. It is often controlled by an algorithm which evaluates the words used as these may indicate a person's feelings and attitudes toward the topic of discussion. With regard to sentiment analysis, there are applications targeting brand reputation management. These apps allow brands to measure and identify changes in overall brand sentiment or changes in attitudes to products or services, allowing companies to innovate in line with customer requirements.

Zhou and Guo[24] dealt with the issue of interactions between reviews and sentiment of given reviews, as well as with the impact of sentiment on the usefulness of the reviews. They were

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[19] SHEN, R-P., ZHANG, H-R., YU, H., MIN, F.: Sentiment based matrix factorization with reliability for recommendation, In *Expert Systems with Applications*, 2019, Vol. 135, p. 249-258. [online]. [2021-10-08]. Available at: <https://www.sciencedirect.com/science/article/pii/S0957417419303951>.

[20] DHABEKAR, S.; PATIL, M. D.: Implementation of Deep Learning Based Sentiment Classification and Product Aspect Analysis. In *ICACC-2021*, 2021, p. 1.

[21] RAZAK, Z. I. et al.: Web mining in classifying youth emotions. In *Malaysian Journal of Computing*, 2018, Vol. 3, No. 1, p. 1.

[22] MEHTA, P., PANDYA, S.: A Review On Sentiment Analysis Methodologies, Practices And Applications. In *International Journal of Scientific & Technology Research*, 2020, Vol. 9, No. 2, p. 601.

[23] KAUR, M.: et al.: Emotions in leader's crisis communication: Twitter sentiment analysis during COVID-19 outbreak, In *Journal of Human Behavior in the Social Environment*, 2021, Vol. 31, No. 1-4, p. 364. [online]. [2021-09-21]. Available at: <https://www.tandfonline.com/doi/abs/10.1080/10911359.2020.1829239>.

[24] ZHOU, S., GUO, B.: The Interactive Effect of Review Rating and Text Sentiment on Review Helpfulness. In STUCKENSCHMIDT, H., JANNACH, D. (eds.): *EC-Web 2015: E-Commerce and Web Technologies*, Lecture

the first to reveal the impact of review rating and text sentiment on perceived review usefulness, which grows stronger with longer reviews. Another factor that affects the credibility and persuasiveness of reviews is their scope, i.e. the length of the text. Therefore, longer reviews, which offer more information and consequently require more cognitive resources to process, can be seen as more compelling, compared to shorter ones.[25] In addition, the length of the review may also reflect the degree of user involvement [26] of a reviewer. A more involved user is likely to provide better information to help others make a purchase decision.[27]

In their research, Hanks found that the balance of power[28,29] and experience together influence consumers' willingness to post online reviews. While the so-called "powerless" consumers are more likely to post positive reviews when the consensus on the forum is also positive, "strong" consumers are more likely to post positive reviews when the main consensus is negative. In both of these cases, Hanks explains this using the concept of the so-called "self-improvement" of individuals.[30] Understanding why consumers publish online reviews can be helpful in clarifying customer satisfaction and engagement so that service providers can better tailor their service offerings to consumer needs.

3 Methodology

The aim of the paper is to point out the importance of mobile applications as a potentially suitable means of communicating sustainability message[31] as well as pointing out the importance of extracting available data in the online space and their use in the decision-making process. The paper used several scientific approaches and methods, such as overview of hitherto known approaches and knowledge from the field of fashion industry and sustainable fashion as well as the overview of the issue of reviews as important elements of the groundswell. The paper also points out the importance of the given topic and brings closer the research topics which might prove important in future in terms of the environment, sustainability (its various forms) and customer relations. In order to verify the basic assumptions, the paper analyzed the sentiment of mobile applications on the basis of the keywords "sustainable fashion." Using the synthesis of several approaches, research methods and analyzes the paper arrives at the conclusions presented in the final part. The research made use of the appbot[32] to analyze applications which suited the keywords "sustainable fashion". Automated functions of the platform were subsequently used. The aim was to point

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Notes in Business Information Processing, Vol 239. Cham : Springer, p. 101. [online]. [2021-09-21]. Available at: <https://doi.org/10.1007/978-3-319-27729-5_8>.

[25] PAN, Y., ZHANG, J. Q.: Born Unequal: A Study of the Helpfulness of User-Generated Product Reviews. In *Journal of Retailing*, Vol. 87, No. 4, 2011, p. 598-612. [online]. [2021-10-21]. Available at: <https://www.sciencedirect.com/science/article/pii/S0022435911000406>.

[26] Involved user – is involved enough to evaluate the content of individual reviews are usually those who possess intent to buy, and thus hold some degree of favorable attitudes toward the reviewed product.

[27] Ibidem.

[28] WU, L., MATTILA, A. S., WANG, CH. Y, HANKS, L.: The Impact of Power on Service Customers' Willingness to Post Online Reviews. In *Journal of Service Research*, 2016, Vol. 19, No. 2, p. 225.

[29] In the context of WU et al. - power mechanisms is defined „as influence rankings or helpful votes into online consumer forums may shape review posting behaviors".

[30] Ibidem.

[31] BEZÁKOVÁ, Z., ZAUŠKOVÁ, A.: Marketing communication in the eco-innovation process: communication in the process of designing and implementing of eco-innovations in Slovak business environment. Katowice : Wydawnictwo Unikat 2, 2016, p. 31.

[32] *Appbot.* [online]. [2020-09-23]. Available at: <https://appbot.co/>.

out the amount of data available through the application able to contribute to informed decisions of customers and proper app management as well as a better orientation in the market segment. To do so, several external sources (statistics) and several approaches and theoretical knowledge were used. Based on Pang and Lee's[33] opinion, the paper aims at evaluating the situation and verifying the assumption via linear regression: Customers will award an adequate number of stars in line with the positive rating they have given (Correlation between review sentiment and number of stars awarded). The number of analyzed reviews of the given applications used was based on the availability criterion. The initial intention was to analyze reviews of all searchable applications based on selected keywords, but due to missing reviews and incorrectly extracted fields in appbot the research made use of cleaned data of 33 applications available on Google Pay and iOS platforms. The results and findings are presented in the Results and Discussion chapter.

3 Results and discussion

The use of mobile applications as an important tool in the process of marketing communication is mentioned by several authors.[34,35] Given the concept of the groundswell, it is important not only to analyze and understand the relationships between online customer behaviour in presenting their product opinions but also, following Wus'[36] opinion, understand the reasons for publishing online reviews in a given polarity (positive, negative, neutral). This is becoming an increasingly important topic for research in the field of services. With regard to the issue of publishing reviews, which are perceived as an electronic variant of WOM marketing,[37,38] and in conjunction with the psychological aspects of customer behaviour in writing and publishing reviews, examining the reasons for doing so can provide important information to managers in terms of capturing individual motivating factors influencing customer decisions in this area. At the same time, the given problem is very closely related to / is part of the issue of online reputation of businesses. Review ratings and review sentiment analysis represent quantitative and qualitative aspects of user-created product reviews. These two types of valence may not always be consistent, but they complement each other in consumer rating reviews.[39] In the following part of the paper the results of the analyses are

[33] PANG, B., LEE, L.: Seeing stars: Exploiting class relationships for sentiment categorization with respect to rating scales. In *Proceedings of the 43rd Annual Meeting of the Association for Computational Linguistics (ACL'05)*, 2005, p. 115. [online]. [2021-09-20]. Available at: <https://arxiv.org/pdf/cs/0506075.pdf>.

[34] ROWLES, D.: *Mobile marketing: how mobile technology is revolutionizing marketing, communications, and advertising*. London : Kogan Page Limited, 2014, p. 13. [online]. [2021-09-14]. Available at: <http://ndl.ethernet.edu.et/bitstream/123456789/50008/1/262.pdf>.

[35] RAJEEV, B., KELLER, K.: Integrating Marketing Communications: New Findings, New Lessons and New Ideas. In *Journal of Marketing*, 2016, Vol. 80, No. 6. Available at: <https://www.researchgate.net/profile/Rajeev-Batra/publication/305079910_Integrating_Marketing_Communications_New_Findings_New_Lessons_and_New_Ideas/links/58499b8108ae686033a768be/Integrating-Marketing-Communications-New-Findings-New-Lessons-and-New-Ideas.pdf>

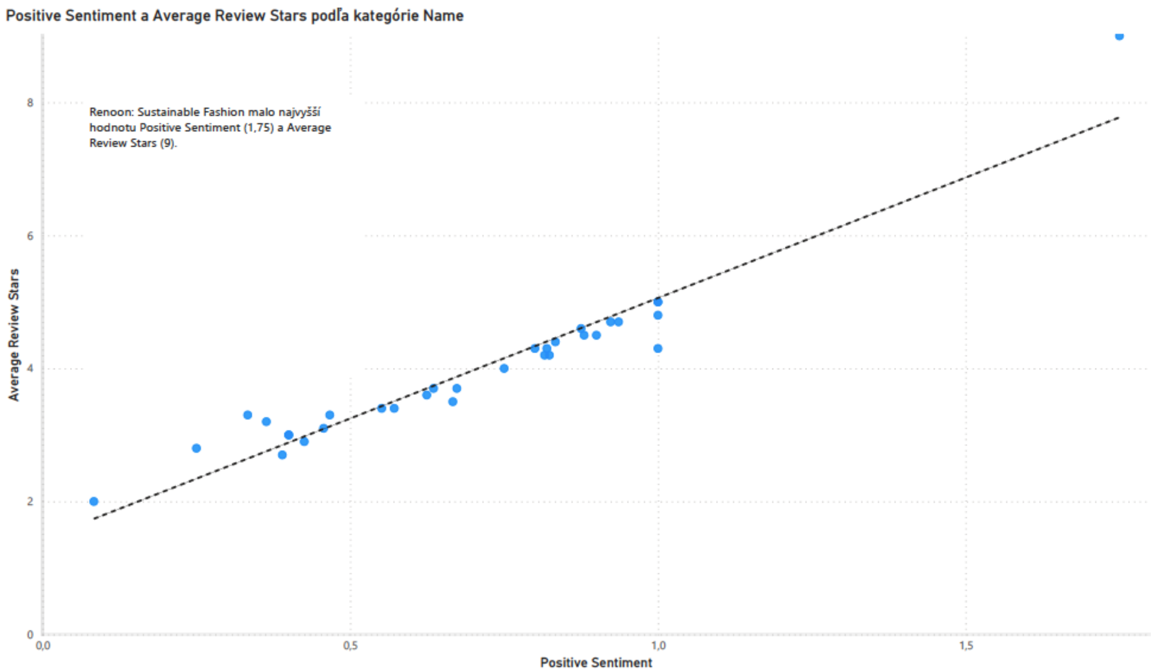
[36] WU, L., MATTILA, A. S., WANG, CH-Y., HANKS, L.: The Impact of Power on Service Customers' Willingness to Post Online Reviews. In *Journal of Service Research*, 2016, Vol. 19, No. 2, p. 224-238.

[37] BREAZEALE, M.: Word of mouse An assessment of electronic word-of-mouth research. In International *Journal of Market Research*, Vol. 51, No. 3, p. 297-298. [online]. [2021-09-12]. Available at: <http://www.mktgmike.com/IJMR_Word_of_Mouse.pdf>.

[38] LÓPEZ, M., SICILIA, M.: How WOM marketing contributes to new product adoption: Testing competitive communication strategies. In *European Journal of Marketing*, 2013, Vol. 47, No. 7, p. 1089-1114. [online]. [09-09-2021]. Available at: <https://www.emerald.com/insight/content/doi/10.1108/03090561311324228/full/html>.

[39] ZHOU, S., GUO, B.: The Interactive Effect of Review Rating and Text Sentiment on Review Helpfulness. In STUCKENSCHMIDT, H., JANNACH, D. (eds.): *EC-Web 2015: E-Commerce and Web Technologies, Lecture*

presented. These are then compared with the partial results of research conducted by other authors. In total, 16,922 reviews from both Google Play and iOS platforms were included in the research, of which 12,794 (75 %) were positive (ratings 4 and 5). This confirms the view of Tsanga et al.[40] that positive reviews are published more often (to a greater extent) compared to negative reviews. This is in line with findings from other online review systems such as Amazon and this fact is also confirmed by Pan et al.[41]



Picture 3: Regression Sentiment and Average Review Stars
Source: Own processing.

Table 1 shows the values obtained.

Table 1: Regression Statistics

Regression Statistics	
Multiple R	0,97095982
R Square	0,94276298
Adjusted R Square	0,94091662
Standard Error	0,18897881
Observations	33

Source: Own processing.

Notes in Business Information Processing, Vol. 239, Cham : Springer, p. 101. [online]. [2021-09-21]. Available at: <https://doi.org/10.1007/978-3-319-27729-5_8>.
[40] TSANG, A. S., PRENDERGAST, G.: Is a "star" worth a thousand words? The interplay between product-review texts and rating valences. In *European Journal of Marketing*, 2009, Vol. 43, No. 11-12, p. 1269-1280.
[41] PAN, Y., ZHANG, J. Q.: Born unequal: A study of the helpfulness of user-generated product reviews. In *Journal of Retailing*, 2011, Vol. 87, No. 4, p. 598-612. [online]. [2020-09-23]. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0022435911000406?via%3Dihub>.

Table 2: ANOVA

ANOVA					
	df	***SS***	***MS***	***F***	***Significance F***
Regression	1	18,2353215	18,2353215	510,607504	8,105E-21
Residual	31	1,10710274	0,03571299		
Total	32	19,3424242			

Source: Own processing.

Table 3: Regression analysis

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	1,8354032	0,09509334	19,3010692	7,8349E-19	1,64145904	2,02934735	1,64145904	2,02934735
Positive Sentiment	2,97013187	0,13144139	22,5966259	8,105E-21	2,7020554	3,23820835	2,7020554	3,23820835

Source: Own processing.

The results speak of a statistical dependence of the two variables - the sentiment of reviews of selected applications in the field of sustainable fashion (independent variable) and the average evaluation based on the assignment of a graphical evaluation of the application (dependent variable). The research made use of regression analysis (Figure 3), and used paired data to figure out statistical features of the given variables (quantitative). The output consists of three parts, namely the correlation analysis, ANOVA output (where the suitability of the model used was tested) and the regression analysis.

The regression function is as follows y = 1.8354032 + 2.97013 x.

If P-value is <0.05, it indicates significance. The research showed the P-value to be at = 7.8349E-19, which implies that the location constant is statistically significant.
The P-value for the regression coefficient is 8.105E-21, which also confirms the significance of this coefficient.

Multiple R - correlation coefficient = 0.97095982, which is a value very close to 1, means that the dependence of both variables is high, and thus it could be stated that the relationship is very strong.

R-square - coefficient of determination = 0.94276298.
0,94276298. 100 = 94.28 - which means that the regression line explains the variability of the assigned rating using a graphical indicator (a star) at approx. 94.28%, with the remainder representing unexplained variability and the impact of random factors and unspecified effects.

ANOVA –the null hypothesis was tested. The result shows that the model chosen to explain the dependence (linear regression line) is not suitable.
F-test - Significance F = 8,105E-21 <0,05 (significance level α). The null hypothesis is rejected, which means that the regression model was chosen correctly.

This means that when reviewing and rating, users make use of star-awarding system, which also corresponds to the sentiment of the given app review. Such rating is important for managers and application developers as it helps them understand customers and the level of customer satisfaction. Such an evaluation is a significant factor/ external indicator of the application's online reputation, and contributes to its positive reputation.

The results also confirmed the Zhou and Guo's research on the positive effect of interaction between the review evaluation and the text sentiment – the effect is positively significant ($\beta = 0.437$, $p < 0.001$). In their research, they also examined other contexts and found that review evaluation has a negative effect on the usefulness of a review when text sentiment is negative. However, this negative effect is weakened when the text sentiment is positive.[42] This implies a significant importance of sentiment analysis in interpreting the results of reviews and their importance in managing the online reputation of products, brands and companies.

Customers rely on text ratings as well as special characters (stars) when reviewing and giving ratings. Our results also point to the consistency of review sentiment and evaluation using star rating. The result is also confirmed by Zhou and Guo,[43] who states that "*Businesses can benefit from sentiment scores and numerical ratings [19], which not only facilitate the processing of consumer review information, but also increase inconsistencies between review and sentiment ratings in the text and, ultimately, reduce negativity*." Customers will actually award an adequate number of stars in line with the positive rating they have given.

Conclusion

The fashion industry represents a significant part of the global business and a significant economic force. It also has a significant impact on the environment. Fast fashion is becoming a serious problem with a great impact on the global issues. The potential of applications in the field of sustainable fashion is significant, especially in terms of education, as apps are able to influence their users towards adapting more sustainable behaviour. The paper focuses on the potential and importance of user reviews of the applications. The aim of the paper was to examine whether there is a relationship between the sentiment of reviews and the star rating and whether the two are interrelated. It was confirmed that review sentiment correlates with the star rating left by customers. Following the meticulous study of many reviews, numerous reviews-related theoretical and empirical studies with a research potential have been found.

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TOPICS DOMINING IN ONLINE JOURNALISM

Pavel Bielik – Michal Kubovics

Abstract
The media has raised issues addressed by the company around the world from the very beginning. Today, online media is a very fast, agile content provider with a large amount of data. Increased numbers of users and content are part of the company's digital development. However, during a coronavirus pandemic, it is extremely important to monitor the introduction of topics through keywords or the thematic focus of individual media. The aim of the paper is to conduct thorough research with the help of visualization of media outputs related to coronavirus in Slovakia, but also abroad and their subsequent comparison. The paper has the ambition to identify the use of keywords in the research period based on the use of quantitative content analysis. The uniqueness of the article is reflected in the comparison with foreign media. The conclusions show the frequency of coronavirus keywords in the domestic and foreign environment.

Key words:
Data visualization. Data Journalism. Online Journalism. Media. Pandemic.

Introduction

The publication of journalistic speeches and journal subjects in their various forms on the Internet can be considered as online journalism.[1] The electronic form of publishing and making available journalism via the Internet can therefore be considered an essential feature of this new form of journalism. At the same time, it cannot be overlooked that this is still a creative activity that requires the application of specific procedures. The media, as a profit-oriented business entity, must respond to all the changes brought about by the marketing environment. As a result, there is a need to innovate products and services so that they can reflect these changes and be more successful than the competition.[2] Robotic journalism, in other words, the use of automated systems aimed at collecting large amounts of data has brought crucial importance for the upward trend in the use of data journalism and data visualization. According to Višňovský, robotic journalism is characterized by the use of machines, artificial intelligence and specialized software working with natural language to create content. The systems are mainly used in situations where it is necessary to process a large amount of data.[3] By collecting and sorting data, they save journalists the time they can use to analyze data, search for contexts and stories. In the era of big data, we can consider sorting information and putting it into a certain context as the main benefit of data journalism. Technology developments have also made data retrieval cheaper and faster today than in the past.[4] Visual storytelling is one effective way to present certain data content to recipients quickly and understandably. We can understand this concept as a form of visual communication. It is about delivering information and conveying a message based on visual perception and observation.[5] According to Tableau Software, American

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[5] PRONER, J.: *Dátová žurnalistika v podmienkach súčasnej mediálnej praxe*. [Dizertačná práca]. Trnava : FMK UCM in Trnava, 2020, p. 41.

interactive data visualization software, it is a graphical presentation of information and data. Using visual elements such as tables, graphs, and maps or data visualization tools[6], they provide an accessible way to see and understand trends, values, and contexts in your data. In the world of big data, data visualization tools and technologies are essential for analyzing vast amounts of information and making data-driven decisions.[7] J. Proner also confirms that in a broader sense, classical display of pie charts, columns, lines and the like can be associated with data visualization. However, the relationships that arise between data and their representations are more complex.[8] We find a similar meaning of the term on the Cambridge Dictionary website, which considers it an act of presenting information such as a picture, diagram, graph or picture, which represents information in this visual way.[9] Our eyes are attracted by colours and patterns. We quickly distinguish red from blue, square from circle. Our culture is visual, covering everything from art and commercials to television and movies. Data visualization can therefore be considered as another form of visual art that interests us. When we see the chart, we quickly see trends and outliers. If we see something, we will master it quickly. It's a story with a purpose. If you've ever looked at a huge table of data and haven't seen the logic or meaning in it, you know how much more effective data visualization can be.[10] Therefore, based on the above facts, the authors of this study consider it extremely important to examine not only the data visualization system they designed, but also the very dominance of topics and keywords in the media environment that will be their data. The authors created the Media Visualization System (MVS) as part of the data visualization for keyword searches. The authors of the present study consider it important to test the functionality of their new system and to declare the importance of data visualization through the frequency of use of individual keywords. As part of the data visualization for keyword search, the Media visualization system (MVS) was created, which is connected to the database of its own processing through an automated system for collecting data from the media. The system works by the user entering a keyword into the system, the system sends a request to the database server and the data comes back, which the system then visualizes in a clear way for the user. The automation part of the collection is prepared by the authors and data are collected. The authors of the study aimed to examine thousands of Slovak and foreign media outlets in the Slovak and foreign media, to visualize the obtained data into clear graphs and conclusions, and to draw conclusions about the dominant topics in online journalism. The authors examined numerous media outlets focused on coronavirus in Slovakia and abroad, and their subsequent comparison. The authors of the study used the News API system to compare. The user enters a keyword into the system, the system sends a request to the News API server and the data comes back, which the system then visualizes for the user. You can use it, for example, to get information about trends in the New York Times or other world media, but also a number of new articles using specific key phrases in a certain period.[11] The main use of the News API is to search every article published by more than 80,000 news sources and blogs in the last 3 years. They act as Google News, with which the user can interact programmatically. A good example is a task for a system in which the user writes the word

[6] TEREK, M.: *Interpretácia štatistiky a dát*. Košice : Equilibria. 2021, p. 16.

[7] *What Is Data Visualization? Definition, Examples, And Learning Resources*. [online]. [2021-11-24]. Available at: <https://www.tableau.com/learn/articles/data-visualization>.

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[9] *Meaning of Data Visualization*. [online]. [2021-11-24]. Available at: <https://www.tableau.com/learn/articles/data-visualization>.

[10] *What Is Data Visualization? Definition, Examples, And Learning Resources*. [online]. [2021-11-24]. Available at: <https://www.tableau.com/learn/articles/data-visualization>.

[11] JED, N.: *Top 10 Best News APIs: Google News, Bloomberg, BING News and more.* [online]. [2021-10-22]. Available at: <https://medium.com/rakuten-rapidapi/top-10-best-news-apis-google-news-bloomberg-bing-news-and-more-bbf3e6e46af6>.

"apple". The News API shows all articles published today that mention the word "apple" and ranks them according to the most used source. If a user only wants to obtain media headline data from a specific source, such as the British Broadcasting Corporation (BBC), the system can do the same.[12] The acquired data can then be visualized by the user through a data visualization system.[13] That's why visualization tools like Tableau, Looker, Zoho Analytics, Sisense or Domo are becoming more and more popular. Datawrapper and Google Sheets, for example, are very easy to use. The authors of the study believe that setting up topics in the media environment is proving to be one of the effective forms of disseminating information to the recipient. Such a period is a pandemic caused by the spread of coronavirus, during which keywords and phrases such as "covid-19", "coronavirus" or "pandemic" dominated.

1 Methodology

Within the sources used, we focused on primary and secondary sources. The research topic that is addressed in the paper is data visualization in journalism. The framework of the research problem can be defined through the analysis of keywords through the database of domestic and foreign media. The research goal of the presented paper is to define the frequency status of the keywords "covid-19", "coronavirus" and "pandemic" in the domestic and foreign environment on the basis of theoretical background and analysis through quantitative research. Research questions are defined as follows:

1. During the individual waves of the coronavirus pandemic, was the coronavirus publishing activity evenly increased at home and abroad?
2. Has media publishing at home and abroad increased during each wave of the coronavirus pandemic?
3. At the beginning of the coronavirus pandemic, was the highest frequency of media publishing at home and abroad? The following table lists the media used in our home environment.

Table 1: List of media that formed the database within the domestic media

Media	Web page	Real users
Topky.sk	www.topky.sk	761 452
Denník N	www.dennikn.sk	272 577
SME	www.sme.sk	650 824
Hospodárske noviny	www.hnonline.sk	358 290
Nový čas	www.cas.sk	572 934
Aktuality.sk	www.aktuality.sk	809 673
Webnoviny.sk	www.webnoviny.sk	102 400
Dobré noviny	www.dobrenoviny.sk	313 613
TV noviny	www.tvnoviny.sk	384 306
Pravda	www.pravda.sk	436 461
Trend	www.etrend.sk	45 981
Plus jeden deň	www.pluska.sk	752 826

Source: *Media monitor.* [online]. [2021-11-29]. Available at: <https://monitor.iabslovakia.sk/>.

The author's database created for the purposes of the present research consisted of 377596 articles. The analysis consists of searching for the keywords "covid-19", "coronavirus" and "pandemic". After entering the keyword, the data was displayed by visualizing the data in a

12 *Get started with News Api*. [online]. [2021-10-22]. Available at: <https://newsapi.org/docs/get-started>.

13 WANG, S.: *New playful data: graphic design and illustration for infographics*. Second edition. Barcelona : HOAKI, 2021, p. 6.

convertible graph. The collection took place from 28 February 2020 to 20 November 2021. The keywords were translated into the domestic language. The research database was made up of media that have freely accessible channels for subscribing articles to the database. They were also selected on the basis of the IAB media list.

The database consisted of millions of articles from over 80,000 large and small news sources and blogs. The analysis consists of searching for the keywords "covid-19", "coronavirus" and "pandemic". After entering the keyword, the data was displayed by visualizing the data in a convertible graph. The data were for the period from 28 February 2020 to 20 November 2021. The keywords were translated into the language of the media. The data was visualized simultaneously for all keywords at the same time for better readability. The following table lists the used media occurring abroad.

Table 2: List of media that formed the database abroad

England	Czechia
Guardian	idnes.cz
BBC News	aktualne.cz
Telegraph	lidovky.cz

Source: Own processing.

Foreign countries were selected on the basis of similarity with the domestic environment where the Czech Republic is presented as the closest country to the Slovak Republic and as benchmarking, comparison with the largest country on the European continent was chosen England.

2 Results

The results of the analysis are contained in the following graphs under which the interpretation is located. The results of the frequency analysis of the variable number of positive coronavirus cases are shown in Graph 1. The graph shows the waves of the coronavirus pandemic where it is possible to observe where the increase occurred and where it is minimal. The break of the increase is visible from October 2020 and the half-time occurs in July 2021. Another increase comes in September and continues to the maximum. From April 2020 to October 2020, we can see that it is stabilized at low values until the stated climb.

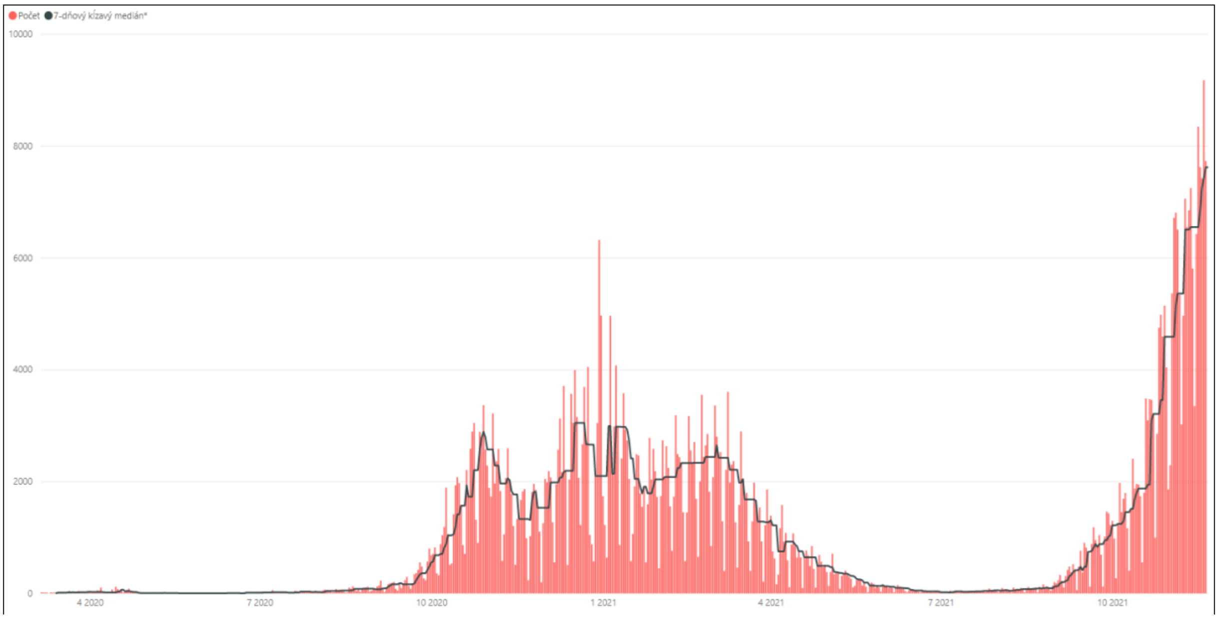

Chart 1: Number of coronavirus cases over time in Slovakia.
Source: *NCZI Covid stats.* [online]. [2021-11-29]. Available at: <https://www.nczisk.sk/Pages/default.aspx>.

From the point of view of world data on confirmed cases of coronavirus, we can observe a certain cyclic repetition of waves. A fourth wave is currently forming. In the beginnings, as with the graph consisting of domestic data, we see a gradual increase from the beginnings to the maximum values during the second wave.

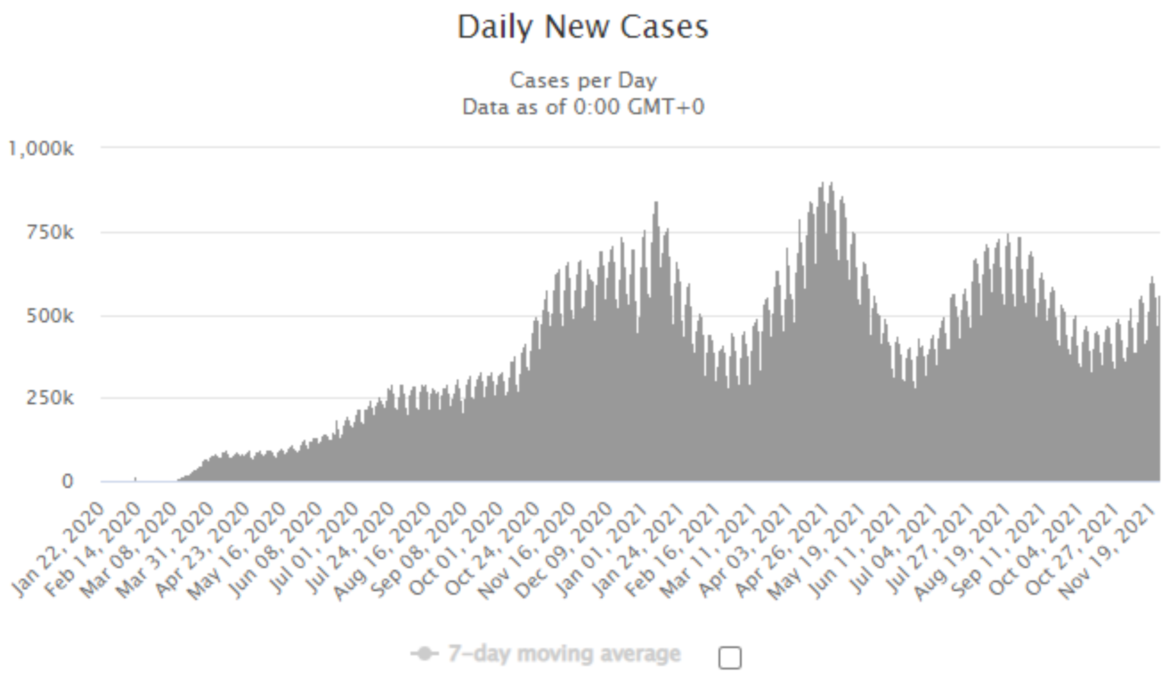

Chart 2: Number of coronavirus cases over time worldwide
Source: *Number of coronavirus cases***.** [online]. [2021-11-29]. Available at: <https://www.worldometers.info/coronavirus/>.

The following chart is generated by Google Trends. The graph shows visualized data from the period from 28.2.2020 to 24.11.2021. The graph shows that the greatest demand for home searches is recorded in the early stages of March 2020 to April 2020.

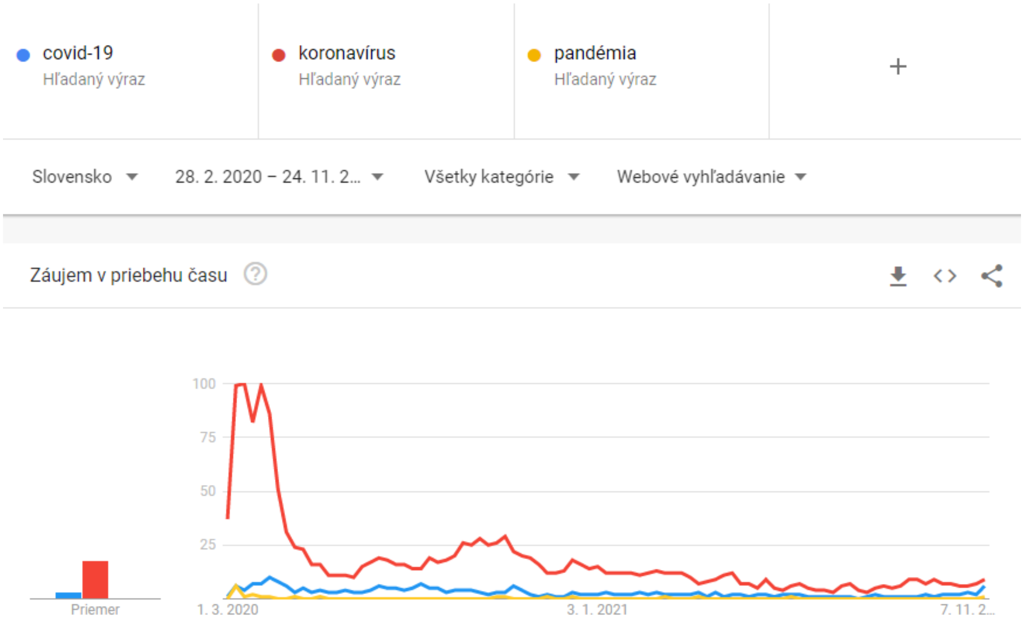

Chart 3: Number of keyword searches via Google Trends in Slovakia
Source: *Number of keyword searches via Google Trends in Slovakia*. [online]. [2021-11-29]. Available at: <https://www.worldometers.info/coronavirus/>.

This is very similar to the graph, which shows global search results, where you can see a sharp increase in searches for the keywords 'covid-19', 'coronavirus' and 'pandemic'. Within the domestic environment, we also see an increase in the number of positive cases of coronavirus. On the other hand, on a global scale, the keywords "covid-19" and "pandemic" are at a minimal level.

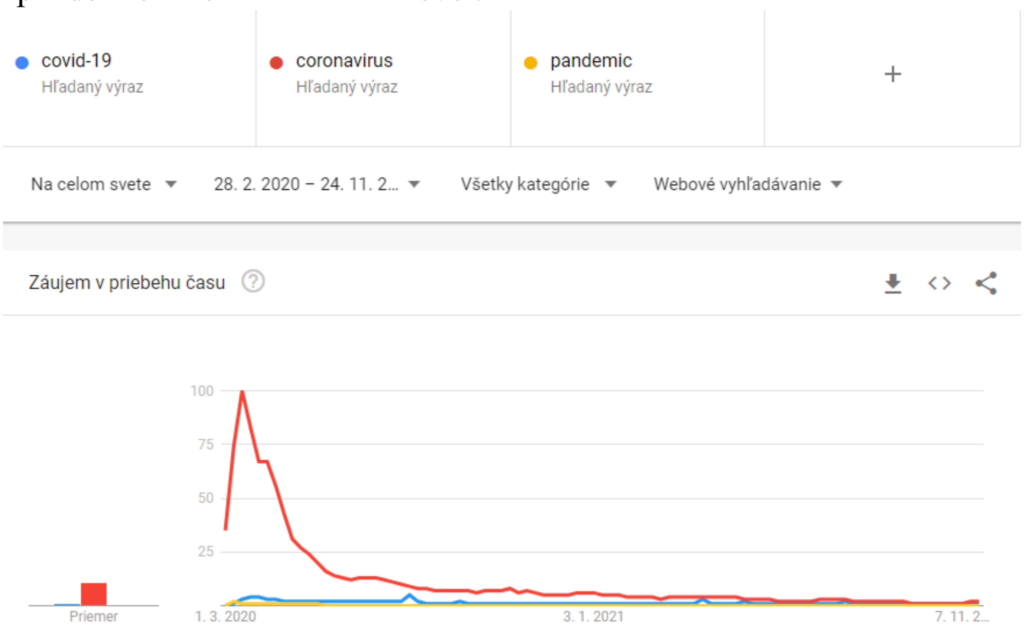

Chart 4: Number of keyword searches via Google Trends worldwide
Source: *Number of keyword searches via Google Trends worldwide*. [online]. [2021-11-29]. Available at: <https://trends.google.com/trends/>.

The following graph looks at the occurrence of the keyword "pandemic." As with Google Trends, we see a sharp increase at the outset, followed by signs of an increase in the first, second, and third waves of the coronavirus. This is followed by a reduction to the current state where it is possible to observe an increasing character.

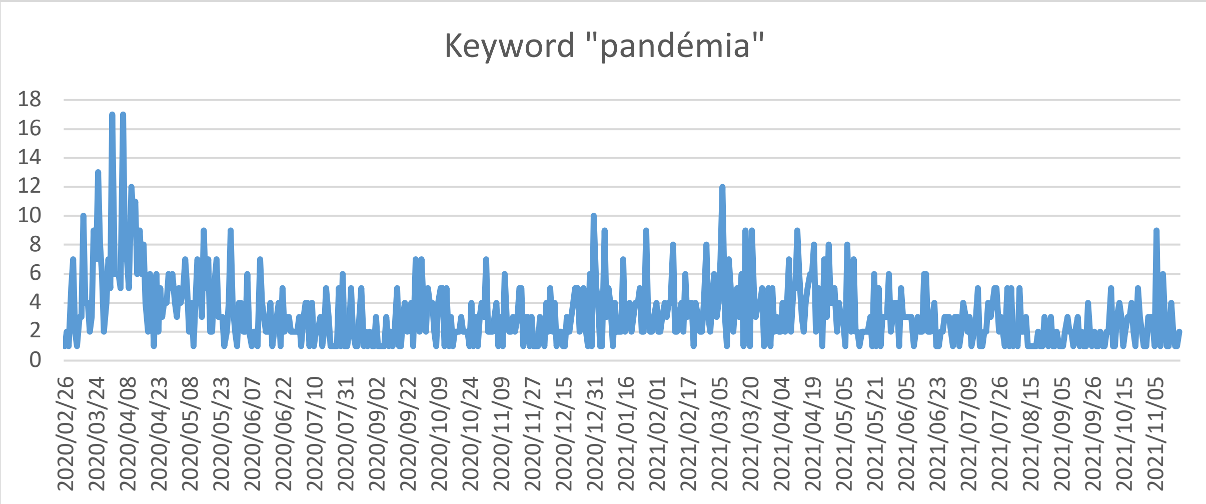

Chart 5: Occurrence of the keyword "pandemic" in the Slovak media database
Source: Own processing.

The following graph focuses on the keyword "coronavirus". The results indicate very similar growth sessions as in the previous graph. In the introduction, we see the highest increase, where the extremes are also visible. Subsequently, the graph reaches lower values where it copies individual waves and currently the topic is at the lowest levels.

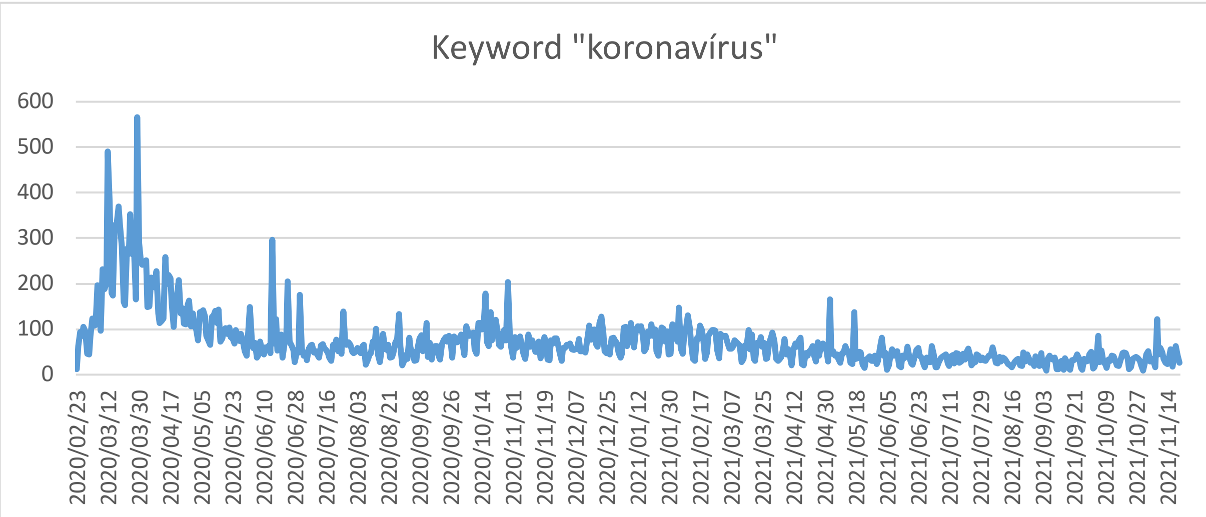

Chart 6: Occurrence of the keyword "coronavirus" in the Slovak media database
Source: Own processing.

The following graph of the content occurrence of the keyword "covid-19", from the graph is very legible to see the increase at the beginning of the pandemic, but approximately the same frequency is recorded during the first and second wave of the pandemic. The third wave of the pandemic did not cause any fluctuations and the current keyword does not have an upward trend.

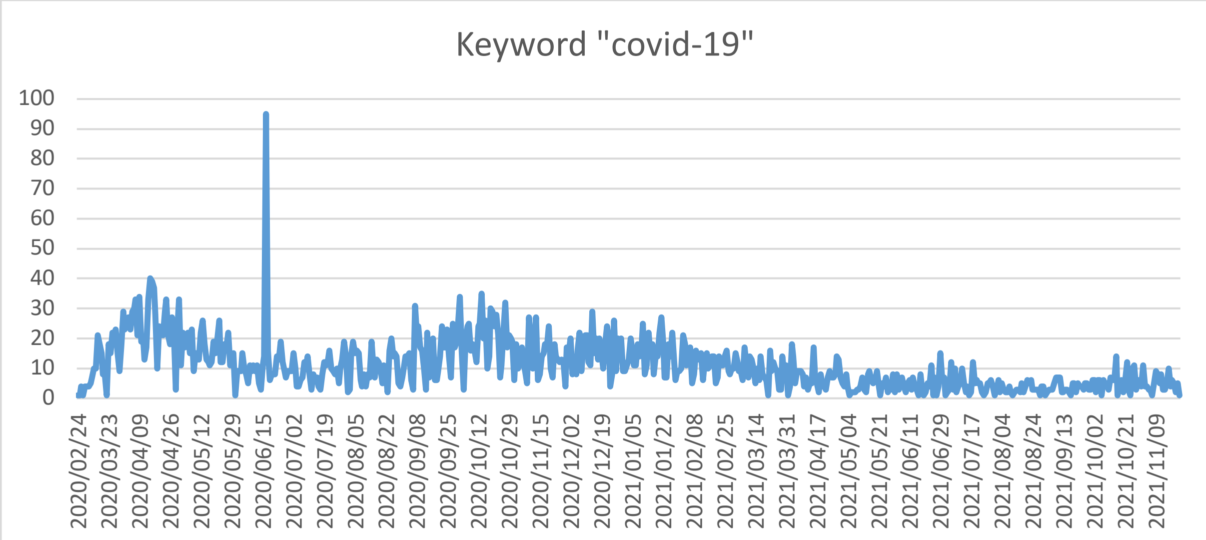

Chart 7: Occurrence of the keyword "covid-19" in the Slovak media database
Source: Own processing.

The results of the obtained data are transformed within the specification of the descriptive structure of the variables into the results of the submitted paper. Within the fulfillment of the goal, it is very important to determine the variables and, after collecting the data, also to evaluate them later using the method of describing the results. The presented graphs were focused mainly on the domestic environment. The following graphs, on the other hand, focus on the foreign environment. The following chart focuses on publication outputs from the Czech Republic. It is clear from the graph that the outputs copy the course from the home environment. The graph shows the "first positive case", the first wave of coronavirus, the second wave of coronavirus, and the third wave of coronavirus.

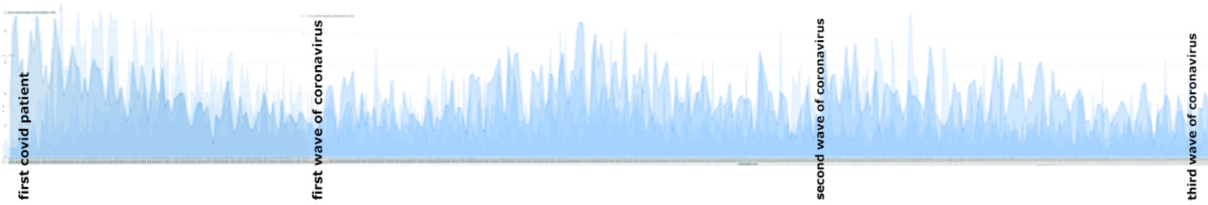

Chart 8: Occurrence of the keywords in the Czechia media database
Source: Own processing.

The following graph shows the data from media from England as the benchmarking with the largest media in Europe. It is clear from the visualization that the curve copies both the results from the Czech Republic and the results from the domestic environment. As a result, we can find very similar results. Furthermore, it is clear from the graph that there was no increase during the second and third waves. The extremes are visible before the first wave of the coronavirus.

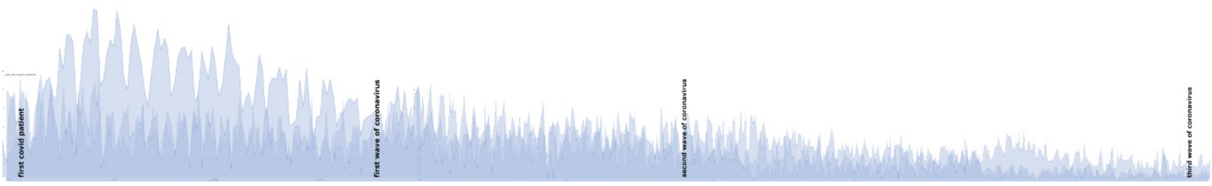

Chart 9 Occurrence of the keywords in the English media database
Source: Own processing.

3 Discussion and conclusion

The following lines are devoted to discussion and conclusion. The goals were achieved, followed by the result part in the form of verbal definition of outputs in the form of questions and answers to the assigned research questions. The final part also covers answering research questions:

1. During the individual waves of the coronavirus pandemic, was the coronavirus, pandemic and covid-19 publishing activity evenly increased at home and abroad?

A: From the results in the form of graphs, it is clear, copying the curve of the number of domestic and foreign outputs within individual keywords.

2. During each wave of the coronavirus pandemic, was the media publishing activity at home and abroad increased within the keywords coronavirus, pandemic and covid-19?

A: It is clear from the graphs that during each wave of the coronavirus pandemic, the media coverage of the coronavirus, pandemic and covid-19 increased within the domestic and foreign environment.

3. At the beginning of the coronavirus pandemic, was the highest frequency of media publishing activity at home and abroad within the keywords coronavirus, pandemic and Covid-19?

A: It has also been shown, as we can see in the graphs that the frequency of publishing activity at home and abroad increased at the beginning of the coronavirus pandemic.

Within the assigned topic, we can say that the media response to various keywords such as coronavirus, covid-19 and pandemic is currently increasing, and their interest is at a higher level. What we can see is mainly the fact that these keywords appeared before the outbreak of the pandemic at home. This means that the topic was "hottest" at the time of the covid19 virus. The following analyzes also showed the interest of users who searched for this keyword, especially before the start of the pandemic. What is critical is especially the lower interest during dead spots in the form of a low increase in positive cases. Subsequently, the work curve increases in increased positive cases or at individual extremes in the form of coronavirus waves. Furthermore, it is necessary to monitor the anomaly in the form of the third wave, where the number of keywords is no longer increased. Today, we encounter data visualization everywhere. It forms a significant and often integral part of today's media. Articles and stories based on data analysis are becoming increasingly popular in our digital environment. These include printed infographics in magazines, animated graphs on social networks, or online interactive visualizations that are part of news portals. As the amount of data grows, it is possible to discover more and more stories that are hidden deep in the data.[14] While traditional data education usually draws a clear line between creative storytelling and data analysis, practicality and experience show that they can intersect. Data visualization is right in the middle of analysis and visual narration.[15] Further research of the issue is necessary because the inclusion of additional keywords gives us answers to questions about which topic is addressed the most.

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[15] *What Is Data Visualization? Definition, Examples, And Learning Resources*. [online]. [2021-11-24]. Available at: <https://www.tableau.com/learn/articles/data-visualization>.

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Meaning of Data Visualization. [online]. [2021-11-24]. Available at: <https://www.tableau.com/learn/articles/data-visualization>.

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CREATING AN INNOVATIVE CHANGES WITH DIGITIZATION AS A MARKETING TOOL IN PRODUCTION COMPANY

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Abstract
Marketing is the main part of the strategic planning and management of each company and allows finding a sales market for their products, creating a market, systematically taking care of this market and improving overall competitiveness. An integral part of marketing is a communication policy and the way in which the company is presented on the market. New technologies in Industry 4.0 concept can be used for various components of communication policy such as advertising, sales promotion and improving overall public publicity on the target market. Our research aims to use digitizing technology, 3D laser scanning, and modelling in FARO Scene and MicroStation V8 software for marketing purposes. The paper describes the proposed methodology for 3D laser scanning, which we are able to get input data into the graphics software and the proposed methodology for design models with high accuracy and high detail. The resulting models whose examples are provided in this paper can be used in addition to design, optimization and planning as a graphical basis for marketing purposes concerning customers, but also by potential company investors.

Key words:
Digitization. Marketing. Production. 3D laser scanning. 3D modelling.

Introduction

The production of each company depends on the demand for the products it offers. Every company must adapt to market conditions, global conditions, constraints and must constantly improve its competitiveness. The biggest challenge for putting a product on the market is to clearly communicate the function, features, and it's added value.[1] Currently, there is a fight for customers in almost every market, and the deteriorating pandemic situation creates new restrictions and opportunities for product promotion for companies. From the point of view of building a digital factory, technologies (such as digital factory, smart factory, 3D laser scanning and smart logistic, intelligent sensors, etc.) are an effective and fast solution for achieving the company's goals in the Industry 4.0 concept. Examples of technologies are 3D laser scanning and 3D modelling. 3D models offer a wide range of uses for product promotion, mainly for shopping and communicating with customers and investors via the Internet. The last two years have remained companies that have used various technologies and have been able to maintain demand for products even in the current pandemic situation and make a profit. Increasingly, the customer is drawn into the development, design, or direct configuration of product to meet his diversification requirements.[2] Accordingly, in the last decade, the use of Data Sciences, which facilitate decision-making and extraction of actionable insights and knowledge from large datasets in the digital marketing environment, has remarkably increased. [3]

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[1] *Five Tips to Boost Conversions with 3D Models, CGI & Product Video*. [online]. [2021-10-22]. Available at: <https://scrollsequence.com/5-tips-to-boost-conversions-with-3d-models-cgi-product-video/>.

[2] MIČIETA, B., BIŇASOVÁ, V., LIESKOVSKÝ, R., KRAJČOVIČ, M., DULINA, L.: Product Segmentation and Sustainability in Customized Assembly with Respect to the Basic Elements of Industry 4.0. In *Sustainability*, 2019, Vol. 11, No. 21. [online]. [2021-10-20]. Available at: <https://www.mdpi.com/2071-1050/11/21/6057>.

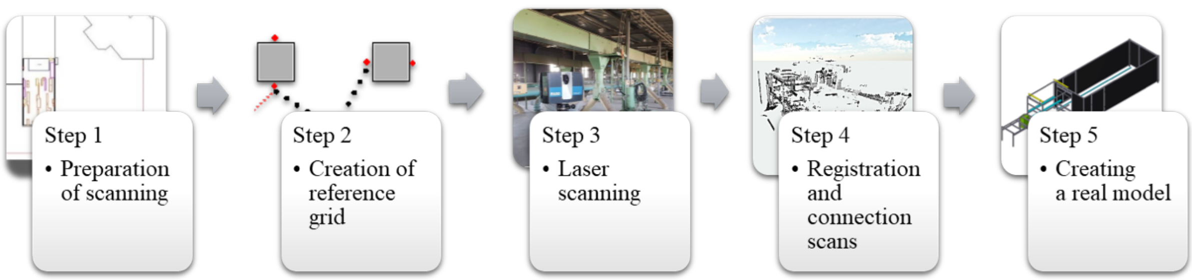
[3] SAURA, J. R.: Using Data Sciences in Digital Marketing: Framework, methods, and performance metrics. In *Journal of Innovation & Knowledge*, 2021, Vol. 6, No. 2, p. 92.

The proposed solution methodology is based on advanced industrial engineering and the use of its two areas, 3D laser scanning in the context of designing production systems, for the implementation of innovative changes in factories. The use of 3D models is currently a common and very effective solution. The process in the proposed methodology describes how to create one part of a smart factory, based on the creation of a digital factory of the company (3D laser scanning and 3D modelling) with its extension by a virtual factory (real-time information transformed from the system into software solutions). This principle can then be applied in real conditions such as:

- Improving and accelerating the detailed design of workplaces (e.g. taking into account specific workplace conditions, taking into account ergonomic requirements for workplaces based on a quality model, creating 3D models of production workplaces),
- creating space to eliminate waste,
- ensuring the growth of labour productivity within the solution team, but also communication between different levels of the company, e.g. between managers and employees of the marketing department,
- creation of suitable storage facilities for work-in-progress and shipping based on accurate scanning data,
- transfer of the virtual design system to expert systems,
- developing of autonomous scanning systems,
- developing online streaming of data from the scanner to the company's server, from where this data could be shared,
- developing software for registering scans without the use of references,
- developing of an autonomous mesh system for models from measured point clouds.

1 3D laser scanning

Laser scanning, mainly 3D, is one of reverse engineering technologies representing modern access to digitization spatial information about the subject that can be used for 3D product and manufacturing systems, focusing the actual implementation of objects (industrial, artistic and historical), focusing hard accessible and dangerous premises, animation and creation of 3D and simulation models. Picture 1 shows a customized methodology (sequence of steps) of 3D scanning verified in a specific company. A description of the individual corks can be found in Picture 1. We divide the digitization process according to the following steps:



Picture 1: 3D laser scanning process
Source: Own processing.

Step 1 represents the preparation of scanning – The technology described represents a high dimensional accuracy of 3D models up to 3 mm. However, we consider it sufficient accuracy of 2-5 cm. Subsequently, this accuracy affects scanning quality. At the beginning of each project, it is necessary to agree on all the conditions under which the models will be created or how they will be used in the future. For example, the model can be useful for reorganising or planning production, constructing object libraries, or analysing static structures. Each method has different criteria for scanning an object, scanner settings and subsequent model creation.

Step 2 represents the creation of a reference grid – Creating a 3D model depends on the scan of production halls. Before this step, reference points must be placed in the entire hall to create the reference grid in the enterprise. Each reference point is placed in a specific location and has its own coordinates and mark. This formation of the reference grid is later used when joining the scan and specifies the future virtual model. In the future, the enterprise can use the reference grid for the accurate location of production facilities, conveyors, transport systems, etc., which have been created in a 3D model. When placing the reference points, it is important to deploy these points so that they are insufficient quantity (minimum three) necessary for the exact location of the scanner in space. It is important to see at least four reference points whose distance is less than fifteen meters from the scanner from one scanning position. The reference points are dependent on the size of the hall and the degree of model detail. For example, in the hall with dimensions of 300 x 100 m with two floors (together 60 000 m2), there was a reference grid of the 12 m x 8 m dimensions. Eight hundred reference points were used in the reference grid of such a dimension.

Step 3 represents laser scanning – The start of the coordinate system is in the centre of the scanning mirror in the device. The software can automatically recalculate the transformation matrix that all reference points have an absolute coordinate system. The core of the entire system is a built-in operating system that ensures collection, storing all data, scanning and easy data transfer to the external computer. This technology allows efficient, fast and accurate scanning of the entire production hall. Scanning is not only about a black and white photo but also about the coloured representation of truly measured spatial points, scans.

Step 4 represents registration and connection scans – Each scan point has 5 values: reflexion, X, Y, Z and distance from the scanner. After the scanning of the entire hall, it is important to connect the scans. This process creates a panoramic image and each point shows one coordinate in the hall. For the interconnection of scans, for their overview and navigation in the scanned hall, to measure distance and object dimensions and FARO Scene Software for scanners from FARO is used to export points to CAD system. FARO Scene is a graphical representation of visual perception, used as a basis for comparing reference points against which other objects can be evaluated. The goal of registration is the location of individual scans to a predetermined coordinate system as well as their link and insertion into a fixed single coordinate system. A correctly registered (registration of scans consists in their interconnection) scan is uniformly located at the level of the "z" axis with other scans and with the correct link to other scans.

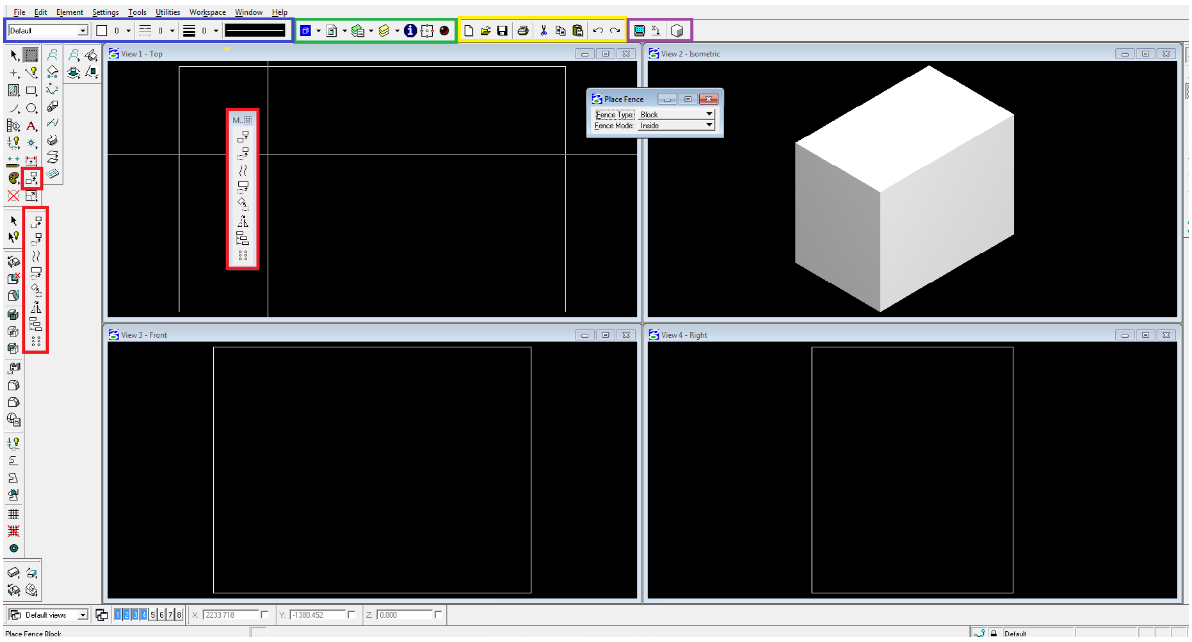
Step 5 represents export data from graphic presentation to CAD system – Usually the data is exported to a CAD system: AutoCad, MicroStation, Intergraph, CATIA, etc. Using 3D scans, a new medium is created that represents a true picture of reality. This medium is redrawn into a CAD drawing that represents reality. This drawing is divided into layers according to the character of the drawn object and is dimensional. To reduce modelling time, various libraries of parametric objects such as TriCAD are used. This library consists of a large catalogue of 3D objects, such as pipes, ventilation systems, electrical wiring, various steel structures, conveyors, various transport systems, etc.

2 3D Modelling in MicroStation V8 Software Environment

The standard MicroStation V8 environment consist of four on top of the follow-up windows:[4]

- view 1 - top,
- view 2 - isometric,
- view 3 – front,
- view 4 – right.

Tools at software are features that create a drawing. MicroStation V8 contains several hundred tools; some are usable at any time, some can only be used for 3D drawings. Tools are arranged and associated, according to certain logical rules, into the so-called toolbars.[5] For example, the logical rule may consist of information about what types of tool elements can create, or how to manipulate with elements. Each toolbar has its headline that can be considered what individual tools can. This headline is only shown in unexpressed, freely deployed toolbars (Picture 2 – red frame).

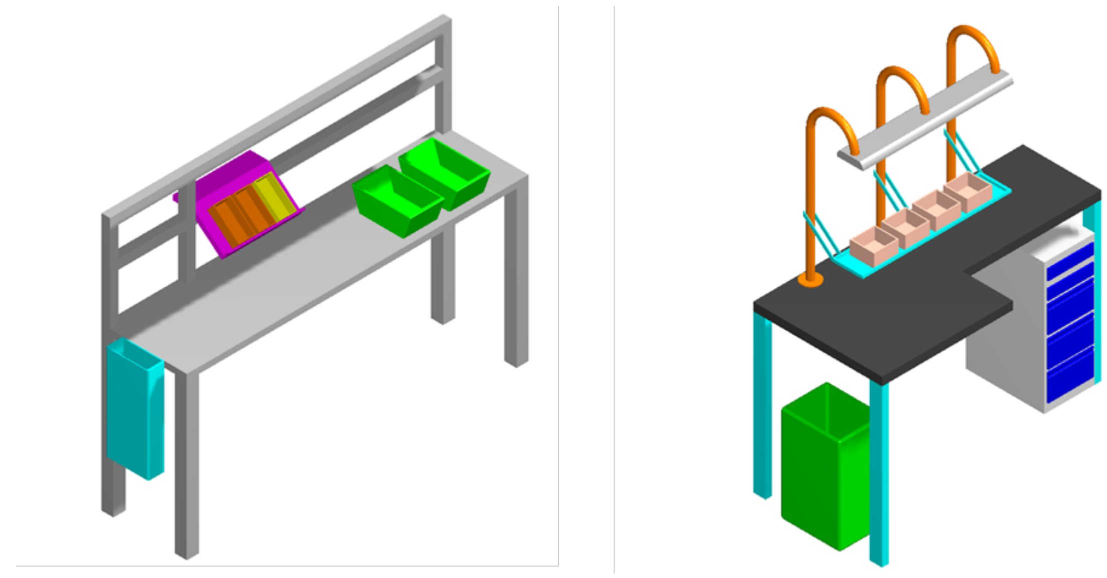


Picture 2: MicroStation V8 software environment
Source: Own processing.

Once the toolbar is anchored in one of the edges of the program, its headline visually disappears. The icon represents each tool in the toolbar. It is a simple picture that best describes how to use the tool. MicroStation V8 uses three unique panels. These panels are helpful because there is no startup tool after clicking on the icon in these panels, but they are used to work with the entire drawing. They are mostly anchored in the upper edge of the program window, right under the base bar program, which we find at almost any Windows program. It is possible to handle them as with tool panels, so let them somewhere in the centre of the screen, dock them or close. The first is the so-called panel. Standard and contains tools for creating, opening, saving and printing drawing, tools for Windows clipboard, tools for returning operations already performed, an icon to connect to Bentley and an icon to start help

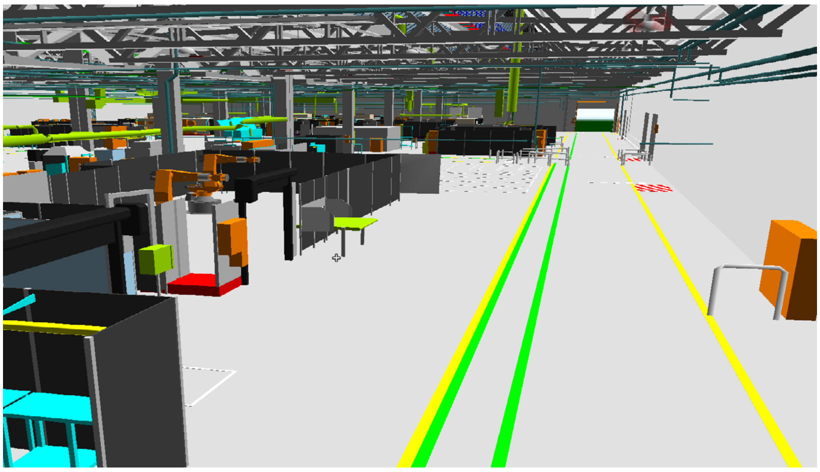
[4] SÝKORA, P.: *MicroStation V8 XM EDITION*. Brno : Computer Press, 2007, p. 41.
[5] SÝKORA, P.: *MicroStation V8 XM EDITION*. Brno : Computer Press, 2007, p. 54.

(Picture 2 – blue frame). The other is the attribute panel and includes items for setting active elements. Each object (whether 3D or 2D) and the object group has its characteristic attributes, such as a level (layer) it belongs as colour, type and line thickness. There is also a visual demonstration in this panel as a given object looks. We can change attributes in the panel, and a specific icon will show us the current object attributes (Picture 2 – green frame). The last panel, a basic toolbar, contains items that open important and frequently used dialogue boxes (Picture 2 – yellow frame). These three special panels would be appropriate to mention the image control panel, which is for the user in complex drawings and can trims, to indicate an active view in other (inactive) views and render an object in its full content, not just according to render's contours (Picture 2 – purple frame). With these tools, it is possible to model different objects with different demands and details. A good example is a model of the manual workplace in an industrial enterprise. The manual workplace can be modelled with little detail (Picture 3) and capture only the spatial volume of the workplace. The high detail model can be used for a wider spectrum of use, but it is more challenging to create. The model of the manual workplace shown in Picture 3 is a work desk, and there is a splinter lamp over the table, drawing a 3D tool that we define the shape of the body profile and axis of the body (flat and line). Boxes under the table have been carved bodies into each other, grooves cut by line. The drawing is to see the lamp profile with the inserted visualization of the bulb. The cover for the lamp was created as a hollow body, open from one tent with the same profile from the upper tent and from the lower side.



Picture 3: 3D models of the manual workplace
Source: Own processing.

Models created primarily for visual purposes are mostly processed in standardized colours, such as metal structures are drawn in turquoise, lamps in yellow, platforms in red etc. In this way, we are able to model the entire production hall (Picture 4) as a building with all equipment (pipes, ventilation systems, electrical wiring, various steel structures, conveyors, various transport systems, etc.), machines, manual workplaces, automatic lines, but also offices and common areas. The visualization can be displayed in the actual state, with all the inaccuracies and details exactly according to the actual state or in the ideal state according to the standardized dimensions. Ideal models are used for advertising visualization when it is not necessary to take into account the external influence on the digitized object.



Picture 4: 3D model of a production hall
Source: Own processing.

The new version of MicroStation V8i software offers object modelling with the classification of specific model components into material classes with visualization of the external structure of the selected material such as glass, copper, wood, tiles, lawn, etc. Visualization of specific materials is solved using a library.

3 Use of 3D models for marketing purpose

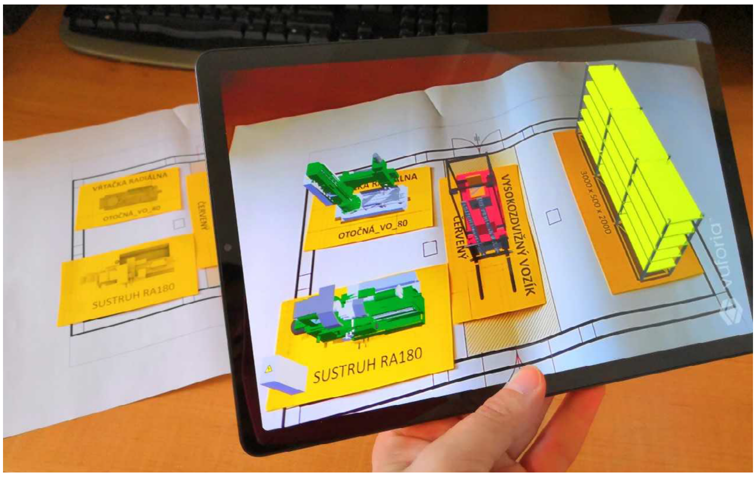
Nowadays, many factories face changes on the global market and manufacturing is unpredictable.[6] And continuous cost reduction is a subject of interest for almost every production company.[7] Spreading of the new corona virus COVID-19 happened suddenly and uncontrollably.[8] The entire digitization path begins with a collection of current status and creating the current state model. Then it is possible to continue with simulation models, forming a digital twin concept and introduced support systems in Industry 4.0. 3D models are currently a trend in planning, managing and optimizing the entire manufacturing process but are also applicable to marketing purposes. The basic goal of marketing is to focus on the customer and satisfy his needs. The extent to which a company approaches its customers will largely determine its market position and future rise or fall. The second no less important goal in the conditions of a market economy is, of course, the creation of a reasonable profit, from which the further development of a company or organization is financed. Marketing is applied in the sphere of business as well as in non-profit organizations, but there are mainly cultural and educational facilities, charities and the like. Marketing purposes in which it is possible to use 3D models, which can be divided into several groups such as:

- marketing focused on new customers,
- marketing aimed at retaining regular customers,

[6] VAVRÍK, V., GREGOR, M., GRZNÁR, P., MOZOL, Š., SCHICKERLE, M., ĎURICA, L., MARSCHALL, M., BIELIK, T.: Design of Manufacturing Lines Using the Reconfigurability Principle. In *MDPI Mathematics*, 2020, Vol. 8, No. 8, p. 24. [online]. [2021-9-28]. Available at: <https://www.mdpi.com/2227-7390/8/8/1227>.
[7] GRZNÁR, P., GREGOR, M., MOZOL, Š., KRAJČOVIČ, M., DULINA, L., GAŠO, M., MAJOR, M.: A System to Determine the Optimal Work-in-Progress Inventory Stored in Interoperation Manufacturing Buffers. In *Sustainability*, 2019, Vol. 11, No. 14, p. 1. [online]. [2021-10-22]. Available at: <https://www.mdpi.com/2071-1050/11/14/3949>.
[8] STALMAŠEKOVÁ, N., GRZNÁR, P.: Shifts in the Behaviour of Businesses due to the Pandemic Situation. In KVETANOVÁ, Z., BEZÁKOVÁ, Z., MADLEŇÁK, A. (eds.): *Marketing Identity 2020: COVID-2.0*, Trnava : Faculty of Mass Media Communication, 2020, p. 575.

- marketing aimed at potential investors.

Marketing focused on customers (new and regular) can be directed to the visualization part. As customers grow increasingly tech-savvy, they demand fast and seamless digital experiences and expect immediate solutions to their needs.[9] Visual advertising is currently a very common way of promoting sales. 3D models can be used as a visualization of the products that companies offer. Type of 3D product models can improve the customer's image of the product, for example, for companies that offer products such as personal accessories. The customer can try such products by using augmented reality. Today's technology offers the use of augmented reality directly in smart devices, such as smartphones or tablets. With this device, the customer can compare the 3D model to himself and better decide whether to buy the product. This ad is widely used for online shopping. An example is shown in Picture 5, which shows 3D models of machines and an industrial rack in an augmented reality environment on a tablet.



Picture 5: Display of augmented reality machines on a tablet
Source: KRAJČOVIČ, M., GABAJOVÁ, G., FURMANNOVÁ, B.: *Rozšírená realita a jej využitie v priemyselnom inžinierstve*. Žilina : Žilinská univerzita v Žiline, 2020, Front-page.

Similarly, the customer can stack other products in a specific place. For example, furniture or appliances can be placed in augmented reality in space in real dimensions. This advertising system is focused on individual customer needs, customer value and key competencies. For regular customers, 3D models represent the possibility of comparing a product that the customer already owns from a specific company and a new product that he is interested in. Visual perception is very important when deciding to buy a new product that would be able to replace the product that the customer already has fully. The 3D models of machines, workplaces, and other production elements can be used as background images for large-scale advertisements for the company or promo videos. The 3D models of machines, workplaces and other elements of production can be used as background images for large-scale advertisements for the company, or promo video. 3D models can be used to design an interactive virtual reality training (VR) as a teaching method and its impact on the transfer and storage of students' knowledge.[10] For example, using 3D models, we can visualize the range of products with all variants while saving costs and time by comparing other methods for the range database. 3D models can be used as background data for a business plan. The

[9] KUMAR, V., RAMACHANDRAN, D., KUMAR, B.: Influence of new-age technologies on marketing: A research agenda. In *Journal of Business Research*, 2021, Vol. 125, p. 864.

[10] KRAJČOVIČ, M., GABAJOVÁ, G., MATYS, M., GRZNÁR, P., DULINA, Ľ., KOHÁR, R.: 3D Interactive Learning Environment as a Tool for Knowledge Transfer and Retention. In *Sustainability*, 2021, Vol. 13, No. 14, p. 1. [online]. [2021-10-1]. Available at: <https://www.mdpi.com/2071-1050/13/14/7916>.

use and demonstration of the use of new technologies arouse interest among new investors and partners. Using 3D models, a point cloud obtained from 3D laser scanning, it is possible to create a virtual tour of the entire company. In this way, it is possible to present the company visually to anyone anywhere in the world. The virtual tour can be processed as a video, i.e. a pre-prepared visualization, which can no longer be entered and changed. The second way is a virtual tour in real-time, where it is possible to walk through the individual points and watch the individual elements from a specific place at a specific distance. This method can also be created for the virtual reality scene or extended, if the model of the whole hall is not available, but only specific elements. The most effective way is to create a 3D model of the entire hall or the whole complex of the company in a virtual reality environment, in which the hardware user can move freely in real-time and is not limited to standing points. Today's era of digital industrialization offers us the opportunity to verify possible changes in the production process without physically interfering with existing production, and thus it is also possible to verify the real consequences of the intervention.[11] It is also possible to communicate and verify proposed changes from a third party and predict the impact of these changes on profit.

Discussion and Conclusion

The basic premise why we deal with the use of 3D laser scanning at the Department of Industrial Engineering is that digitisation and its possibilities affect all areas of the company. For example, with the growth of digitalisation, there is a need to increase the knowledge of employees who need to work with new technologies, software (e.g., MicroStation V8) or understand why they work with them and what results they will achieve with them. Furthermore, as mentioned in the individual chapters of the article, it is necessary to adapt to this growth from the company perspective and its marketing. The growth of digitalisation and the use of new technologies will attract customers and enable them to look at the company's products and services. Thus, marketing in connection with digitisation can be a solid competitive tool. The described 3D laser scanning and post-processing of models in MicroStation V8 can be a powerful tool aimed at or used to support the layout solution's management and improvement. With its help, we can improve designing production, logistics, warehousing systems, etc. Among the advantages of using our methodology, we can include:

- Accelerate the systems designing process,
- improving and refining data obtained for system designing needs,
- accumulation of knowledge within one data source,
- sharing and availability of information within the research team thanks to better access to quality data,
- quick identification and subsequent troubleshooting in drawings or real production,
- effective planning and division of tasks within the team, including at different levels of the company,
- checking information about individual stages of the project,
- resource optimisation,
- engaging a more significant number of potential customers with interesting and innovative systems designing solutions,
- access to digital enterprise tools.

[11] KLIMENT, M., TREBUŇA, P., PEKARČÍKOVÁ, M., STRAKA, M., TROJAN, J., DUDA, R.: Production Efficiency Evaluation and Products' Quality Improvement Using Simulation. In *International Journal of Simulation Modelling*, 2020, Vol. 19, No. 3, p. 470.

The disadvantages of using our methodology include:

- Higher initial costs associated with purchasing software solutions and running them,
- internet connection dependency,
- risk of disconnection during data synchronisation,
- limitations caused by insufficient hardware and software requirements of the computer,
- system and data protection may be compromised e. g. due to editing drawings by a user who did not communicate well with team members.

Our research also points to the possibility that over time, systems will be able to predict customer needs and make independent decisions even in the case of more complex strategic decisions. Therefore, it is essential to use e. g. 3D laser scanning is fast and quickly creates a virtual image of an entire production or warehouse. The reason will be their rapid rationalisation and reconfiguration to new requirements or the creation of 2D / 3D documentation required by the customer. With the increasing number of modular elements in the system, it is possible to assume an increase in its adaptability, efficiency, and speed of response to unexpected changes. Using software such as MicroStation V8, databases, and various modules will bring a specific intelligence to the company, becoming a prerequisite for the advent of other technologies such as nanotechnology and artificial intelligence. These technologies will significantly change the usual processes in companies, especially the ways of creating marketing strategies in the competitive struggle for the customer. This time period is characteristic with focusing on company throughput for improving productivity and competitiveness.[12] The optimization should take place in a dynamic way, ac-cording to the situation occurring in the production and in the world.[13] The main findings of this study can be summarised as follows:

- Digitization is a necessary response to a pandemic situation,
- digitization needs to be done quickly and efficiently,
- the most suitable tools for digitization are from the concept of Industry 4.0,
- the results of digitization are suitable input data for marketing,
- the use of 3D models in marketing has a wide range of applications in relation to customers and potential investors.

The increasing digitization of the economy and the rapid ascent of platform-based businesses is altering not just the kind of products and services that companies produce but critically, the way they generate value and deliver it to final customers.[14] Fast and efficient digitization of production companies is currently a necessary step to stay in the market and the ability to optimize, manage and plan without physical access to the company. If a company deals with the digitization of the hall and products, it is possible to use them for marketing in many ways and thus save significant costs. Also, for example, if an enterprise can communicate more quickly and flexibly with a customer and better meet his requirements for the price, it can deliver more orders and better fill own production capacity.[15]

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This paper describes the use of technologies that are trends in digitization and in the concept of building a digital factory. The MicroStation V8 and FARO Scene software were selected for their user support and complete compatibility in digitizing real objects and creating a 3D static graphics model, which is currently an integral part and the first step in creating a digital factory. The next part of the article describes the use of a 3D model of the company for marketing purposes, which can support sales by the already mentioned options. This concept also offers opportunities to support new partnerships with potential investors, and with gradual development, manufacturing companies are able to work towards the concept of a smart factory.

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TRUST IN THE MEDIA IN THE POST-FACTUAL AGE

Diana Bulganová

Abstract
One of the basic features of the post-factual period is that it polarizes society, encourages distrust in the news media, public institutions, considers school education, health care, the expertise of doctors, educated people and, last but not least, scientific progress. There is nothing that cannot be questioned or refuted. Journalists are often referred to as "listeners" and liars. Quality journalistic work based on relevant resources is beneficial for society. It is not perfect, but it is beneficial. Journalists are aware of their limits and can admit them publicly. However, knowing the tangle of information, which has its own quality and relevance, is a difficult task for many beneficiaries. It is easier to believe misinformation and myths than the real truth. Therefore, some recipients fall victim to information bubbles, manipulations and social networking algorithms. Social bubbles include younger and older years, recipients with different education. The post Confidence in the media in the post-factual period describes the reason why trust in the media and journalists is important in the post-actual period, which the recipient imagines as a professional journalist and also in the contribution of critical thinking and individual responsibility of each recipient.

Key words:
Journalists. Post-factual age. Recipients. Trust. Truth.

Introduction

Trust is one of the crucial values for the media and the reporters. Since their basic task is to inform the public about matters of the public interests, we encounter issues of trust in the media and credibility of the news media, as well as the reporters themselves relatively often. It is difficult for the media and the reporters to gain credibility, especially in the post-factual age, which plays into emotions, unsubstantiated arguments, social networks algorithms, alternative “facts” and alternative media. Due to an absence of critical thinking, insufficiently developed media literacy, distrust of media organizations, state institutions and everything that is in line with the opinion of the people working in these institutions, we are witnessing an information battle, hate and polarization of the society. The information discussed by the alternative media sound “better”, it fits the worldview of many people, whereby they misuse their trust and undermine the credibility of the opinion-making media. The alternative media create a black and white reality and they offer simple answers to complex issues. They are often biased and they tell us what we should think. Misinformation, conspiration theories, hoaxes and fake news have paralyzed human thinking to the extent, where it is incapable of rational thought. We look at stirred up emotions, fabricated stories and argumentatively undersized discussions. Due to the incited riots, extremism and spreading hate, the overall functioning of the society could be in danger.

1 The Issue of Trust and Mistrust in the Media and Reporters on Social Networks in the Post-Factual Age

Mistrust in the media is not something we would experience only in the age of the Internet and social networks. Credibility of the reporters has been tested for years. It is fragile and instable. It adds seriousness, relevancy and credibility to the media and the reporters. For this reason, we cannot look at the mistrust only from the negative perspective. I. Kanižaj and S.

Lechpammer say that media credibility is considered the basic media capital.[1] The media should handle this capital the best they know how, because if there is something that affects people's opinion and their view of the world, it is necessary to be sceptical and verify information and its sources. It is important to be sceptical also of the media we watch regularly, because the news is created by people, who can be wrong. The audience should examine the reliability of the content and verify the information. Ch. Ireton says that due to the "high-speed information", which is communicated for free on the Internet and the social networks, the recipients have difficulties recognizing, what is the truth and what is constructed misinformation. Ireton also states that cynicism, mistrust, extreme opinions, conspiracy theories and populism are doing well in the post-factual age.[2] Low level of media and information literacy makes it difficult to distinguish quality, valuable and emotionally unaffected content from biased content or such content that is fabricated or serving political interests.

Samidh Chakrabarti, the product manager of the Facebook social network says that in the wrong hands, the social media can work as a weapon.[3] Social media do not have an editor or a corrector, there are almost no rules here. In addition to the ordinary users of the social media, who also support certain claims by their activity, there are also the politicians and publicly-know people. They also affect, for example with their statements, how we look at the reporters. Defamation of their work, public discreditation of the reporters or other degrading and hateful statements also cast a negative image on the media professionals. The group creating content on the Internet and the social media is completed by the so-called professional alternative media and media spreading political propaganda. Despite the fact that their intent and content is clearly distinguishable from the serious media, some recipients show higher level of trust of especially these media. They believe that these channels are doing a good thing, that they are interest in the needs and lives of all people and that they do not serve the elites. According to Williams, the practice points out one important phenomenon. The opinions of people and scientifically verified facts have the same value.[4] Furthermore, this trend is referred to as the freedom of speech.

There are also certain social bubbles on social networks. The recipients in these bubbles are linked by the same opinion and the same world view and they mutually confirm each other in their position. They do not confront their opinions and assumptions with the opposing world view. Samidh Chakrabarti, the Facebook manager also acknowledges that Facebook can cause damage to democracy by the sharing of unverified information and content en masse, which is of manipulative and propagandistic nature. Despite the fact that it was created to stay in touch with family and friends, today, the majority of politicians focuse their energy here. Chakrabarti also acknowledged that when Facebook was founded, no one foresaw that it would be one day used also for political purposes. Social networks can thus cause great damage even to a well-functioning democracy.[5] Serious and investigative journalistic work is one of the fundamental pillars of democracy. Schrøder says that never before have we had so

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much news as today. Through the digital media, the Internet and social networks we cross regional and national borders, and thus we have at our disposal a huge selection of information of various nature and quality. The decision-making process is the most important aspect here, which I will discuss in detail, as well as which content do I consider to be relevant.[6] However, few people are capable of properly assessing content, because we let ourselves to be carried away by emotions and we do not think critically. A mix of various information, the battle of alternative and serious media, profiles with propaganda and various individuals, who share anything without thinking about it damage the trust in serious journalism. However, this does not mean that we should trust anything the serious media say without any scrutiny, as there must be some level of skepticism. In general, we can say that we are experiencing the great era of mistrust of anything that was once recognized and valid. Algorithms, social media bubbles and alternative reality have a negative effect on the trust in state institutions, news media and the reporters. Additionally, we also do not trust education, healthcare, science and we degrade anything irrespective of the deeper context.

2 The Professionalism of Media Professionals as the Basis of Credibility and its Assessment

The journalists acquire their professional competences with practice. According to Kohring and Matthes, we can consider professionalism and impartiality to be the building blocks of credibility.[7] Ch. Ireton says that reporters should follow five principles. In the context of the first principle, in relation to credibility and in the context of hyper-information, he says that reporters should profess such values as independence of the media, professional ethics, transparency and plurality of opinions. According to Ireton, these values will guarantee a trustworthy relationship of the reporters with the recipients. In the context of the second principle, reporters should recognize social media as a source of information and as a platform for communication of information. However, they should also be skeptical of information making the rounds on the social networks and verify them. We can discuss the third principle as the most important principle in general. It is the provision of high-quality verified information and the attempt to create trustworthy media "brands" or organizations. In the fourth principle, we can talk of providing contextual and investigative reporting based on verifiable facts. The final fifth principle talks of the fact that the journalists should follow rules like social relevance and truthfulness.[8] The media professionals create a mediated view of the world. Therefore, the recipients expect for this view to be as reliable as possible.

Today, we know many methodologies, which help the recipients to assess media content as well as the media themselves. Many of them agree and complete each other on the basic questions. One of them is *The Trust Project*, which using the *8 indicators of trust* helps recognizing trustworthy and professional journalism: [9]

1. Expertise of the reporter – everything the reporter communicates to the public should be based on reliable evidence and facts. The questions we can ask ourselves in assessing the

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expertise of the reporter can be related to his or her professional reputation. This category can include his or her expertly and professional competences.
2. Why was given media content created? – in this second point, it is necessary to focus on whether the communicated content is biased or not. It should be important for the recipients to form their own opinion on given topic and the reporters should facilitate this especially via unbiased journalism. It is also important for the recipients to know how to distinguish whether it is a commentary, a report or sponsored content (advertisement).
3. Referencing relevant sources – in their work, the reporters must reference and should work with reliable sources. These sources should be also published and easily accessible for the purposes of verifying the accuracy and factual basis of the information by the recipients.
4. Informing on events/places that are close to the reporter – the reporter should have sufficient knowledge of the community (or event or topic) on which he or she reports. If a reporter is part of some community and he or she will be reporting on it, he or she may get more accurate and clearer information. This applies to the processed topic as well. If he or she understands it sufficiently, the reporter will present more relevant answers and conclusions.
5. The story will appeal to many people – this point is related to considering several points of view with an effort to minimize stereotypes. It is also a prevention of not concealing anything.
6. Possibility of feedback – the recipients should have the possibility to comment and provide feedback to the outputs of the reporters. Feedback reassures the recipients that the journalistic work is current and in some cases the recipients may point out important topics happening in the society. They may also express their disagreement, point out mistakes or inspire the media professionals for a more detailed elaboration of the issue.
7. Methods of information processing, the number of reporters involved in the production process – according to *The Trust Project* portal, reporter's motivation is important, as well as the reason he or she chose to process given story and whether anyone else was involved in the processing of the event. For better transparency it is also suitable to state how did they proceed in creating the media content, i.e. how much time did they spend on the processed topic, whether the content was checked by an editor/fact-checker, etc.
8. Media ownership and ethical standards that apply to given medium – every serious media organization should have a code of ethics or a set of rules. Equally important are also the methods of verifying the facts and the question of ownership of given medium.

The professionalism of reporters is an extremely individual matter. In addition to the above-mentioned indicators, journalistic work and trust in the media is also affected by the salary, work experience, ethics, epistemology, the reporters' sense of security at work, as well as personal beliefs and opinions of the reporters, because it is not always possible to separate the subjective part in the creative journalistic work.

3 The Importance of Trust in the Media and Reporters for the Recipients

At the beginning of 2021, through a project of the Reuters institute, a team of authors[10] conducted research[11] with 132 participants. Through discussion and interviews they were

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[10] Team of authors: Benjamin Toff, Sumitra Badrinathan, Camila Mont'Alverne, Amy Ross Arguedas, Richard Fletcher, Rasmus Kleis Nielsen. Respondents came from Brazil, India, the United Kingdom (UK) and the United States (US). The Reuters Institute aims to find out why confidence in intelligence institutions is being eroded. The institute also has long researched journalism, the value of news and the impact of the media on society. For

trying to determine, what is important to the respondents, as the media recipients, when going over the news, how do they assess media credibility and individual media content, as well as how the respondents form their opinions. The respondents have stated that they link credible journalism and credible media with values like objectivity, impartiality and balance of reporting. They have criticized the media mostly for activities linked to commercial interests or for the fact that some media are politically oriented. On the other hand, the respondents did also not agree with the media depiction of some groups of the society. They criticized the fact that some social groups are not given media space, or they are degraded and vice versa, too much attention is given to others. Part of the respondents even believed that the news is a subject of scrutiny and it is governed by the rules of the owners or those, who finance the operation of the news agencies. This has led them to skepticism and apathy towards the credibility of the news media. However, it must be said that the respondents, who trusted the media, were equally critical of them. It was therefore by no means an unconditional trust. However, in their verification of the factual nature of the news and sources, the respondents rely more on their own impression.

What is media credibility to the respondents? Toff, Badrinathan, Mont´Alverne et al have examined also this question among the respondents in the research. The research yielded the following results:[12]

- The recipients link media credibility to how long does the given medium exist in the media space. If it existed for longer time, the recipients give it greater weight and credibility.
- If the recipients are unable to assess the reputation of the media organization, they turn to people with knowledge on given topic (health, politics, etc.) and they help them assess given medium and specific news content.
- The greatest mistrust prevails in the news spread by the social media. On the other hand, some of the participants have expressed trust in the information broadcast by the television. The reason is it also provides visual material, which to them is a sort of visual proof of the given fact.
- Grammar and stylistics of the news presentation also improves the professionalism and credibility of the news media. The reporters have said that the appearance and aesthetics of the webpage, from which they take their information, is also important to them. They negatively rate being “bombarded” by advertisements. It also applies here that the less advertisement content and fewer popup windows there are, the more trustworthy and serios the webpage appears to be.
- Sensational news and clickbait headlines were also rated very negatively. The respondents link this news to less quality content, which also wants to attract a large part of the audience. However, such headlines and sensational news to not present relevant content. This is perceived very negatively especially in the news media. According to the respondents, it is also not appropriate to appeal to the emotions. One of the respondents stated that he stopped watching the news on one channel, because it evoked negative emotions in him. Despite this, he remained consistent in his opinions.

more information see: *About the Reuters Institute*. [online]. [2021-12-22]. Available at: <https://reutersinstitute.politics.ox.ac.uk/about-reuters-institute>.

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We would like to state that actual trust can only be gained over time. Everyone knows the saying that a lie has short legs. All we have to do is follow the reporters and focus on whether their statements come true over time. It must also be said that it is not a mistake to make an error, the mistake is not admitting it.

The research in question also presented interesting findings on what the respondents value and demand from the reporters:[13]

- Professionalism – in the sense that the reporters should examine the issues, cases, etc. in greater detail, avoid superficial process and demand clear answers from their respondents.
- deep processing of news and information with links to sources – the respondents have also said that they consider important for the reporters to process topics in depth and in a comprehensive way, whereby they should adopt the facts from renowned experts on given topics. They also agreed that the more opinions and facts from experts there are in the processed topics, the more the content is relevant to them. They consider simply processed topics to be superficial, without added information value.

Despite seeing intersections of what the recipients consider trustworthy and professional, sometimes this is not in line with what they really should be expecting. A paper by the American Press Institute captured this perfectly, when it said: *„When journalists say they are just doing their jobs, the problem is many people harbor doubts about what the job should be.“*[14] With freedom of speech comes individual responsibility not only for what we spread on the Internet and social networks, but also for what we read and accept. Every person on a social network is therefore responsible for him or herself and for his or her bubble he or she creates and in which he or she lives.

Conclusion

The more difficult trust is to gain, the easier it is to lose. For the media professionals and media themselves, trust in relation to the recipients is the highest value they are trying to achieve. As stated by Tsfati and Cappella, there are always two parties to trust. One strives for trust and the other party puts their trust, i.e. trusts.[15] Everyone should therefore be responsible for what he or she consumes on the Internet and social networks. However, this "responsibility" is possible only to the extent to which our media literacy and critical thinking are developed. On one hand, we do have the option to report content, which in some way meets the nature of unsuitable content, i.e. it is deceptive, endangers health, contains hate speech, etc. On the other hand, we do not always get the feedback we expect. Furthermore, restrictions and prohibitions should not be the solution of issues we encounter in the online

[13] TOFF, B., BADRINATHAN, S., MONT´ALVERNE, C. et al.: *Listening to what trust in news means to users: qualitative evidence from four countries.* [online]. [2021-11-15]. Available at: <https://reutersinstitute.politics.ox.ac.uk/listening-what-trust-news-means-users-qualitative-evidence-four-countries>.

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world. In particular, this should not be a long-term solution, but only a supportive one. The long-term, but more demanding solution, appears to be the strengthening of critical thinking and media literacy. An important skill is for the recipient to be able to assess the quality of the report, the report, the information itself and, of course, other journalistic units. He should also be able to work with an information explosion, an onslaught of negative emotions and targeted political propaganda. However, such skill is not easily achieved. Continuous, lifelong learning is needed. However, the problem is the current education system. There is no discussion in schools and the topic of media education is not attractive to many, despite the fact that there are currently influencers who deal with the popularization of science, critical thinking, media literacy and media education itself.

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THE ROLE OF BLOGS IN THE COMMUNICATION OF ECOLOGICAL TOPICS

Ľudmila Čábyová

Abstract
The author focuses on the use of blogs as communication tools that are able to effectively influence the target customer. Communication through the blogs is considered trustworthy and interactive and therefore it is appropriate to use them in the communication strategies of companies. The aim of the study was to analyze the use of blogs in the presentation of environmental topics and to point out the trend of using this tool in the "ground wave", which can have a significant impact on the purchasing decisions of the target group. The author monitored the use of blogs in communicating environmental topics. The survey was carried out using the Monitora system, which analysed the media outputs of 84 blogs from 2016 to 2021. It is also possible to state the trend of using communication through blogs in categories that are related to the ecological theme from the results of the survey. The contribution is one of the outputs of VEGA project "Management of the "groundswell" concept by business entities in promotion of environmentally-friendly products in times of technology interference".

Key words:
Blogs. Communication. Consumer Behaviour. Ecoinnovation. Ecological. Groundswell. Monitoring. Social media.

Introduction

Consumer behaviour can be influenced by many factors of marketing communication, business and non-business entities are using communication tools (advertising, personal selling, sales promotion, public relations or direct marketing) through offline and online communication channels. The information can be addressed to the target group from official sources (formal) or from unofficial sources (informal). In the case of these official sources, these are mainly controlled and planned communication outputs, which the company itself is behind, creates and participates in their content (advertising campaigns, press news, websites, etc.). In traditional mass marketing, information is directed only one-way, from the company to the target audience - the consumers.[1] In the two-step flow, information goes from the sender to certain receivers, (opinion leaders and opinion formers), that in turn reach the target audience through interpersonal networks.[2] With the multiple-step flow of communication,[3] Kotler et al. calls this kind of communication personal communication, since it is communication between two or more individuals, and also since this information cannot be controlled by the company. However, such a large amount of informal output cannot be coordinated by companies. It is important to give them due attention because of the growing influence of social media. These are all mentions of the company in online comments, discussion forums, blogs or reviews, video publishing, parodies of commercials on YouTube or creating podcasts. However, this isn't something new. Uncontrolled and unmanaged flows of information existed before the internet, in the form of word-of-mouth advertising such as

[1] HARREL, G. D., FRAIZER, G. L.: *Marketing – connecting with consumers,* Upper Saddle River : Prentice Hall, 1999, p. 128.
[2] FILL, C.: *Marketing communications,* London : Prentice Hall Europe, 1999, p. 12-15.
[3] KOTLER, P., WONG, V., SAUNDERS, J., ARMSTRONG, G.: *Principles of Marketing*. Spain : Pearson Education Limited, 2005, p. 187.

slander or whispering. Word of mouth (WOM) is defined by Blackwell[4] as *"the informal transmission of ideas, comments, opinions, and information between two people, neither one of which is a marketer"*. Nowadays the information flow has moved to the online social media environment which is much more able to spread information much faster and to more potential customers. Authors Li and Bernoff named these communication tools „groundswell"[5] Social media is interactive in nature and is therefore according to Dickey and Lewis[6] known as consumer-generated-media, new media or citizen media. Conventional media is company-generated and information flows in one direction i.e., messages are broadcast from company to target audience (one-to-many) and in social media (many-to-many) in multiple directions. The Groundswell offers helpful strategic recommendations or planning processes for how corporations and other organizations might both monitor and interact with consumers and the public via blogs, social media, wikis and forums.[7] Groundswell is formed by the intersection of people, interactive technologies, and online economics.[8] It is defined as, "*A social trend in which people use technologies to get information they need from one another, rather than from traditional institutions like corporations*"[9] In this article we will pay attention to one of the tools of groundswell, in particular blogs. We will characterize blogs from the point of view of various authors and we will point out trends that are related to using ecological topics in blogs, which are monitored by the MONITORA® system.

1 Literature review

The term „weblog" (later shortened to blog) was created by combining the terms web and log in 1997.[10] Blog is derived from the term „web log". The word web is a short name for www-World Wide Web, which is a browsing, referencing and storage system connected by using hyperlinks located on the internet. The word log[11] was used on sea voyages and had the meaning of a logbook in which all events from voyages were recorded chronologically. We can characterize a blog as a space on the internet where it is possible to publicize posts in the form of articles. A Blog can be described as „*website containing blog posts or content written by a bloggers, which are mostly arranged into categories and sorted in reverse chronological order."*[12] For some form of blogging we can include vlogs (video) and podcasts (audio recordings on the internet). Blogs are mostly defined by their form rather then content, which is often updated on websites in the form of personal diaries or article files.[13] The content of the blog can be different, for example personal, political, journalistic or it may focus on

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[4] BLACKWELL, R. D., MINIARD, P. W., ENGEL, J. F.: *Consumer Behavior,* 9th ed. Mason, OH : South-Western, 2001, p. 404.
[5] LI, Ch., BERNOFF, J.: *Spodná vlna.* Bratislava : Eastone Books, 2008, p. 10.
[6] DICKEY, I., LEWIS, W. F.: *Consumer Generated Media: Evolving Marketing Opportunity for Consumer Engagement.* [online]. [2021-10-15]. Available at: <http://ecommons.udayton.edu/mgt_fac_pub/34>.
[7] LI, Ch., BERNOFF, J.: *Spodná vlna*. Bratislava : Eastone Books, 2008, p. 11.
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[11] RETTBERG, J. W.: *Blogging, Digital Media and Society Series*. Cambridge : Polity Press, 2008, p. 17.
[12] WRIGHT, J.: *Blog marketing: The revolutionary new way to increase sales, build your brand, and get exceptional results,* New York, N. Y. : McGraw-Hill, 2005, p. 7.
[13] BAYM, N., K.: *Personal connections in the digital age*. Malden, MA : Polity, Digital media and society, 2010, p. 16.

special hobbies and lifestyles. „Kahn and Kellner[14] said that *„Blogs' are hypertextual web logs which people use for new forms of journaling, self- publishing, and media/news-critique,“* According to the blog search Technorati in early 2016, around 77% of active users of the internet read blogs, representing almost 346 million people. As of 2021, there are more than **570 million blogs** on the internet, based on activities reported by WordPress, Tumblr, Blogger, Wix, Squarespace, and Medium (and this number is constantly growing).[15]

In other interesting findings about blogs and and their writings we can include:
- Around 7 million blog posts are published per day,[16]
- 44% of websites are built on WordPress, more proof that most blogs are powered by WordPress is the fact that 20 billions of their blog pages are viewed each month by 409 million users,[17]
- 24.2% of people start blogs because they want to be self-employed,[18]
- 77% of internet users regularly read blogs,[19]
- around 43% of people only skim through blog posts,
- 22% of bloggers said that they aren't generating any revenue, while 19% say that affiliate marketing is their top revenue source., 17% make the most money by selling various services or products to their readers.[20]

Also, research opinions and experiences of American companies with blogging and bloggers produce interesting results: 61% of online shoppers in the US say they made a purchase after getting a recommendation from a blog post. Blog marketing has the power to build trust better than any other marketing method. It really gets the attention of consumers and can be quite persuasive. (Source: Contentmarketinginstitute.com) Blogs affect customers' buying decisions as 47% of them go through 3 to 5 blog posts before the buying process. Blogs are still one of the main research options when it comes to shopping for products or services. They have credibility with consumers and can provide in-depth information.[21]

It can be stated that the primary function for which were blogs created is the „civic engagement“ function. Their abilities can also be used for marketing and communicating purposes of companies. Wright[22] considers blog or blogging to be communication or marketing tools suitable for interacting with internet users and customers on a global scale. Concoran[23] defines the main benefits of blogs as a marketing tool, namely: viral potential

[14] KAHN, R., KELLNER, D.: New media and internet activism: from the 'Battle of Seattle' to blogging. In *New Media & Society,* 2004, Vol. 6, No. 1, p. 87-95.
[15] *Digital around the world.* [online]. [2021-10-15]. Available at: <https://datareportal.com/global-digital-overview>.
[16] *Internet live stats*. [online]. [2021-10-15]. Available at: <https://www.internetlivestats.com>.
[17]OSMAN, O.: *Wild and Interesting WordPress Statistics and Facts.* [online]. [2021-10-15]. Available at: <https://kinsta.com/blog/wordpress-statistics/>.
[18] GONZALEZ, L.: *Building an Audience Blogging is Difficult.* [online]. [2021-10-15]. Available at: <https://theneighborhoodfinanceguy.com/blogging-stats/>.
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[21] CHOLAWSKY, E.: *How Tech Intelligence Will Drive Companies To Be More Successful.* [online].[2021-10-15]. Available at: <https://www.linkedin.com/pulse/how-tech-intelligence-drive-companies-more-successful-cholawsky-phd>.
[22] WRIGHT, J.: *Blog marketing: The revolutionary new way to increase sales, build your brand, and get exceptional results.* New York, N.Y. : McGraw-Hill. 2005, p. 224-226.
[23] CORCORAN, A. et al.: Blog marketing. In KIRBY, J., MARSDEN, P. (eds.): *Connected marketing: The viral, buzz and word of mouth revolution,* Amsterdam : Elsevier, 2006, p. 148-158.

(they have tendency to spread quickly and for small amount of money reach a large audience). We can measure the effectiveness of blogs, it has measurable results. A personal approach is used to process the topics with the use of creativity and lastly blogs are distinguished by their high degree of interactivity. With the right marketing strategy set, bloggers are the voice of people and their communication is trustworthy.

We can effectively organize online PR and communicate interactively with their customers through blog marketing. It is also a good tool for more powerful campaigns for the optimization of websites for search engines. Company blogs may not only serve to promote but also increase sales. According to Marken,[24] blogs have the potential to be effective tools for cooperation communication, due to their unique features, which make easier one- way and two-way communication as well as mass and interpersonal communication. Blogs also offer companies special channels for direct communication with the public in a similar way to personal communication and also addresses a mass audience.[25] Sifry[26] defined company bloggers as „people who blog in the official or semi-official level in society, or are so closely related to the society in which they work, although they aren't official spokespersons of the company, they are positively connected and loyal to society. The most popular types of blogs are:[27] fashion blogs, food blogs, travel blogs, music blogs, lifestyle blogs DIY (do it yourself) blogs, sport blogs, movie blogs, personal blogs, finance blogs, fitness blogs, political blogs, parenting blogs, business blogs, car blog, news blogs, pet blogs and gaming blogs.

2 Methodology

The interaction of socially responsible business with an emphasis on environmental protection, the promotion of healthy lifestyles and the promotion of eco-inovation is becoming more frequent. As Krajčovič and Čábyová[28] emphasize, in practice we encounter increasing media interest in these topics, which is a natural reflection of the interest in the issue of responsible behaviour on the part of the audience, specifically the public. This is also proved by the number of media outputs in individual types of media. Krajčovič and Čábyová researched the period from 2015 to 2020*(*until 30.6. 2020). For the period 2015-2020, 232 906 articles on topics related to eco-innovation, environmental issues and healthy lifestyle were published in Slovakia. The media impact of these contributions represents in total 421 921,43 GRP (the GRP table represents the true media image as it reaches the widest audience, viewers and readers. They are based primarily on the readability and viewership of individual media and are expressed as a percentage.)

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[24] MARKEN, G. A.: "To blog or not to blog. That is the question?" In *Public Relations Quarterly,* 2005, Vol. 50, No. 3, p. 31-33.

[25] KELLEHER, T., MILLER, B.: Organizational blogs and the human voice: relational strategies and relational outcomes, In *Journal of Computer-mediated Communication*, 2006, Vol. 11, No. 2. [online]. [2021-10-15]. Available at: <http://jcmc.indiana.edu/vol11/issue2/kelleher.html>.

[26] SIFRY, D.: *Oct 2004 state of the blogosphere: corporate bloggers.* [online]. [2021-10-15]. Available at: <www.sifry. com/alerts/archives/000248.html>.

[27] MIŽÍKOVÁ, A.: *Aké typy blogov sú najpopulárnejšie.* [online]. [2021-10-15]. Available at: <https://blogit.sk/typy-blogov/>.

[28] KRAJČOVIČ, P., ČÁBYOVÁ, Ľ.: Význam tradičných a digitálnych médií pri zvyšovaní povedomia o ekoinováciách a environmentálnych témach. In ZAUŠKOVÁ, A. et al.: *Výskumné štúdie a analýzy súvisiace s uplatnením komunikačných aktivít prezentujúcich environmentálne inovácie prostredníctvom konceptu SoLoMo*. Trnava : FMK UCM, 2019, p. 138.

In this article, the author examined the representation of the word "ecological" in blogs. She analyzes how often and what media impact has the word "ecological" as it appears in blogs in the monitored media. The growing popularity of blogs and social networks is also related to the growing number of their readers. They can thus affect a significant percentage. She monitored the number of outputs using the MONITORA® monitoring tool, with which we monitored 84 online blogs. Media outputs were categorized into individual topics according to the following keywords:

- „Eco-innovation",
- „Eco product ",
- „Organic product",
- „Ecological",
- „Sustainable fashion",
- „Slow fashion".

One of the limits of the research is that we were restricted by data from the Monitora system alone, which monitored 84 Slovak blogs during the analysis.

3 Media monitoring in the field of ecological topics

In the "eco-innovation" and "sustainable fashion" categories, media outputs were not recorded in the monitored blogs. In the "eco-products" category, only 2 media outputs were recorded in 2020 (25 May 2020 and 7 June 2020). Both were published on "blog.sme.sk." The media value (GRP) in the "eco-products" category was 2.66.

In the "fast fashion" category, there were only 2 media outputs in 2021 (April 14, 2021 on blog.sme.sk and August 13, 2021 on blog.refresher.sk). The media value (GRP) value in this category 1.35. There were also 2 outputs in 2020 in the category "fast fashion" (January 23, 2020, on blog.refresher.sk and June 1, 2020 on blog.sme.sk). The media value (GRP) was 1.35.

The analysis of monitoring in the "slow fashion" category points out that there were only 2 media outputs in 2021 (6 May 2021 on "blog.sme.sk" and 2 August 2021 on "blog.refresher.sk"). The media value (GRP) value 1.35. There was only 1 media output in 2020 (August 27, 2020 on "blog.refresher.sk"). The media value (GRP) was 0.01.

In the "organic product" category, there were no media outputs recorded in 2021. In 2020, there were only 6 media outputs published with a total media value (GRP) of 3.51.

"ECOLOGICAL" category

From the data in the monitoring system, we analysed the number of media outputs (blogs) in the "ECOLOGICAL" category. The data were collected over the last 6 years. (Table 1) From the outputs in the table, it can be stated that there is a growing tendency to use this category in the researched blogs. The lowest number of media outputs in the "ecological" category was in 2016 (274 media outputs) compared to 2019 with 351 media outputs. The data for 2021 are not yet complete, as the last available tables are from October 2021.

Table 1: Number of media outputs in the category "ecological" in individual years and months

	1	2	3	4	5	6	7	8	9	10	11	12	
2021	19	4	35	23	24	15	25	29	23	24			222
2020	29	35	33	37	30	35	29	18	14	26	31	24	341
2019	18	21	23	32	35	28	19	38	37	38	32	30	351
2018	12	25	21	34	19	26	11	22	27	33	42	28	300
2017	16	27	25	16	35	20	14	20	28	30	25	18	274
2016	25	29	22	22	31	21	14	20	23	14	11	12	244

Source: Own processing (data: MONITORA).

From the monitoring system, it was also possible to find the media value (GRP) of the monitoring blogs in the individual months and their development of media outputs (GRP) since 2016. (Table 2) As in the previous comparison, we also state an increasing trend in the number of GRP. The highest number of media outputs was recorded in 2019, when published articles also achieved the greatest media impact Data for 2021 were processed only up until October 2021.

Table 2: Media value (GRP) in the category "ecological" in individual years and months

	1	2	3	4	5	6	7	8	9	10	11	12	
2021	15,67	12,03	29,98	22,37	26,69	15,45	27,14	27,17	25,12	19,66			
2020	25,93	38,27	34,89	34,61	34,76	35,18	29,25	17,58	11,3	23,12	30,71	23,4	339
2019	15,26	22,33	20,86	30,2	41,38	29,95	17,07	40,17	39,04	30,47	31,55	32,15	350,43
2018	13,34	22,97	16,83	29,05	17,75	20,55	6,87	20,6	24,24	27,11	44,55	27,14	271
2017	17,04	24,43	23,94	13,69	30,75	19,24	12,76	19,14	30,64	21,81	29,29	15,77	258,5
2016	29,51	31,17	23,66	23,14	17,25	24,83	16,47	22,45	24,19	14,86	11,59	12,64	251,76

Source: Own processing (data: MONITORA).

However, the actual impact of individual blogs can proved by number of individual blogs which have been shared by other social network users. Even in this case, the impact of social media users, resp. social shares have an upward trend. In 2019, there is an exception again. In 2019 occurred the largest number of blogs, the highest impact and the largest growth in data is also shown by the number of shares on social networks.

Table 3: Social share in the category „ecological" in individual years

year	2016	2017	2018	2019	2020	2021
Social share	5040	3392	3635	8590	3744	6714

Source: Own processing (data: MONITORA).

In comparison, in the "ecological" category, a total of 94,775 media outputs were recorded. Traditional media (television, radio and print media) published 18,964 media outputs (20%). The largest number of publications was published in online media, namely 75,067 (79.2%). News agencies published a total of 744 media outputs. The highest number of media outputs was recorded in 2019, when published articles also achieved the greatest media impact and number of shares.[29]

[29] KRAJČOVIČ, P., ČÁBYOVÁ, Ľ.: The Role of Solomo Marketing and Media in the Communication of Eco-inovation. Budapest : Wolters Kluwer, 2020, p. 108.

Table 4: The most frequented blogs in category Ecological in 2016 – 2021

Category	Number of blogs
sme.sk	892,00
pravda.sk	494,00
blogspot.com	94,00
refresher.sk	53,00
trend.sk	50,00
modrastrecha.sk/blog/pr_clanok	37,00
blogovisko.sk	34,00
afinabul.blog.cz	33,00
innonews.blog	17,00
elimakeupartistblog.com	15,00

Source: Own processing (data: MONITORA).

Table 5: The most frequented blogs in category Ecological in 2020 – 2021

2020		2021	
Category	**Number of blogs**	**Category**	**Number of blogs**
sme.sk	171,00	**sme.sk**	110,00
pravda.sk	101,00	**pravda.sk**	102,00
blogovisko.sk	10,00	**refresher.sk**	11,00
innonews.blog	10,00	**modrastrecha.sk/blog/pr_clanok**	10,00
modrastrecha.sk/blog/pr_clanok	9,00	**blogspot.com**	10,00
blogspot.com	8,00	**innonews.blog**	7,00
refresher.sk	6,00	**elimakeupartistblog.com**	5,00
poleblog.sk	6,00	**blogovisko.sk**	4,00
elimakeupartistblog.com	5,00	**blog.mindshare.sk**	3,00
napadovy.blog	5,00	**poleblog.sk**	2,00

Source: Own processing (data: MONITORA).

In 2016-2021, the most frequent mentions in the „ecological" category were found on the „blogs sme.sk", „pravda.sk". The results were also confirmed in the last two monitored blogs, when in 2020 and 2021 the blogs on „sme.sk, pravda.sk" were again the highest. However, it should be emphasized that these blogs are media outputs of national dailies, which contain several blogs from different authors. The results of our own survey, which was conducted on a sample of 493 respondents aged 15-65 years, showed that almost 90% of respondents are interested in environmental topics.[30] According Zaušková and Rezničková[31] 43.3% companies use social media as a part of their eco-innovation processes implemented in the company, while 56.7% expressed a negative opinion. The survey was conducted on a sample of 300 slovak business entities. We can state from Monitora's results, that blogs are used to

[30] KRAJČOVIČ, P., ČÁBYOVÁ, Ľ.: *The Role of Solomo Marketing and Media in the Communication of Eco-inovation*. Budapest : Wolters Kluwer, 2020, p. 108.

[31] ZAUŠKOVÁ, A., REZNIČKOVÁ, M.: SoLoMo marketing ako nástroj pre podporu eko-inovácií v podnikateľskom prostredí. In ZAUŠKOVÁ, A. et al. (eds.): *Výskumné štúdie a analýzy súvisiace s uplatnením komunikačných aktivít prezentujúcich environmentálne inovácie prostredníctvom konceptu SoLoMo*. Trnava : Fakulta masmediálnej komunikácie UCM v Trnave, 2019, p. 7-17.

present environmental topics, but compared to other online communication tools, promotion and communication through blogs is much less intense than through other communication tools. The categories eco-innovation, sustainable fashion and fast food were not found at all in the monitored blogs, although their communication through other media is very intense. However, as can be seen from the results in Tables 1, 2 and 3, we note the increased interest in this topic, confirmed by the growing number of blogs, higher media impact (GRP) and the number of social blogs.

Conclusion

At present, the issue of environmental protection is coming to the fore and consumers are more often looking for products that are environmentally friendly, do not pollute the air and protect natural resources. As a result of global changes that also negatively affect the environment, individuals can express their positive attitude towards the environment by changing their shopping behaviour. This change is easy to imagine, but relatively difficult to implement. Customers must first understand the basic reasons and the meaning of changing their environmental behaviour. 49.67% of the respondents to the mentioned survey[32] use mainly social media and PR techniques for communication of their activities in the environmental field. Their advantages are low costs, efficiency, credibility, delivery for interest, and public retention. Businesses use these communication tools especially when launching new products on the market and during price sales promotions. It is necessary to start to usethose public relations techniques that are able to present the content in an informal way and are credible and interactive compared to official communication flows to an even greater level. Communication through blogs can therefore become one of the key tools for raising awareness of environmental issues. Communication through blogs and other "groundwell" tools has the potential to reach a significant audience and thus contribute to raising awareness of environmental issues, eco-innovation and thus contributing to a responsible approach to the use of limited resources and environmental protection.

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MARKETING COMMUNICATION IN TOURISM AND THE SENIOR SEGMENT

Jana Černá

Abstract
Demographic trends in European countries are leading to an increase in the average age of consumers of tourism services. This fact is mainly reflected on the demand side. There is a growing demand for specialized services that meet the specific needs of individual age groups, such as seniors, young travellers, families with children and the like. However, patterns of consumer behaviour in individual age segments are also changing dynamically. They are influenced by the growth of living standards, education, massive use of information technologies, flexibility of working hours and also travel experience. Today's seniors have a significant share and influence in the tourism services sector. They are characterized by their desire to stay young for a long time, to be active, to know new places, to gain new knowledge, etc. These characters are reflected in the form of how they spend their holidays. The topic of health protection and healthcare has always been urgent, very important and intensively discussed in the senior segment. Especially during a pandemic, it is necessary to sensitively assess the content of the communication message for different segments of seniors with regard to their needs, preferences and current life situation.

Key words: Consumer behaviour. Segmentation. Seniors. Tourism.

Introduction

The issue associated with the aging population has been a widely discussed topic for a long time at various levels and across individual sectors of the national economy[1,2,3,4]. This topic is closely related to economics, sociology, health care, culture, media and many other areas of socio-economic life. An essential characteristic of the European population is its aging population and "population aging is one of the main social and political challenges of the 21st century"[5]. The roots of this process are changes in family behaviour and population reproduction[6]. Despite recognizing the negative consequences of an aging population not only for the countries' economies, the measures do not seem to be aimed at actively reversing this trend (except the Hungarian family policy, which consists in economic support for families and this trend was later introduced in Poland too). Most European countries are responding to an aging population by creating new policies and strategies to adapt to the new policies and strategies aimed at adapting to new conditions in which the proportion of the working age

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[1] ALÉN, E., NIEVES, L., TRINIDAD, D. V.: The Impact of Ageing on the Tourism Industry: An Approach to the Senior Tourist Profile. In *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement,* 2016, Vol. 127, No. 1, p. 303-322. [online]. [2021-09-09]. Available at: <https://ideas.repec.org/a/spr/soinre/v127y2016i1d10.1007_s11205-015-0966-x.html>.

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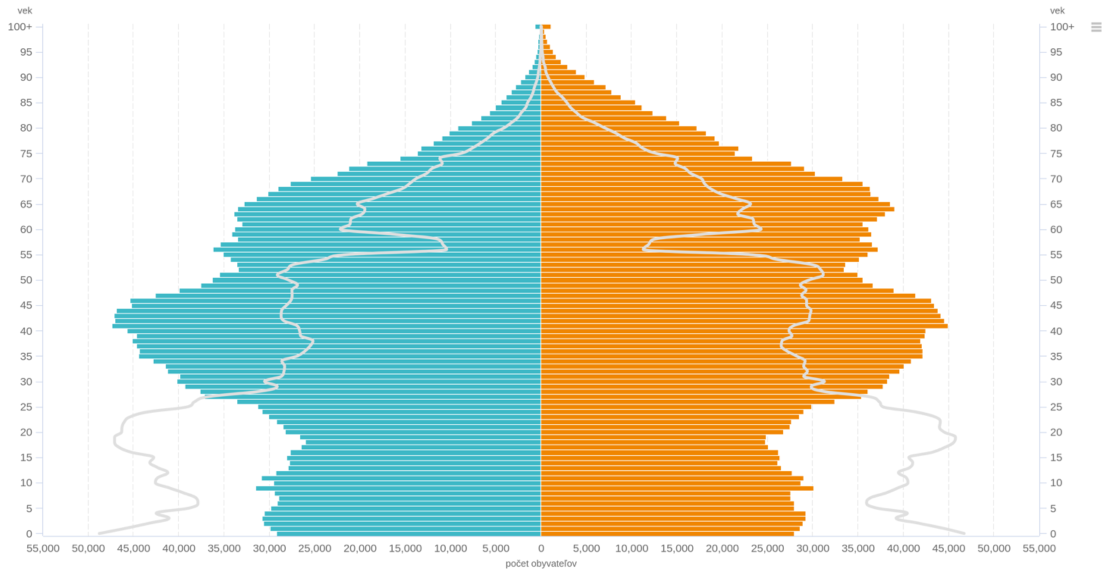
[5] ŠPROCHA, B., ĎURČEK, P.: *Starnutie populácie Slovenska v čase a priestore.* Bratislava : Prognostický ústav SAV, 2019, p. 13.

[6] KÁČERROVÁ, M., ONDAČKOVÁ, J.: Proces starnutia populácie Slovenska v Európskom kontexte. In *Slovenská štatistika a demografia*, 2015, Vol. 3, p. 45.

population will decrease (for example in the Slovak republic: The National Program for Active Aging 2014-2020, in the Czech Republic the document: Preparing for Aging in the Czech Republic).



Picture 1: Age structure of the population of the Slovak Republic (1974, 2020)
Source: *Koľko nás žije na Slovensku?* [online]. [2021-11-03]. Available at: <https://vekovastruktura.statistics.sk/>.

Picture 1 graphically shows the aging process of the population. It expresses changes in the age structure, comparing the years 1974 (with a gray curve) and the current year 2020 (expressed by a color chart - blue men, orange women). In 1974, the historically highest total fertility of our country was recorded. A significant decline in the child population and an increase in the proportion of the elderly population are represented by the "expanding tree"; the average life expectancy of the population is increasing and the number of live births is declining. These changes are striking and took place in a relatively short time. In addition, they affect the macroeconomic and microeconomic level of the national economy, and thus the tourism sector, including.

1 Bases for marketing communication in tourism for the senior segment

The increase in the number of seniors is automatically changing the overall nature of the tourism services market and its pricing. In general, current seniors have higher incomes than seniors in the past. They buy and use tourism services more often and subsequently become more experienced and demanding consumers. The most important factor for decision-making is not the price of tourism services. In the consumer behaviour of seniors are characterized current trends by the demand for[7]:

- quality and safety,
- simpler and better modes of transport,

[7] ČERNÁ, J.: *Nové trendy v cestovnom ruchu pre marketérov.* Trnava : Fakulta masmediálnej komunikácie, 2015, p. 44.

- leisure activities (wellness, spa, golf, etc.),
- off-season holiday trips,
- more remote and exotic destinations,
- destinations with quality healthcare,
- clean and ecological destinations.

Research into the specifics and peculiarities of senior tourism and applications for marketing and marketing communication has been the focus of attention in Western European countries for several decades (the first studies date from the 1980s and 1990s). In post-communist countries, this area is studied later and is related to the transition to a market economy, a change in demographic development, but also to changes in society as a whole. It can be observed that travel has become a fashion, even a lifestyle across all generations. The offer of products and services in tourism is changing; companies are more intensively focused on satisfying needs according to individual target groups. "Among the pioneers in senior orientation are Japanese companies that were the first to respond to the challenges of demographic change and are constantly entering the market with innovative products and services. Nevertheless, only a fraction of the huge potential of this market has been used"[8].

2 Segmentation of seniors in tourism

A characteristic feature of seniors in the tourism sector (but also affects other sectors) is diversity. In particular, diversity in relation to vitality, mental and physical condition, which predisposes one to the consumption of tourism services. This is a qualitative characteristic that is more difficult to measure. Comprehensive and multidisciplinary research (eg medical, psychological, sociological, anagogical research, etc.) is needed to further investigate these characteristics. Current seniors represent the so-called baby boomers generation. These are people born between 1946 and 1964. According to a CBI study, the main motivation for traveling is to spend more time with friends and family. Other important reasons to travel include relaxation, social interactions, physical exercise, maintaining health and well-being, nostalgia, learning and excitement. Among this generation, cruises and family visits are popular, and there is also interest in authentic experiences and learning about local conditions. The preferred communication medium is the telephone[9]. Another characteristic of this generation is that they feel young and want to stay young for as long as possible; this is one of the main attributes of the image they are working on. They also have an idea of independent and mobile life. Therefore, the generation of "baby boomers" is characterized by a demand for products and services that satisfy their desires. In general, they use off-season time to travel (unless they not travel with compulsory school grandchildren) and prefer a longer stay. “They are also characterized by cosmopolitanism, which testifies to their strong propensity to travel. They are more experienced travelers than their parents, they are increasingly looking for sightseeing tours, travel is associated with their lifelong hobbies, but they also make various adventure trips"[10]. The most commonly used segmentation criterion is the physical age of seniors. Several age limits defining senior age can be found in the literature[11], generally

[8] PÁLENÍK, V. a kol.: *Strieborná ekonomika v slovenskom, európskom a svetovom kontexte.* Bratislava : Ekonomický ústav Slovenskej akadémie vied, 2012, p. 58.

[9] *The European market potential for babyboom tourism.* [online]. [2021-11-03]. Available at: <https://www.cbi.eu/market-information/tourism/baby-boomer-tourism/market-potential>.

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[11] ALÉN, E. et al.: The Impact of Ageing on the Tourism Industry: An Approach to the senior Tourist profile. In *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement*,

accepted categorization is absent. The authors present a senior age of 50+ across a wide range[12]; most are in the age of 55+[13] but e.g. Eurostat statistics show the age of 65+[14]. Within the framework of consumer behavior in senior age, several specifics can be observed, which are essential for the creators of the offer of products and services in tourism. Common behavioral attributes for younger seniors and other attributes in older seniors[15] can be sought within the seniors segment (Table 1).

Table 1: Seniors in tourism by age

Age	Category	Characteristics
55-64	Early senior	They are still working, preferring the recreational and regenerative function of the holiday. They are no longer involved in raising and caring for children, the holiday is once again becoming carefree and fun.
65-74	Senior	Non-working seniors with plenty of free time all year round. They often want to educate and supplement their knowledge in some fields related to travel (geography, history, art).
75-84	Later senior	They already have more frequent health problems, the form of vacation adapts to physical and mental condition.
85 and more	Elderly senior	Travel is already exceptional, great emphasis on the health of the individual.

Source: Own processing according Šedivá Neckářová, 2013, p. 4.

It follows from the above that in the case of seniors, marketing efforts cannot be focused only on the one selected target group, because there are actually many different customer segments. There may be a phase of life called "age", but there are no typical old people. Other authors eg Meiners and Seeberger[16] or Śniadeková[17] formulate segmentation criteria more complexly, depending on the life situation, living circumstances and health condition of seniors. Śniadeková [18] names these circumstances as "influential factors", including:

2016, Vol. 127, No. 1, p. 305. [online]. [2021-10-10]. Available at: <https://ideas.repec.org/a/spr/soinre/v127y2016i1d10.1007_s11205-015-0966-x.html>.

12 KUSÁ, A., GREŠKOVÁ, P.: 50+ Generation - the perspective for marketing. In MATÚŠ, J., PETRANOVÁ, D. (eds.): *Marketing Identity, Design that sells*. Trnava : Fakulta masmediálnej komunikácie, 2013, p. 91. [online]. [2021-08-05]. Available at: <https://fmk.sk/download/konferencie/zborniky/midentity_design-that-sells.pdf>.

13 e.g. SPASOJEVIC, B., BOZIC, S.: Senior tourists' preferences in the developing countries - measuring perceptions of Serbian potential senior market. In *European Journal of Tourism, Hospitality and Recreation*, 2016, Vol. 7, No. 2, p. 77. [online]. [2021-10-12]. Available at: <https://sciendo.com/de/article/10.1515/ejthr-2016-0009>.

14 *Ageing Europe*. [online]. [2016-09-01]. Available at: <https://ec.europa.eu/eurostat/documents/3217494/10166544/KS-02-19%E2%80%91681-EN-N.pdf/c701972f-6b4e-b432-57d2-91898ca94893>.

15 ŠEDIVÁ NECKÁŘOVÁ, A.: Senioři jako perspektivní segment poptávky na trhu cestovního ruchu. In SKOKAN, K. (ed.): *Sborník příspěvků VI. Mezinárodní vědecké konference doktorandů a mladých vědeckých pracovníků Karviná*, 2013, p. 4.

16 MEINERS, N. H., SEEBERGER, B.: Marketing to Senior Citizens: Challenges and Opportunities. In *The Journal of Social, Political and Economic Studies,* 2010, Vol. 35, No. 3, p. 301. [online]. [2021-09-05]. Available at: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.675.2346&rep=rep1&type=pdf>.

17 ŚNIADEK, J.: Age of seniors – a challenge for tourism and leisure industry. In *Studies in physical culture and tourism*, 2006, Vol. 13, No. 1, p. 104. [online]. [2021-09-13]. Available at: <http://www.wbc.poznan.pl/Content/61372/Sniadek_REV.pdf>.

18 ŚNIADEK, J.: Age of seniors – a challenge for tourism and leisure industry. In *Studies in physical culture and tourism*, 2006, Vol. 13, No. 1, p. 105. [online]. [2021-09-13]. Available at: <http://www.wbc.poznan.pl/Content/61372/Sniadek_REV.pdf>.

- The current phase of the family life cycle and current life events, their nature and sequence, e.g. removal of children, retirement, birth of grandchildren, death of spouse, etc.
- Belonging to the generational cohort - the system of values of the seniors of the generation is relatively constant, because it was formed in childhood and early youth, very often under the influence of current political (war, peace, political system), economic (times of crisis and prosperity), social (conflicts) or cultural / subcultural events (music, films) witnessed by them and their peers.
- Preservation and transmission of vital values; e.g. family life and family care, incentives for simple joy, physical health care, fears for the future, etc.

The above characteristics are the most complex. For a deeper examination and understanding of this segment, other characteristics can be identified and supplemented, such as: marital status, amount and nature of income, financial background, gender, educational attainment, quality of health, hobbies, etc.

3 Seniors and online shopping

Next important fact that significantly influences the consumer behavior of seniors in the market of products and services in tourism is their behavior in the online environment. This behavior of seniors has its own specifics, which distinguish it from consumers from the younger generation. In general, they make more judicious decisions, devoting more time to the decision-making process - not only when buying in "stone shops" but also in an online environment. They have enough information and have higher shopping literacy than previous generations of seniors. Some studies confirm that today's seniors are predominantly experienced users and are well-versed in the online space. "There is a new type of senior travellers who are passionate users of technology and are very independent. It is expected to continue to grow rapidly, which is an opportunity for tourism businesses to promote their products, especially out of season"[19]. And not only out of season but also during the current Covid 2019 pandemic. The presentation of destinations and tourism products and services is generally important in the online environment and also has an impact on the older target group. Online shopping is based primarily on factors such as digital literacy, digital skills and the quality of IT equipment. According to the results of a study by Vibration[20] on the shopping behavior of Slovak seniors and communication with them, online space is used to purchase goods and services very often. In particular, the category of younger seniors is a regular Internet user and mostly searches for goods and services online (up to 95% of users) and also make purchases here (79% of Internet users). He carries out these activities on his own. The most frequently visited online stores were from the category of online giants operating in our market (Alza.sk, MALL.sk, AndreaShop.sk, 4home.sk, Datart.sk, etc.) but also various Deal portals, where gro sales represent tourism services such as wellness, holidays, insurance, various events, etc.

[19] PESONEN, J., KOMPPULA, R., RIHINEN, A.: Typology of Senior Travellers as Users of Tourism Information Technology. In *Information Technology & Tourism*, 2015, Vol. 15, No. 3, p. 239. [online]. [2021-10-10]. Available at: <https://erepo.uef.fi/handle/123456789/96>.

[20] *Nákupné správanie seniorov a komunikácia s týmto segmentom*. [online]. [2021-07-03]. Available at: <https://vibration.sk/nakupne-spravanie-seniorov-a-komunikacia-s-tymto-segmentom/>.

Conclusion

No generation or partial market segment is more heterogeneous and diverse than the 50+ generation. Given this heterogeneity, it is "... the most demanding target group in terms of market research..."[21]. In addition to age, generationality or digital literacy, "considerable diversity can also be seen in this age group in income, wealth, vulnerability or health status"[22]. Demographic change has an impact on marketing and communication strategies at all levels. The success of marketing communication in the tourism market for seniors is conditioned by an understanding of this specific segment. There is also considerable diversity in consumer behaviour across Europe. Current seniors in Central European countries are characterized by a desire to travel and discover new ones and a desire for experiences; similar to Western European ones. They also feel young, love wellness and spa and recreation as such. Among the most important factors that have shaped the current consumer behavior of Central European seniors (as opposed to Western European) in tourism are:

1. Belonging to a generational cohort that grew and shaped its values and attitudes during the communist era and the centrally controlled economy vs. belonging to a generation that lived and grew up in a market economy and is also referred to as "the first teenagers in an increasingly consumer society"[23].
2. Experience with tourism activities and leisure time in the productive age, especially in domestic tourism, but mostly in the countries of the former so-called Eastern Bloc (as evidenced by the phenomenon of chattering and cottaging) vs. the possibility of a holiday "anywhere in the world".
3. The importance of traditional values such as family, family cohesion and traditions is still high in the hierarchy of values of Central European seniors. This is also reflected in relation to leisure preferences: e.g. more frequent visit of relatives, time spent with grandchildren, preference of family holidays, etc.
4. The purchasing power of Central European seniors, which is transforming into living standards, is lower compared to the EU-15 countries (member states of the European Union in 1995). This is subsequently reflected in the structure of consumption of tourism services. The income is primarily an old-age pension, which is less than half the average wage in the national economy. In addition, the purchasing power of seniors is significantly reduced with age.

The results of research on consumer behavior and appropriate segmentation criteria for seniors in tourism are the basis for decisions related to marketing communication. They should be able to zoom in and answer questions like:

- What is the current senior as a consumer of tourism services? In this context, identify his needs, expectations and requirements. Also know the broader context of existing life situations. Further answer the questions of how current modern trends shape seniors, what is the lifestyle of current seniors, what will be the lifestyle of the next "Generation X".
- What marketing strategies are more effective for products and services in tourism for seniors? Partial product, pricing, distribution and communication strategies can respond to this.

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[21] MEINERS, N. H., SEEBERGER, B.: Marketing to Senior Citizens: Challenges and Opportunities. In *The Journal of Social, Political and Economic Studies,* 2010, Vol. 35, No. 3, p. 296. [online]. [2021-09-05]. Available at: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.675.2346&rep=rep1&type=pdf>.

[22] PÁLENÍK, V. a kol.: *Strieborná ekonomika v slovenskom, európskom a svetovom kontexte.* Bratislava : Ekonomický ústav Slovenskej akadémie vied, 2012, p. 59.

[23] Ibidem.

- What marketing strategies are more effective for products and services in tourism for seniors? Partial product, pricing, distribution and communication strategies can respond to this. At the same time answer the questions: how should these strategies be set for future seniors? This in turn results in the creation of future business models. In this context, there is a parallel need to study behaviour in the online environment.
- At the same time, several other external factors need to be taken into account: economic factors (disposable income, which in our conditions mostly represents retirement), cultural factors (customs, traditions, religion), social factors (new life role, grandchildren most often), vitality and health of seniors (physical fitness, health restrictions, possible loss of health) and, last but not least, the global health situation.

Such specifically oriented research has the potential to bring the necessary knowledge, which can be used in practice, especially for destination management organizations, tourism companies but also for policy makers at the national, regional and local levels. A particularly good time for such preparation is the period of crisis (currently in the context of the risks of spreading the infectious disease caused by the coronavirus SARS-CoV-2, resulting in the deepest decline in the tourism industry in history). The new knowledge then represents inputs for innovation processes that have the ability to revive the market.

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SCIENTIFIC PROGRESS AND ITS CONTRIBUTION TO MARKETING RESEARCH

Tamás Darázs

Abstract
Today's science brings new facts every day and reveals hitherto unknown facts. If the facts found by scientists, even with the help of modern technology, become accessible to the public, it can have a very positive impact on society. However, a truly revolutionary benefit is making the use of these technologies available to people to facilitate their daily activities. The article points out the importance of marketing and marketing research of customer behavior as a basic prerequisite for meeting their needs. It lists factors that influence the customer's decision-making process when purchasing various products. It indicates the relevant context of this process with the various stages of the product life cycle. It clarifies the nature and basics of neuromarketing as one of the innovative forms of exact research into consumer behavior. It introduces the emotions that are part of the human decision-making process. It presents possibilities of application of neuromarketing methods of research to investigate customer reactions in sales of selected goods.

Key words:
Marketing research. Modern Technologies in Research. Neuromarketing.

Introduction

The development of technology directly or indirectly affects the lives of every individual on this planet. Technologies can make people's lives easier by streamlining their daily activities, but they can also offer new opportunities. This phenomenon is not circumvented by marketing, a concept that is related to perhaps every retail or wholesale activity. The current trend in technology development is to solve increasingly complex problems more and more easily, using reductionism to obtain only the data he needs while minimizing the burden of obtaining this data. An example of such a shift in human possibilities is the use of methods for recording and evaluating facial biometrics or other neuromarketing methods. It sounds very complicated, because the principle and process of working of these methods is quite complicated. However, the final output is very practical for practical use. It is the use of the latest technologies in practice so that a large number of people benefit from it, which is what makes the technology really useful. Since the business was established, traders have had to decide from their own minds what the customer wants, what he needs. But with the use of facial biometrics technology, the trader can already know that what the customer actually likes directly from his mind by deciphering the complex process of brain processes that result in the movement of muscles on the face, which we know as a smile, for example. By combining information unaffected by an individual's complex decision-making process with other information that comes from the individual's free choice and consciousness, the trader can find out what the customer wants more accurately than ever before in human history.

1 Consumer perception

It is commonly known fact who the consumer is. In professional literature we can find the opinion that the consumer is a person who spends money for products and services purchase for his or her own consumption or for family needs, for other member of the family, or as a gift for another person. It is also indicated in the literature that in all listed cases the product is bought for the final consumption and therefore they are labeled as final consumers. A dynamic element of consumer purchasing behaviour characteristics (even in the most basic theorems) is facing the opinion that the final consumption of the individual consumers is changed very quickly because it includes all individuals (all people are the consumers) in each life stage and in each life role, no metter it is in the role of a buyer, a user (who consumes and someone else purchases for him or her) or he or she is in the both roles. [1] One of the models in the consumer behaviour sphere is the model of R. Shepard that points to the fact that the consumer behaviour is strongly influenced by features and quality of the products (physiological effects, sensory sensations), personal facts (biological, psychological, socio-demographic) and environmental facts (cultural, economic and marketing).[2] Issues of what appelas to consumers and characterizing of factors that influence their behaviour have been solved for decades in a commercial as well as in a professional sphere. Issues of how and why these factors actually affect him or her and which processes are needed to influence the consumer have become important just recently. What is the cause or effect of a mind changing process or environment sensation perception? Is the process constant for most of the consumers or does it run separately? Answers to the questions have been looked for by many scientists, behavioural economists, public opinion researchers, marketers or businessmen for the scientific motives or motives based on the desire to satisfy the customer or to get a profit. In general, it can be said that features of the products and services are registered by consumer by his or her senses. The perception occurs through organizing and interpreting of impulses which come from the environment to the meaningful picture of the surrounding world. Humans are sensitive to the influence of several motions from the environment which are perceived by the specialized sensitive cells in the organs of the senses. According to the type of their acting we can distinguished mechanical, acoustic, light and chemical stimuli of the environment. The sensitive cells and their terminations in the organs of the senses by which the organism catches the stimuli are called receptors. We distinguish external receptors (exteroreceptors) which recieve stimuli from the outside environment, e.g. light, sound, heat, pressure etc. On the other side, internal receptors (interreceptor) receive stimuli from the inner organism (hunger, thirst, pain). Those receptors are e.g., chemoreceptors which are sensitive to the chemicals that react with taste and olfactory cells. Depending on whether a direct contact in the formation of perception is needed, we talk about contact receptors- a taste organ, an olfactory organ and a tactile organ, or the sense is evoked by some waveform (light, sound)- then we talk about distance receptors (sight, hearing). The perception process of organoleptic respectively sensory features is closely related to the sense organ anatomy and physiological processes which run during the perception. Only perfect knowledge of these questions and appropriate answers allow to reach more objective and more impeccable sensory evaluation of products. Significance of individual organs of our senses during recognizing of various products is different. For example, when evaluating perfumes the smell is dominant but when evaluating honey it is the taste. [3]

In general, this order of importance is accepted: ***sight > taste > smell > touch > hearing***. However, when evaluating- the preference of individual kinds of senses will depend on the type of the product and the goal of the evaluation. According to the essay by Schiffman and Kanuk, 83% of marketing communication is aimed to the sight, while the second most important sense is the smell. Several researches point to the fact that people associate

[1] RICHTEROVÁ, K. et al.: *Spotrebiteľské správanie*. Bratislava : SPRINT2, 2015, p. 404.

[2] SHEPERD, R.: *Determinants of consumer behavior related to organic foods*. [online]. [2021-01-25]. Available at: <https://www.researchgate.net/profile/Gunne_Grankvist/publication/7668675_Habitual_and_Value-guided_Purchase_Behavior/links/55942ba308ae793d13797d14.pdf#page=89>.

[3] PRÍBELA, A.: *Zmyslové hodnotenie potravinárskych surovín, polotovarov a hotových výrobkov.* Bratislava : CHTF STU, 1998, p. 97.

remembrances with odour.[4] Feelings are generated on the base of information we receive and the feelings can often affect our decisions making and acting. Feeling is a personal evaluation of individual features and phenomena of the real world or internal conditions during stimuli acting. Feelings vary in intensity, duration and level of consciousness. Sensitivity of individual receptors of different individuals is different – it can be improved significantly by exercising. It is an explanation of extraordinary sensitivity of people who degustate and this activity is a job for them. Perception is a result of activity of several cooperations, several analyzing cells at the same time, while new quality arises. Thus, it is not just a simple sum of information from these organs respectively feelings. Threshold recognition (it is often labelled as threshold concentration) is important for a feeling quantification. Threshold recognition is characterized as the smallest value of the stimulus which evokes the feeling is important for a feeling quantification.[5]

1.1 Influence of senses on consumer emotions

From the begining of existence of marketing it is important to understand final consumer and his or her emotions which lead him or her to make decision. In contemporary scientific sphere, the perception of emotions as a process model of individual components comes to the foreground. Emotion is characterized as a short, independent yet synchronized status change in majority (the best- in all) of five sub-systems of organism as a response to the stimuli, either from external or internal environment, that are significant for the organism. Biologically controlled time changes are perceived as processes.[6] The emotions may seem like conscious and actively perceived feelings, but the opposite is true. They are complicated neurochemical internal stimuls - psychological responses to the stimuli. They are able to move person away from danger or move forward to a reward. They are made permanently in the limbic system that is a cluster of nerve structures which lie under the cerebral cortex and in Homo Sapiens they are closely related to recently developed cortex areas. Emotions are consciously perceived phenomena, and they are significantly influenced by our thoughts. Each emotion in the human brain is made by different network of brain structures, including hypothalamus and hypophysis which regulate hormones that produce physical interactions (for example increased heart rate and muscle contractions). As a result of the above mentioned is it clear that emotions which are able to influence our shopping behaviour are the results of changes that happened in our central nervous system as consequences of the senses which are perceived through the specialized cells. Therefore, we have to find out how our brain process those stimuli to understand how our shopping behaviour will change by the means of certain stimulis. The most of the time of our everyday life is controlled by the brain without our consciousness. It is known that we use just about 20% of our brain. We do not control majority of our consciousness because we are too busy due to the scanning of environment because of potential threats. Because nothing matters except survival, we are actually controlled largely by the oldest part of our brain.[7] Researches confirm that evolutionarily oldest parts of our brain have developed over millions of years. They are pre-verbal, these parts of the brain do not understand complicated messages and they try to

[4] SCHIFFMAN, L. G., KANUK, L. L.: *Consumer Behavior*. New Jersy : Prentice Hall, 2007, p. 729.

[5] PRÍBELA, A.: *Zmyslové hodnotenie potravinárskych surovín, polotovarov a hotových výrobkov.* Bratislava : CHTF STU, 1998, p. 97.

[6] RAMIREZ, R.: Detecting Emotion from EEG Signals Using the Emotive Epoc Device. In ZANZOTTO, F. M., TSUMOTO, S., TAATGEN, N., YAO, Y. (eds.): *Brain Informatics: LectureNotes in Computer Science.* Berlin Heidelberg : Springer, 2012, p. 175.

[7] GLIMCHEER, P., et al.: *Neuroeconomics: Decision making and the brain*. San Diego : Elsevier academic press Inc., 2009, p. 538.

avoid pain or excitement. It is the part of the brain that makes us extremely selfish and drives our strong preference of mental shortcuts over the long reflections. The strongest aspect of a “prehistorical„ brain work is the fact that it is able to handle visual stimuli without those mental attributes which characterize complexity of the human mind. Therefore, we prefer pictures to words and experiences to explanations. We dare to say that the consumer an his or her needs are one of the momentum of modern economics development. Therefore, right understanding of how the consumer perceive stimuli surrounding him and what is his or her reaction to the stimuli allows us to understand better the consumer and adapt to his or her desires (often unspoken). It can change the shopping behaviour not only the individual but also the whole society. Contemporary marketing research is not simple, there are many ways how to get and evaluate consumer data and their behaviour that are based on the data from various sources. Contemporary science needs to understand consumer behaviour effectively. If we label established ways of marketing research and consumer behaviour as insufficient, we are right, because they are mostly based on explicit data observation, however, when taking into account the analysis there is a need to understand consumer behaviour by essence of each his or her decision exactly in his or her mind. Understanding of processes of the human brain was a mystery just few years ago and marketers could just rely on their experiences. Exact methods of consumer detection were based on data of psychology or psychographics. Pioneer experiments to record human brain activity appeared in 1970s in study of the influence of advertisement on the consumer behaviour by measuring the electrical resistance resp. skin conductivity, heart rate etc. In that period those experiments were innovative and despite the complicated exact evaluating of obtained data this period of human brain researching was a huge step forward. The first significant change appeared at Harvard University where they started to study sensorimotor, cognitive and emotional responses to various stimuli which run inside of the human brain and thus, knowledge and facts about how our senses influence our shopping could be united exactly.[8] Contemporary technological progress allowed to use new approaches and methods which lead to brain research.[9] There is a wide range of options how to adapt to current trends. One of them is to focus the marketing research on understanding of target group needs and values.

2 Neuromarketing, an advanced form of consumer research

“Neuromarketing is a discipline that combines knowledge from several fields - neurology, psychology, sociology as well as marketing, and investigates why people behave irrationally using modern research methods and devices.“[10] Neuromarketing can be understood as an activity that aims to connect products and people in time and space by understanding, analysing and synthesising human behaviour that is relevant to the business market.[11] Neuromarketing may not be able to substitute established marketing approaches. Nevertheless, it can be assumed that diagnostic methods such as functional magnetic resonance imaging (fMRI) can increase the effectiveness of marketing strategies. As brand and advertising have a significant impact on what

[8] SVĚTLÍK, J.: *O podstatě reklamy*. Bratislava : Eurokódex, 2012, p. 312.
[9] LEE, N. et al.: *What is "neuromarketing"? A discussion and agenda for future research.* [online]. [2021-10-10]. Available at: <https://www.researchgate.net/publication/7014653_What_is_%27Neuromarketing%27_A_Discussion_and_Agenda_for_Future_Research >.
[10] BERČÍK, J., NAGYOVÁ, Ľ., HORSKÁ E.: *Use of neuromarketing in retailing and visual merchandising of food.* Nitra : Slovak University of Agriculture, 2016, p. 110.
[11] ARIELY, D., BERNS, G. S.: *Neuromarketing: the hope and hype of neuroimaging in business.* [online]. [2021-10-10]. Available at: <https://www.researchgate.net/publication/41669613_Neuromarketing_The_Hope_and_Hype_of_Neuroimaging_in_Business>.

customers like and which product they prefer, it is highly likely that the use of neuromarketing techniques will have a positive impact on customer and/or consumer preference.[12] Neuromarketing will play a very important role in the future. It is expected that the discipline has great potential to bring to light both implicit and automatic processes underlying the decision-making process, and to reveal hidden information related to consumer decision-making that has not yet been discovered by employing traditional marketing methods.[13] However, there are also opinions against neuromarketing resting on concerns that it interferes with customer integrity. Still, it can be agreed that neuromarketing techniques can achieve a more efficient customer segmentation. As a result, it would be possible for products to be made available at the market in a more profitable manner, individually for each brand and product, in line with the behaviour of specific customers. The interest in the discipline itself, and insights it can provide, has been growing steadily in consumer surveys and research. This is also evidenced by the fact that many neuromarketing companies have been established in recent years, and a significant number of neuromarketing articles and publications have been published in leading marketing publications and periodicals. It can be concluded that neuromarketing is used to uncover consumers' unspoken thoughts. It clarifies the views of consumers, sheds light on what can attract their interest and evoke emotions that are profitable. The primary goal of neuromarketing is to gain a profound understanding of the connection between consumer responses and marketing activities. In this way, brain activity can be largely assessed objectively. Various techniques used to decode the mind of the consumer include eye tracking, body language, facial coding, fMRI (functional magnetic resonance imaging), MEG (magnetoencephalography), EEG (electroencephalography) for tracking skin conductivity, and heart rate. By using neuromarketing techniques, marketers can be very effective in identifying which parts of the brain are involved when consumers and/or customers are being shown products of certain brands, but also to what extent brands influence the decision-making process. In general, the issue of creating a valuable brand has a major impact on the consumer's final decision. Conversely, incorrect representation can lead to price and quality problems. Neuromarketing is therefore a possible way of understanding the customer better than ever before. Paradoxically, a 2014 study shows that most research agencies and advertisers consider neuromarketing techniques to be the least used in their activities.[14] There can be many reasons for this, but it is certain that neuromarketing research requires not only new technical procedures, but also researchers who are experts in the field of marketing as well as in other fields such as psychology or medicine.

2.1 Emotions as a part of human decision-making process

Emotions can be viewed as a complex experience of events and states that are conditioned by the connections between the objective characteristics and needs of individuals based on both conscious and unconscious assessment of the situation.[15] An emotion is the experience of a person's relationship to the objects and phenomena of their environment, as well as to themselves, their own actions and to the actions of other people in relation to others.

[12] BRUCE, A. S. et al.: *Branding and a child´s brain: and fMRI study of neural responses to logos.* [online]. [2021-10-10]. Available at: <https://www.researchgate.net/publication/230895466_Branding_and_a_child%27s_brain_An_fMRI_study_of_neural_responses_to_logos>.

[13] TUSCHE, A., BODE, S., HAYNES, J. D.: *Neural responses to unattended products predict later consumer coices*. [online]. [2021-10-11]. Available at: <http://www.jneurosci.org/content/30/23/8024>.

[14] MURPHY, L. F.: *GreenBook Research Industry Trends Report*. New York : AMA COMUNICATION SERVICES Inc., 2014. [online]. [2020-10-10]. Available at: <https://www.greenbook.org/PDFs/GRIT-W13.pdf>.

[15] VYSEKALOVÁ, J. et al.: *Emotions in marketing. How to win the customer's heart.* Praha : Grada Publishing, a.s., 2014, p. 296.

Monitoring consumer emotions is an essential component of marketing. One of the ways of recording emotions is by observing facial expressions. Facial expressions are a form of communication between individuals. Facial expressions are systematically linked and depend on human feelings. An important research in this field was done by Dan Hill, who identified a combination of 24 muscle movements that can be segmented into seven basic emotional types. This method can be universally applicable, based on Darwin's findings that facial expressions of people of different nations and nationalities are the same.[16] Research shows that a person is able to recognise and decode 60% of communication from body language, but from 70 to 98% of information from facial expressions.[17] Well-known companies that are currently using facial coding include Toyota and Capital One.

Facial Movement Analysis (FMA) enables us to see what is happening to our facial expressions, for example while watching TV spots or browsing websites. FMA discusses both the unconscious and conscious facial expressions, tracking any movements on the face, ranging from smiling to frowning. Whether we are aware of it or not, facial expressions can either confirm or contradict the spoken word. One of the possible FMA tools is FaceReader. The software is used to analyse facial muscle movements. FaceReader was developed with the help of more than ten thousand manually evaluated images. Noldus, the company that developed this software, claims that many universities, research institutions and other organisations are currently using the software. It is most commonly used in research of consumer reactions, users, in usability studies, psychography, market research, or for educational purposes.

2.2 Are neuromarketing research methods relevant sources of information?

We conducted research to highlight new possibilities for practical sensory investigation of product perception using FaceReader. For the purposes of the research, we carried out blind testing of product samples of I.D.C. Holding, JSC, using explicit and implicit methods in laboratory conditions to identify respondents' opinions and emotions. During blind testing, participants had to taste 4 different wafer samples whereby they were familiar with one of those from the domestic market and the remaining three were unknown to them. In the present work, a survey of consumer preferences for new product variants was performed by several methods, in the logical order as they would probably be done in a real environment. The survey found that it is relevant to address the idea of introducing new products to the product line. After confirming the relevance of the issue, we were able to address this issue in detail with explicit and implicit research methods to determine whether Slovaks are interested in new variants of the product Horalky. The questionnaire survey in order to find out the preferences of new flavors of the existing product on the domestic market was attended by 1719 respondents, of which 50 respondents filled in the questionnaire directly at the place of purchase within the pilot testing. After confirming the correctness and comprehensibility of the questionnaire, we also launched the survey in an online environment, where we managed to engage a diverse sample of residents. The above data showed that after the launch of a new type of Horaliek on the market, 75.50% of respondents would try it, while up to 64% of respondents said that they would prefer to consume a product other than the existing one. 35% of those who would taste the new product would then start buying more of the product than

[16] POSTMA, P.: *Anatomie van de Verleiding. Neuromarketing – Neuromarketing succesvol toegepast.* [online]. [2021-10-11]. Available at: <https://docs.google.com/document/d/1N8SUJM56dhEtyEor52hVD4kY-v8Tm7WrK-KKoUdGgoA/edit>.
[17] LINDSTROM, M.: *Buyology.* Brno : Computer Press, 2009, p. 232.

before, which is 26.90% of the total number of respondents. This number could be even higher if marketing tools are used. Of the total number of respondents, 81% would consume new products in addition to the current one. Using the questioning, we found out that the introduction of new product variants on the domestic market is a relevant idea, which after implementation could mean not only strengthening the competitiveness but also increasing the company's turnover, and therefore it is appropriate to address it in more detail. To find out more accurate information, we performed a blind test, in which data on participants' preferences were obtained using explicit and implicit methods. During the blind testing, the respondents were acquainted with the model situation in which Sedita launched new types of Horalky product. Respondents had these products prepared in advance as samples 1 (coconut), 2 (traditional peanut), 3 (chocolate) and 4 (dairy) with a glass of water and a paper towel in a room with a reasonable temperature and no disturbing elements. The experiment was attended by 40 participants of various ages, social status, profession and gender, with the youngest respondent being 16 years old and the oldest respondent 65 years old. The task of the respondents was to taste the samples, evaluate them and mark their opinion in the questionnaire. The data obtained from the explicit data acquisition method, which was part of the blind testing, show that there is no difference in the respondents' scores between the individual samples, both in terms of attractiveness and taste of the products. This means that all samples of respondents tasted roughly the same. We can also say that when choosing the product that the participants would like to buy, the largest number of respondents chose the well-known taste of classic Horalka. Nevertheless, 67% of respondents said that they would buy a sample other than the one on the Slovak market, and 60% of respondents said that they would prefer to buy some of the flavors other than the one currently on the Slovak market. Video recordings recorded during the blank test served as a data source for the default data processing method. With the help of a program for analysing changes in facial micro-emotions, we found out the representation of individual emotions of the tested subjects. At the time when the respondents tasted the samples, video recordings of the respondents were used, which were used for implicit testing. Mean values were generated from data on the emotions of individual subjects. Based on the data obtained by measuring facial biometrics, we found that the respondents liked the new variants of the Horalky product relatively to the same extent as the classic one. We recorded a small positive difference in sample 4 (dairy), and with a minimal difference but the least tasty for the respondents was sample 2 (classic). In relative terms, not a single sample achieves significant differences in mean values, which means that in all samples the respondents were in approximately the same emotional mood, and thus they liked the new variants at least as much as the previously known variant of Horalky. Comparing the results of individual parts of our research, we can say that the research sample would be so interested in deepening the offer of Horalek that such a step could be for the company I.D.C. Holding, a. with. profitable. The consumer would still prefer traditional Horalka the most, probably because many memories can be associated with its taste, but all tested variants of Horalka would taste the same, if not more so than traditional Horalka, even though they loved them so far. The fact that respondents like the new variant of Horaliek, but still buy the traditional one, can be attributed to various factors, whether it is discretion, emotion nationality or traditionalism, but in any case, there are more people who like one of the new types of product than those who only like an existing product. The company I.D.C Holding, a. with. in the case of the introduction of new types of products, a decision must be made not only between whether this step is profitable or not, but also the role played by Horalky in its identity on the market. Research has shown that FaceReader is a very useful tool for sensory perception of a product. If this research was carried out only on the basis of information found explicitly, the introduction of new variants of Horalky product on the Slovak market would be debatable but using the implicit method in the form of

FaceReader, we confirmed that consumers would like the taste of new variants of Horalky product. more than the classic variant of the product known in Slovakia. FaceReader has provided data that is difficult to obtain by explicit testing and may not be accurate. By combining an explicit and an implicit method, we obtained data on the micro-emotions that prevailed on the faces of the participants, as well as their conscious opinions. By combining these methods, we obtained detailed data which, after processing and evaluation, provided more accurate information for solving the model situation.

Conclusion

Information about consumers, their behaviour and decision making have been in high demand since trading itself has existed. Today, consumer-related information is gathered using scientific methods and marketing is looking for and finding answers to questions about accurate consumer information and preferences. Such information is of great value in the business world. It is therefore necessary to look into how we can learn more about consumer behaviour in an easier and more cost-effective way. It is said that the best way of solving problems is to find their roots. Finding consumer-related information poses an interesting research problem. We therefore consider it appropriate to address this problem where it starts, in the mind of the consumer. New research methods that make it possible to obtain information on consumers' feelings do not seek to identify matters they do not wish to disclose. The greatest motivation for developing and applying these methods is to find out what the consumer really feels like regarding their decision-making process, including information they are not able to share effectively. Current technologies can capture moments when something catches the attention of consumers, as well as emotions that elicit a response on the consumer's face due to electrochemical reactions. Many studies have confirmed that several tens of participants in neuromarketing research can reveal as much information about the opinions of consumers as several thousand respondents in a classical survey. Our research has also proven the functionality of one of the methods of neuromarketing research in an application that was wrongly considered ineffective. It has confirmed the benefits and pointed out the possibilities of practical applications of this method. New opportunities that have emerged from following up on the results of dynamic technological advances offer faster and more effective ways of identifying consumers' views. However, these options are still only at an early stage of development. Often, the results cannot be compared with anything to confirm their accuracy or inaccuracy. It is therefore essential that further research in this area be continued. Our research was based on comparing the results with the results of established research methods. It has been confirmed that while the new methods can easily and quickly detect a wealth of information that could not be accessed a few years ago, such "raw" information requires a highly experienced expert to evaluate it correctly, assigning the correct meaning to the information in specific situations, whether in terms of marketing or psychological research.

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GENERATION IDENTIFICATION APPROACH OF THE PURCHASE TRANSACTION VALUE CAUSED BY THE MARKETING APPEAL

Tomáš Fašiang

Abstract
Modern approaches to consumers and their consumer behaviour are being more and more reflected in their buying decisions. It is the market globalisation, digitalisation, new marketing trends and new marketing communication as well as new forms of sales in the retail sector that indicate reconsidering of former approaches towards consumers. A consumer requires an individual approach to his shopping due to the fact the decision-making process has become more sophisticated and demanding. The current generational approach to customer segmentation according to generation cohorts has brought more effective communication and marketing tools placing emphasis on influencing the buying decision. The aim of the paper is identification of the marketing communication impact on purchasing activities (retail store visit and subsequent purchase) of selected generations of consumers expressed through the transaction value parameter. The Paper describes key parameters in connection with the identification of the transaction value of the purchase within the consumer behaviour of generations X, Y and Z.

Key words:
Consumer Behaviour. Promotion. Transaction value. Typology of Consumers Based on Generations.

Introduction

Generally speaking, consumer behaviour is a dynamic and fast-developing area. The main purpose of consumer research is to recognise their personalities, needs, interests, attitudes and reasons behind their buying decisions. These are crucial for the marketing creation of consumer typology and development of effective marketing and communication mix. Segmentation on the basis of generational approach is nowadays regarded as a modern, attractive and fully acceptable approach to market stratification. It can be used for creating specific marketing strategies and communication programmes. It splits consumers into specific groups or so-called generations, on the basis of their age and date of birth while assuming similar traits should be reflected in their interests, value orientation, lifestyle, buying behaviour and other factors. What is more, individual typologies where created for specific generations, thus splitting them into larger and smaller units.

1 Theoretical basis

The term of the generation is defined by many authors across various scientific fields. Authors' attitudes vary from case to case so their knowledge and opinions. This mainly refers to demographic data of particular generations. Tolbize describes the generation as an identifiable group of people that are identical in terms of their date of birth, age, domicile and other life events[1]. Howe and Strauss who had long dealt with the matter of generations declare that members of the specific generation tend to change their attitudes and consumer behaviour with their age.[2] However, people of the same age and belonging to the same generation do not necessarily need to demonstrate the same behaviour and attitudes.

[1] TOLBIZE, A.: *Generational Differences in the workplace. Research and training center of community living*. Minesota : University of Minnesota. [online]. [2021-10-26] Available at: <http://rtc.umn.edu/docs/2_18_Gen_diff_workplace.pdf>.
[2] SOLOMON, M.*: Consumers Behavior (Buying, Having, and Being).* 13. edit. USA : Pearson Education, 2020, p. 321.

Ondrejkovič understands the generation as the group of people that were born within the same time period (the age gap of max. 30 years) or the group of people sharing the same interests arising out of the time period they were born at.[3] The term "generation" often refers to the specific time period, e.g. war generation. Demography sees the generation as the set of people to have been born within the same time period and it also specifies the age limit necessary for reproduction of the human population. The generation often refers to great grand-parents, parents and children.[4] Sociology perceives the generation as the social group of people to have been affected by a number of social events and changes. Speaking about generations, we often mention the young, rising, middle and previous generation. Changing of generations is often accompanied by generational conflicts that are reflected across various spheres of social, cultural, economic and political life.[5] The main cause of generational conflicts are the efforts to promote certain systems of values or norms. Changing of generations is natural and ensures continuity of the society by means of lifelong acquisition of values or even the necessity to face power of influence.[6] Boehnenkamp claim that: "generations of people are connected by age, values, patterns of behaviour, historic events and experience. However, one generation will have fewer cohorts in case of imminent social changes."[7] From the marketing point of view, the generation categorises consumers into generations according to their years of birth and typical traits, characteristic features, opinions of the world and values that are typical for the time period they were born in. Categorisation of consumers into generations is regarded as one of the original socio-demographic classifications of inhabitants with its origins in the US.[8]. Members of the particular generation are not assimilated into other generations when they get older. On the contrary, generations reflect the specific time period and society at the time when their members grow up and live, are influenced by the media, technologies, social indices and events that make them unique creations. The term "generation" is often connected to so-called generation cohorts. These refer to persons that were affected by certain demographic events.[9] Generation cohorts are also closely linked to marketing activities integrated into the generation mix focusing on consumers across various generations. Generation mix was invented by Andreas Reidl who claims that this notion had already been created in the year 2003.[10] The figure below shows categorisation of particular generations in marketing as defined by Kotler and Keller.

[3] ONDREJKOVIČ, P.: Medzigeneračné vzťahy v sociálnej optike. In *Sociální pedagogika*, 2013, Vol. 1, No. 1, p. 49. [online]. [2021-10-26]. Available at: <http://soced.cz/wp-content/uploads/2014/04/Medzigenera%C4%8Dn%C3%A9-vz%C5%A5ahy-v-optike-sociologickej-te%C3%B3rie_SocEd.pdf>.

[4] KOLESÁROVÁ, K., SAK, P.: *Sociologie stáří a seniorů*. Praha : Grada Publishing, 2012, p. 115

[5] MOTHERSBAUGH, D., HAWKINS, D.: *Consumer Behavior* (Building Marketing Strategy). New York : McGraw-Hill Education, 2016, p. 12.

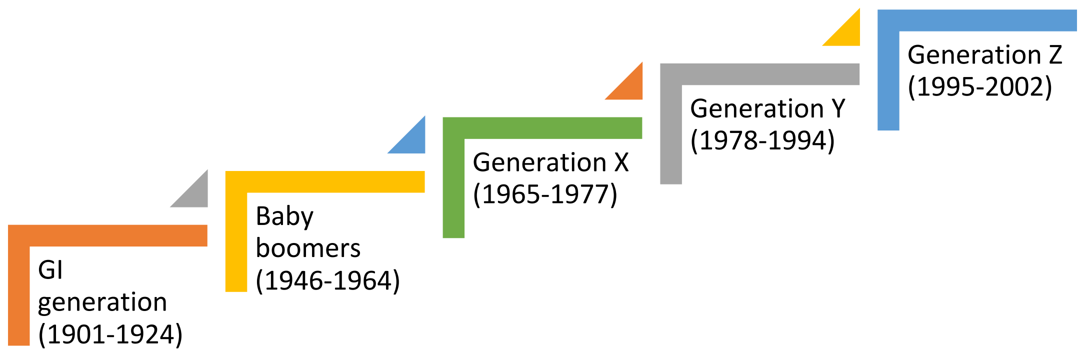
[6] ONDREJKOVIČ, P.: Medzigeneračné vzťahy v sociálnej optike. In *Sociální pedagogika*, 2013, Vol. 1, No. 1, p. 51. [online]. [2021-10-26]. Available at: <http://soced.cz/wp-content/uploads/2014/04/Medzigenera%C4%8Dn%C3%A9-vz%C5%A5ahy-v-optike-sociologickej-te%C3%B3rie_SocEd.pdf>.

[7] Ibidem, p. 49.

[8] KOTLER, P., KELLER, K. L.: *Marketing management*. 14th edition. Praha : Grada Publishing, 2013, p. 291-292.

[9] Ibidem.

[10] REIDL, A.: *Senior zákazník budoucnosti*. Brno : BizBrooks, 2012, p. 21.



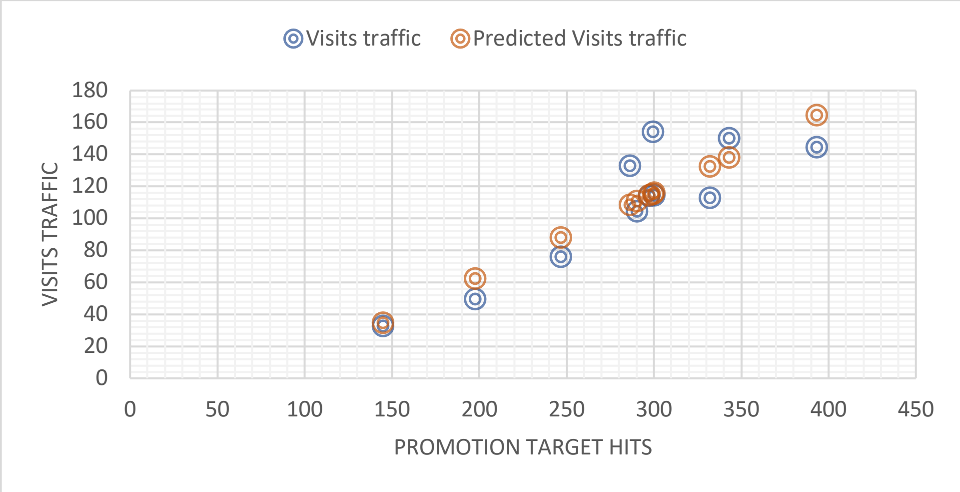
Picture 1: Classification of generations
Source: Own processing, according to KOTLER, P., KELLER, K. L.: *Marketing management*. 14th edition. Praha : Grada Publishing, 2013, p. 291-292.

2 Methodology

In order to fulfil the aim of this paper, consumer research was carried out, focused on the knowledge of buyer decision process. From the point of view of the evaluation of consumer research and the focus of this paper, it is crucial to identify the basic target groups of consumers as well. The identification of target groups is based on a multi-attribute comparison of the evaluated research indicators through cross-analysis. The basic indicators are demographic data of the interviewed respondents compared with respect to the attribute of the choice of the type of retail shop from in which the main purchase was done. In terms of the focus of the paper, only the data in question will be evaluated in the following section, regardless of the range of carried research. The part of the consumer research was focused on identifying the number of respondents being targeted by communication activities of all types of retail outlets and their respective visits. For the purpose of identifying the dependence between targeting through marketing communication and the activity in terms of visits to the retail outlet, we selected the regression analysis method interpreted by means of the regression coefficient parameters that are expressed by the regression axis principle determining the addition to the medium value of the dependent variable.

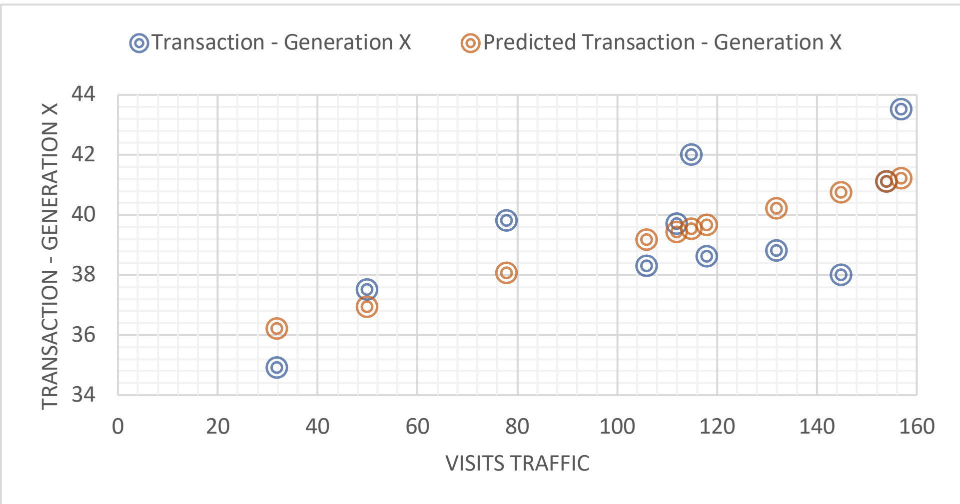
3 Research outputs

The regression model may help us to demonstrate the reciprocal relationship expressed by the so-called linear model. Therefore, the score on the alignment axis will be obtained by the following equation: Visits traffic = -41,2965 + 0,522436*Number of targeted customers. The value of the regression coefficient says that if the number of targeted customers increases by 100, the visit traffic increases by 52 customers. It is noteworthy that the targeting and the impact of marketing communication was carried out on prospective customers moving within the retail area. Visit to the retail outlet does not define itself the realisation of purchase. Therefore, we should define the dependence between the visits traffic and the size of the shopping transaction.



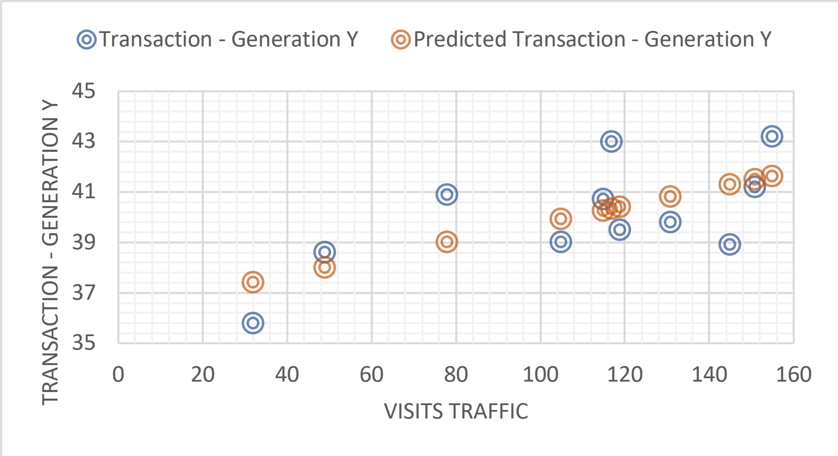
Picture 2: Relation of impact of the marketing communication on the induced visit to the retail outlet
Source: Own processing.

By using the regression model, we are able to demonstrate the reciprocal relation between visits traffic and the value of the shopping transaction within the given consumer generation. The graph below points to the fact that if the visits traffic to the retail outlet increases by 100 customers, the average value of the shopping transaction within the target consumer group of the Generation X will increase by 4.55 EUR. The same has also been confirmed by the alignment axis: Transaction - Generation X = 34.96 + 0.0454713*Visits traffic. When applying the previous assumption about the increase in the visits traffic by 52 customers, we may say that the average transaction value increases by 2.36 EUR.



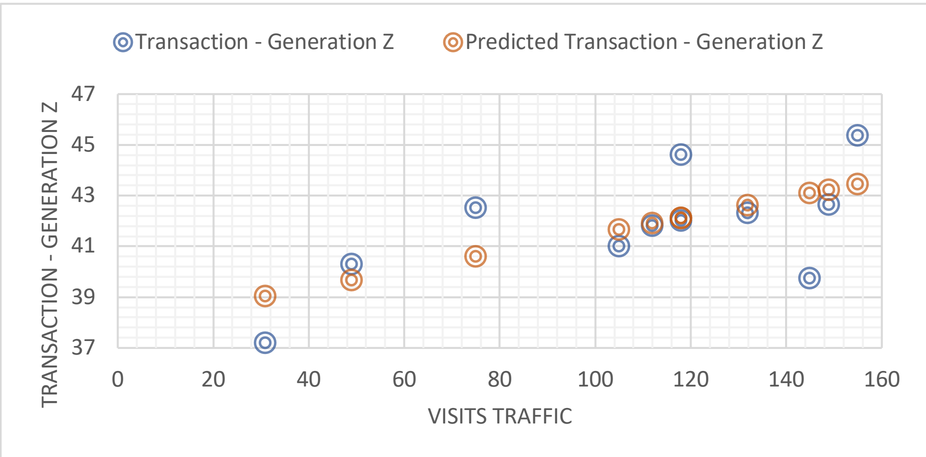
Picture 3: Relationship between the visits traffic and the average value of the shopping transaction of the Generation X
Source: Own processing.

The following graph points to the fact that if the visits traffic to the retail outlet grows by 100 customers, the average value of the shopping transaction with the target group will grow by 4.64 EUR. The same can also be confirmed by the equation on the alignment axis: Transaction - Generation Y = 35.7386 + 0.046484*Visits traffic. When applying the previous assumption about the increase in the visits traffic by 52 customers, we may assume that the average value of the shopping transaction will grow by 2.41 EUR.



Picture 4: Relationship between the visits traffic and the average value of the shopping transaction of the Generation Y
Source: Own processing.

The following graph points to the fact that if the number of Visits traffic of the retail outlet will grow by 100 customers, the average value of the shopping transaction within the target customer group from the Generation Z will grow by 4.85 EUR. The same can also be confirmed by the equation on the alignment axis: Transaction - Generation Z = 37.2825 + 0.04849*Visits traffic. When applying the previous assumption about the increase in the visits traffic by 52 customers, we may assume that the average value of the shopping transaction will grow by 2.52 EUR.



Picture 5: Relationship between the visits traffic and the average value of the shopping transaction of the Generation Z
Source: Own processing.

Conclusion

One of the main reasons for elaborating this paper was to point to the subject matter of marketing communication in the retail sector, especially in the point of sale, within the context of consumer behaviour of selected generations. The aim of the paper was identification of the marketing communication impact on purchasing activities (retail store visit and subsequent purchase) of selected generations of consumers expressed through the transaction value parameter. The Paper described key parameters in connection with the identification of the transaction value of the purchase within the consumer behaviour of generations X, Y and Z.

The presented results of the research show that targeted marketing communication has a direct impact on the number of visits and the consequent increase in the transaction value of the purchase of consumers of the surveyed generations. In conclusion, it should be noted that the basis for measuring consumer behaviour of customers lies in the interactive process of marketing communication of the retail outlet aimed at building customer loyalty within its retail gravity determining the maximum market potential.

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ONDREJKOVIČ, P.: Medzigeneračné vzťahy v sociálnej optike. In *Sociální pedagogika,* 2013, Vol. 1, No. 1, p. 47-62. [online]. [2021-10-26]. Available at: <http://soced.cz/wp-content/uploads/2014/04/Medzigenera%C4%8Dn%C3%A9-vz%C5%A5ahy-v-optike-sociologickej-te%C3%B3rie_SocEd.pdf>.
TOLBIZE, A.: *Generational Differences in the workplace. Research and training center of community living*. Minesota : University of Minnesota. [online]. [2021-10-26]. Available at: <http://rtc.umn.edu/docs/2_18_Gen_diff_workplace.pdf>.
REIDL, A.: *Senior zákazník budoucnosti*. Brno : BizBrooks, 2012.
SOLOMON, M.: *Consumers Behavior (Buying, Having, and Being)*. 13. edit. USA : Pearson Education, 2020.

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VISUALIZATION OF DATA AND KEYWORDS IN ONLINE JOURNALISM

Pavel Bielik – Michal Kubovics

Abstract
The online media brought a new trend not only in the form of an immediate response to emerging situations, but also offered a two-way response to emerging situations through discussions. The researched sources showed that content analysis is often based on qualitative analysis, which, however, can be a problem in the form of inefficiency and distortion of results. This situation can be reversed through quantitative keyword analysis through the collection of quantitative data. At the same time, the visualization of the collected data is important, thanks to which percipients can capture the data more efficiently and cleanly. The aim of the paper is to prepare a methodological procedure for creating the system and verify its functionality based on the theoretical basis and available methods for data collection and visualization. The contribution of the paper is precisely in the uniqueness of the system for visualization of keywords in a wide range of online media coverage.

Key words:
Data visualization. Data Journalism. Media. Online Journalism. Pandemic.

Introduction

Massive digitization has also meant an enormous increase in available data in the media industry. At the same time, it is clear that with the growing amount of available data, the importance of orientation in the data environment grows. Mastering the basic tools can enable the journalist to obtain information from less transparent areas and expands his / her possibilities.[1] According to S. Mičová, traditional journalism started towards technological changes for the first time in 1970. Even then, the idea of a device that could cover a wide range of information and make it accessible to everyone who needed it arose.[2] According to M. Švecová, digitization in the technological understanding of the media is a process of changing the production of media content, its storage, distribution and dissemination to the audience from analog to digital.[3] After the transition of journalism from print to electronic media, the methods of journalism had to be adapted to the medium. It was the same with the advent of the Internet. The media world has changed with digitization and conditioned the emergence of new types of journalism.[4] The reason is mainly the increase in competition and the effort to keep the interest of viewers, listeners and readers, but also the interest of advertisers and media agencies. In addition, the media are constantly trying to adapt to changing market conditions, to respond to current trends.[5] According to J. Višňovský, the Internet has brought a huge breakthrough in terms of access to information. We cannot deny that users have a wide range of information available on the web from all areas of society,

[1] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie*. Trnava : FMK UCM in Trnava, 2021, p. 14.
[2] MIČOVÁ, S.: Novinári v prostredí onlinovej žurnalistiky. In GÁLIKOVÁ TOLNAIOVÁ, S., GREGUŠ, Ľ., PRONER, J. (eds.): *Quo Vadis 2019: Masmedia and marketing*. Trnava : FMK UCM in Trnava, 2019, p. 75.
[3] ŠVECOVÁ, M.: *Webová žurnalistika*. Trnava : Univerzita sv. Cyrila a Metoda v Trnave, 2017, p. 10.
[4] PRONER, J.: Vývoj a predpoklady pre vznik dátovej žurnalistiky. In GÁLIKOVÁ TOLNAIOVÁ, S., GREGUŠ, Ľ., PRONER, J. (eds.): *Quo Vadis 2019: Masmedia and marketing*. Trnava : FMK UCM in Trnava, 2019, p. 101.
[5] ŠKARBA, T.: Inovácie v médiách. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie*. Trnava : FMK UCM in Trnava, 2021, p. 48.

from public institutions, public authorities to information from private companies.[6] Both novice and more experienced journalists have had to deal with new formats and methods that have changed everyday working practices. These innovations are accompanied by a number of challenges, including a wealth of quick and concise information provided online and more frequent on social media, but the audience is poorly informed.[7] At the time of the development of computer technologies, data visualization was also gradually evolving.[8] An important milestone for the development of data journalism was the year 2008 associated with the financial crisis. The recession has also hit the US media market hard. Many media had to transform into a web in order to survive, which made web journalism more important. This gave a strong impetus to the development of new journalistic formats.[9] J. Višňovský also confirms that the impact of web publishing, in addition to content and formal specifics, also implies economic reasons, as it allows the definition of the target group, and thus has a major impact on the effectiveness of advertising.[10] Today we live in a world of data; we create them with almost every click. It does not matter whether it's communicating on social networks, searching for information on the Internet, uploading photos, or records from our online shopping.[11] Data journalists work mainly with publicly available data, which comes mainly from the websites of state institutions. However, the fact that they are publicly available does not mean that they are easily traceable. Therefore, data acquisition requires the novice to master advanced information retrieval techniques. The journalist must know how to formulate a search term correctly.[12] Some of the public data is in turn available via API (Application Programming Interface), so programming skills are needed to handle it. Some data, in turn, is public, but we don't have access to it in a structured way - we need to extract it from the website.[13] Equally important is mastering the basic principles of an online journalist. Media space is based on the use of keywords. Through them, we search for information on Google, automate our journalistic output through SEO (Earch Engine Optimization) in an open source publishing system such as Wordpress. A well-optimized article based on keywords can be one of the first to search, increasing its readability and relevance. It includes a way of writing, selecting photos, that increases the likelihood of finding a link to a page in an Internet search engine - Google.[14] This method involves inserting a keyword or phrase into the text, caption, perex, first paragraph, and other parts of the text, as well as into the photo description. The

[6] VIŠŇOVSKÝ, J.: Onlinová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie*. Trnava : FMK UCM in Trnava, 2021, p. 88.

[7] HAHN, O., STALPH, F.: *Digital investigative journalism: Data, Visual Analytics and Innovative Methodologies in International Reporting*. Passau : Palgrave Macmillan, 2018, p. 2.

[8] KUBOVICS, M., ZAUŠKOVÁ, A.: The Way Of Marketing Communication Data Visualization In The Context Of The Groundswell. In PROSTINÁKOVÁ HOSSOVÁ, M., RADOŠINSKÁ, J., SOLÍK, M. (eds.): *Megatrends and Media: Home Officetainment*. Trnava : FMK UCM in Trnava, 2021, p. 406.

[9] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie.* Trnava : FMK UCM in Trnava, 2021, p. 14.

[10] VIŠŇOVSKÝ, J.: Onlinová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie*. Trnava : FMK UCM in Trnava, 2021, p. 87.

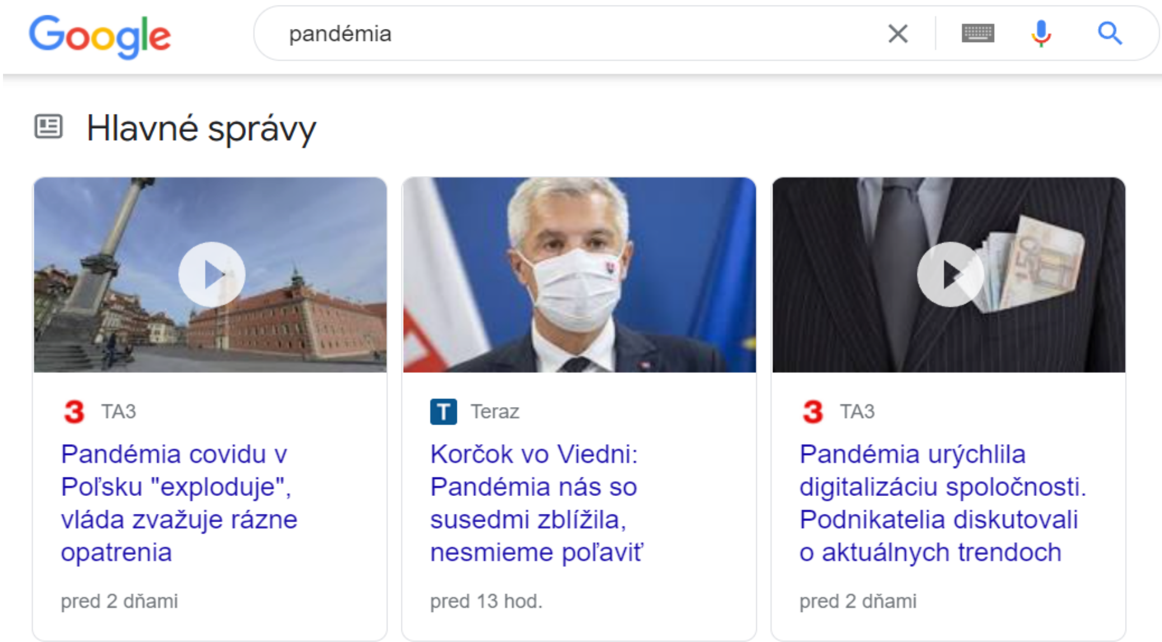
[11] PRONER, J.: Vývoj a predpoklady pre vznik dátovej žurnalistiky. In GÁLIKOVÁ TOLNAIOVÁ, S., GREGUŠ, Ľ., PRONER, J. (eds.): *Quo Vadis 2019: Masmedia and marketing*. Trnava : FMK UCM in Trnava, 2019, p. 100.

[12] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie.* Trnava : FMK UCM in Trnava, 2021, p. 14.

[13] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie.* Trnava : FMK UCM in Trnava, 2021, p. 14.

[14] ŠVECOVÁ, M.: *Webová žurnalistika*. Trnava : Univerzita sv. Cyrila a Metoda v Trnave, 2017, p. 51.

keyword should be carefully thought out and identified with the search preferences of both users and search bots.[15]



Picture 1: Search by keywords
Source: Own processing.

1 Data visualization makes content more attractive

Data journalism is an area that combines the methods and procedures of programming statistics and journalism. Its aim is to obtain interesting data, find important or urgent information in it and present it to the public in an understandable and engaging way.[16] The concept of data journalism can be understood on two levels. In a narrower sense, data journalism refers to the aforementioned process of data mining, filtering, context detection, and subsequent exposing the story. In a broader sense, the use of any tools or technologies to present journalistic output can be considered data journalism.[17] The impact of web publishing is a significant factor in the work of an online journalist and online media.[18] Today's media are in a situation where they have to constantly make their content, web design more attractive and look for more and more entertaining forms of talking and providing information, which will also be less demanding on the recipient's time and attention.[19] Due to its technical nature, data journalism in the media is connected with online or web journalism, i.e. also with the Internet. It uses Internet technologies in data mining, sorting and their

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[15] HARCUP, T.: *Oxford Dictionary of Journalism*. New York : Oxford University Press, 2014, p. 274.
[16] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie.* Trnava : FMK UCM in Trnava, 2021, p. 13.
[17] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie.* Trnava : FMK UCM in Trnava, 2021, p. 13.
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subsequent visualization.[20] Today, data journalism can be considered embedded and respected in prestigious media editorial structures such as The Guardian or The New York Times. However, even at the local and regional level, we are seeing more and more smaller teams dealing with data journalism.[21] Looking at how data has spread in space, it can be alarming. For example, Google receives more than 2 million search queries every minute. On a larger scale, people currently generate an estimated 2.5 billion bytes of data every single day.[22] Data visualization is therefore important in the correct perception of individual information. The coding takes place through visualization techniques, which is confirmed by the research of the author Z. O'Connor.[23] The ideal visual element is one that the user is able to decode correctly and as quickly as possible.[24] Data journalism differs from the classic form of journalism in its approach to the story. As journalists obtain information from interviews, available sources, or documents, data journalists look for information and stories in the data. According to J. Proner, the strength of data journalism lies in the fact that a journalist can hire stories that would be difficult or impossible to create in the classical way.[25] While in traditional journalism the story is often a basic building block (it is based on the presentation of information), in data journalism the story is either only a supplement or the journalist additionally creates it on the basis of extracted data.[26] S. Mičová notes that online journalists must be skilled and adaptable when responding to stories. They need to decide how best to tell the story and estimate when to end it in terms of added value. At the same time, they must maintain the basic journalistic principles that apply to both print and web publishing.[27] There is no doubt that new information and communication technologies, as well as the multimediaisation of all editorial activities, determine the nature and character of the current editorial office.[28] While the typical output of journalism is an article, the typical output of data journalism is infographics. Infographics can be considered as a special type of information visualization, where data and information are drawn by hand through graphics software. Infographics have become a popular tool for presenting a story through data.[29] Murár reminds that infographics within data visualization can be static or interactive.[30] It can be an interactive election map, a map of new cases infected with the coronavirus in different regions

[20] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie,* Trnava : FMK UCM in Trnava, 2021, p. 13.
[21] BIELIK, P., VIŠŇOVSKÝ, J.: Explanatory Journalism – A New Way How To Communicate In Digital Era. In *Media Literacy and Academic Research*, 2021, Vol. 4, No. 1, p. 30.
[22] *Humans Process Visual Data Better*. [online]. [2021-10-22]. Available at: <https://www.t-sciences.com/news/humans-process-visual-data-better>.
[23] O'CONNOR, Z.: Colour, Contrast and Gestalt Theories of Perception: The Impact in Contemporary Visual Communications Design. In *Color Research & Application*, 2015, Vol. 40, No. 1, p. 85-92.
[24] KUBOVICS, M., ZAUŠKOVÁ, A.: The Way Of Marketing Communication Data Visualization In The Context Of The Groundswell. In PROSTINÁKOVÁ HOSSOVÁ, M., RADOŠINSKÁ, J., SOLÍK, M. (eds.): *Megatrends and Media: Home Officetainment*. Trnava : FMK UCM in Trnava, 2021, p. 407.
[25] PRONER, J.: Vývoj a predpoklady pre vznik dátovej žurnalistiky. In GÁLIKOVÁ TOLNAIOVÁ, S., GREGUŠ, Ľ., PRONER, J. (eds.): *Quo Vadis 2019: Masmedia and marketing*. Trnava : FMK UCM in Trnava, 2019, p. 99.
[26] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie.* Trnava : FMK UCM in Trnava, 2021, p. 13.
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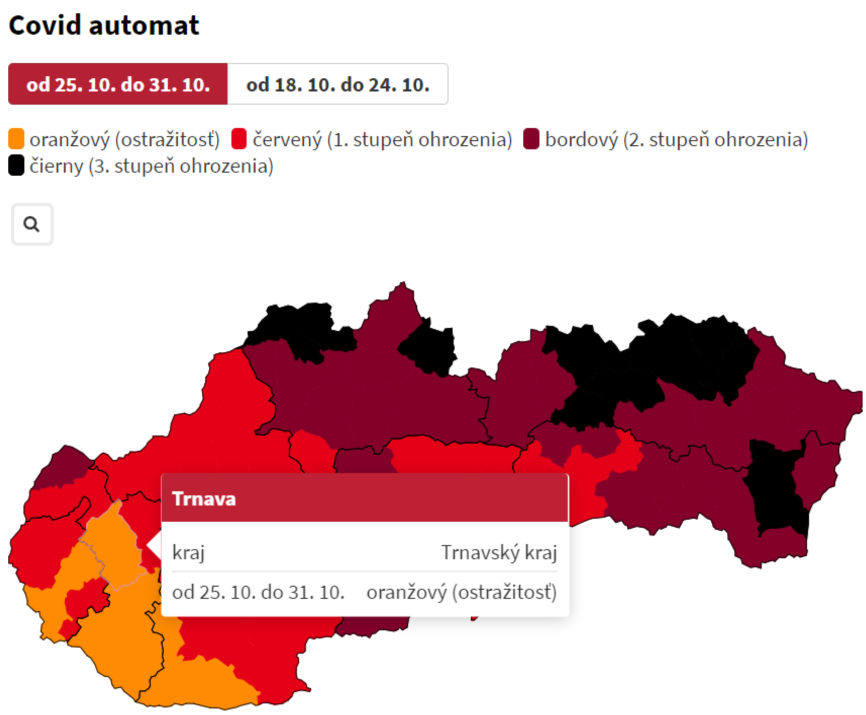
[28] VIŠŇOVSKÝ, J.: Redakcia, onlinová redakcia. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie*. Trnava : FMK UCM in Trnava, 2021, p. 99.
[29] PRONER, J.: *Dátová žurnalistika v podmienkach súčasnej mediálnej praxe*. [Dizertačná práca]. Trnava : FMK UCM in Trnava, 2020, p. 43.
[30] MURÁR, P.: Dátová žurnalistika. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie.* Trnava : FMK UCM in Trnava, 2021, p. 13.

of the country, or the number of police interventions in different parts of the capital. J. Višňovský reminds that the interactivity of the website created conditions for communication between the author of the text and the recipient, which in the past could have been realized mainly in the form of responses from readers in the form of letters or phone calls to the editorial office.[31]

2 Data can be stories

According to J. Proner, data visualization involves any use of graphical or visual material that represents data for further investigation, explanation, or use of data for communication.[32] The reason is that newsrooms around the world are aware of the power of data to create new stories.[33] Data can be used as a tool to create a story, but it can also serve as a set of information on which the story is based. These techniques may also be interconnected.[34] Even in hard data, such as numbers, a skilled journalist can find causality, understand the connections between the data, and draw full conclusions. It was the pandemic caused by the spread of the coronavirus around the world that tested the world's and domestic media, which began working with hard data more rigorously than before, to be able to present seemingly complex statistical facts in an accessible way. This is why proper data visualization is equally important when mining data. Data journalists such as D. Kerekes from the Slovak Denník N have been working with data for a long time. He currently uses his skills in pandemic times to visualize data and interpret it correctly (Picture 2). The data presentation does not only have to be static, it can also be interactive (Picture 2 and Picture 3).[35]

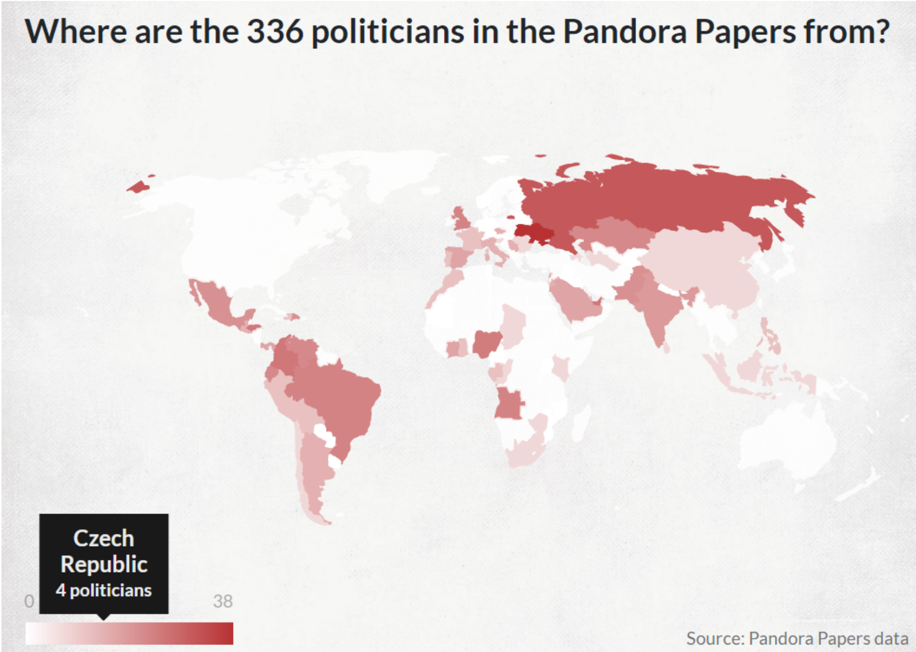
[31] VIŠŇOVSKÝ, J.: Redakcia, onlinová redakcia. In KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J. (eds.): *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie*. Trnava : FMK UCM in Trnava, 2021, p. 101.
[32] PRONER, J.: *Dátová žurnalistika v podmienkach súčasnej mediálnej praxe*. [Dizertačná práca]. Trnava : FMK UCM in Trnava, 2020, p. 45.
[33] PRONER, J.: Vývoj a predpoklady pre vznik dátovej žurnalistiky. In GÁLIKOVÁ TOLNAIOVÁ, S., GREGUŠ, Ľ., PRONER, J. (eds.): *Quo Vadis 2019: Masmedia and marketing*. Trnava : FMK UCM in Trnava, 2019, p. 98.
[34] GRAY, J., BOUNEGRU, L., CHAMBERS, L.: *The Data Journalism Handbook*. Sebaspol : O'Reilly Media, 2012, p. 3.
[35] PRONER, J.: *Dátová žurnalistika v podmienkach súčasnej mediálnej praxe*. [Dizertačná práca]. Trnava : FMK UCM in Trnava, 2020, p. 43.



Picture 2: Interactive infographics on the pandemic and coloring of districts according to the number of positive cases
Source: FOLENTOVÁ, V., KEREKES, D.: *Od pondelka sa počet čiernych okresov zdvojnásobí*. [online]. [2021-10-23]. Available at: <https://dennikn.sk/2580535/od-pondelka-sa-pocet-ciernych-okresov-zdvojnasobi-oranzovy-je-len-zapad/?ref=list>.

Another interesting example is the 2.94 terabytes data surveyed by data journalists, called Pandora Papers (Picture 3), which was unveiled to the general public in November 2021 and revealed the secrets of offshore companies and wealthy elites from more than 200 countries. These are people who use tax havens and secret paradises to buy property and hide property. Many of them avoid taxes or make fictitious money transfers.[36] This is another huge data leak (11.9 million documents) after cases like Panama Papers and Paradise Papers. The leaked files were provided by the Consortium of Investigative Journalists (ICIJ) in selected media partners - Guardian, BBC Panorama, Le Monde and Washington Post. More than 600 journalists reviewed the files as part of a large-scale global investigation.[37]

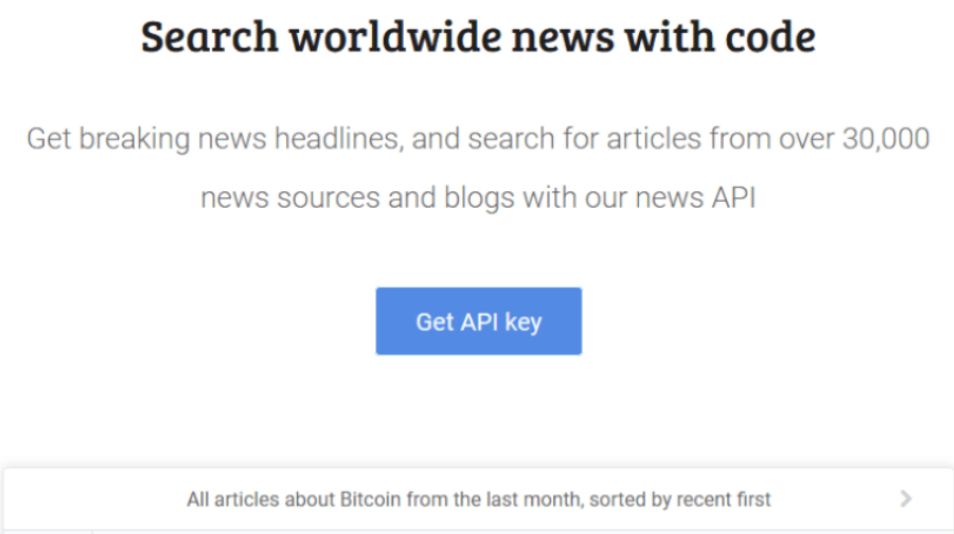
[36] *Pandora Papers: An offshore data tsunami.* [online]. [2021-10-22]. Available at: <https://www.icij.org/investigations/pandora-papers/about-pandora-papers-leak-dataset/>.
[37] *Pandora papers: biggest ever leak of offshore data exposes financial secrets of rich and powerful.* [online]. [2021-10-22]. Available at: <https://www.theguardian.com/news/2021/oct/03/pandora-papers-biggest-ever-leak-of-offshore-data-exposes-financial-secrets-of-rich-and-powerful>.



Picture 3: Interactive infographics reveal 4 people from the Czech Republic involved in the Pandora Papers case
Source: *Pandora Papers: An offshore data tsunami.* [online]. [2021-10-22]. Available at: <https://www.icij.org/investigations/pandora-papers/about-pandora-papers-leak-dataset/>.

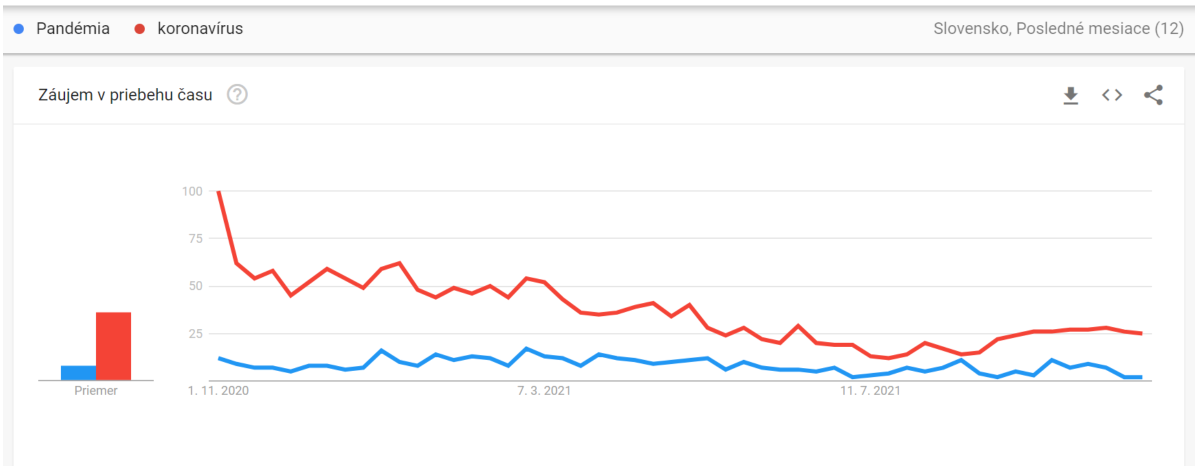
In this data era, it is important to understand their power and the possibilities they offer in order to obtain some useful information. Data visualization is a very important part of understanding hidden patterns and information.[38] That's why visualization tools like Tableau, Looker, Zoho Analytics, Sisense or Domo are becoming more and more popular. Datawrapper and Google Sheets, for example, are very easy to use. The News API works on the principle of keyword search. The user enters a keyword into the system, the system sends a request to the News API server and the data comes back, which the system then visualizes for the user (Picture 4). The News API is a user-friendly system that allows you to search more than 30,000 news channels from around the world, so the News API offers many options. You can use it, for example, to get information about trends in the New York Times or other world media, but also a number of new articles using specific key phrases in a certain period.[39]

[38] *10 Best Data Visualization Tools in 2020.* [online]. [2021-10-22]. Available at: <https://www.geeksforgeeks.org/10-best-data-visualization-tools-in-2020/>.
[39] JED, N.: *Top 10 Best News APIs: Google News, Bloomberg, BING News and more.* [online]. [2021-10-22]. Available at: <https://medium.com/rakuten-rapidapi/top-10-best-news-apis-google-news-bloomberg-bing-news-and-more-bbf3e6e46af6>.



Picture 4: After entering a keyword phrase in the News Api, it shows the user how to use it
Source: Own processing.

Google Trends (Picture 5) is also an available keyword phrase service. It is a Google system that analyzes the popularity of search words and phrases in a search engine. Google Trends uses graphs to compare the number of search terms over a period of time. Google Trends allows you to see in almost real time what topics people are searching or not. Based on this information, you can examine what your audience is thinking and find out how to tailor your advertising campaigns to meet their expectations. A good example is the ability to see the latest trends in coronavirus information retrieval.[40] This allows you to examine selected statistics on popular topics and get a quick overview of how people search for a given topic.



Picture 5: Searches in Google Trends using the keywords "pandemic" and "coronavirus" are gradually declining
Source: Own processing.

3 Methods

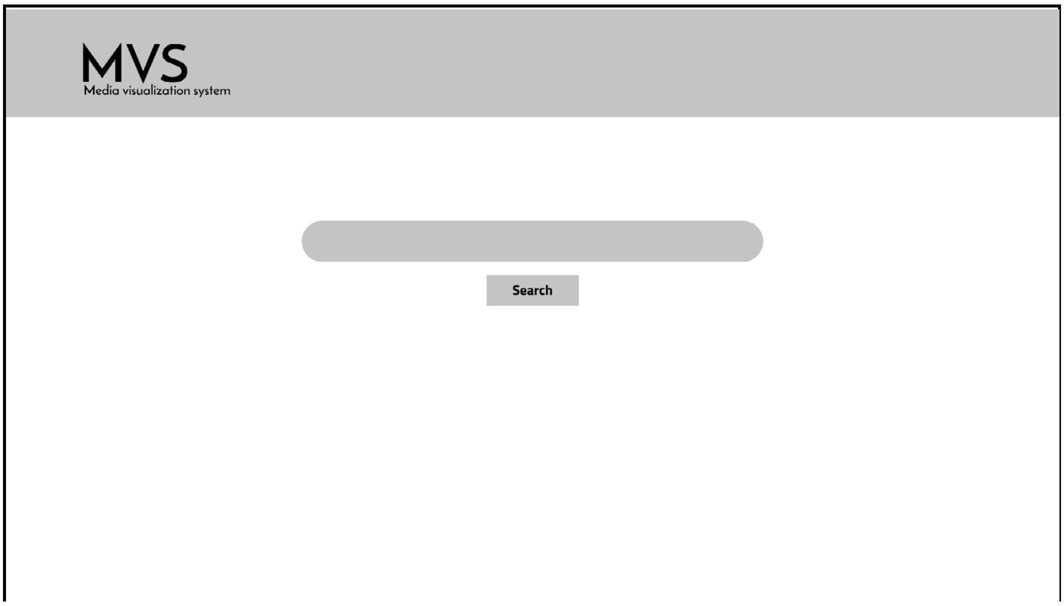
Qualitative methods were used in the methods used, especially the analysis of synthesis, induction and deduction of the used literature, which came mainly from leading authors.

40 *Google Ads Pomocník.* [online]. [2021-10-22]. Available at: <https://support.google.com/google-ads/answer/9817630?hl=sk>.

Furthermore, expert articles of similar research have been widely used. Significant contributions that were widely used came mainly from scientific journals with a high rating index. Similar research outputs also belonged to secondary sources. We also analyzed similar platforms and keyword search systems. In this way, a suitable basis was created for framing the problem. In the form of a question: How could it be possible to record, analyze and visualize data coming from the media? This was followed by the connection and subsequent decomposition of the received information through the brainstorming technique. Techniques aimed at creating new ideas. Subsequently, several inventions were created, which ultimately formed a large number of potential outputs in the form of a given goal. Subsequently, the best idea was selected on the basis of experience, which was materialized through programming with the help of the authors of the article.

4 Results

As part of data visualization in keyword search, the Media Visualization System (MVS) was created, which the authors describe in more detail and also attach visual material. Picture 6, Picture 7 and Picture 8 define the functionality of an MVS linked to a self-processing database through an automated media data collection system.

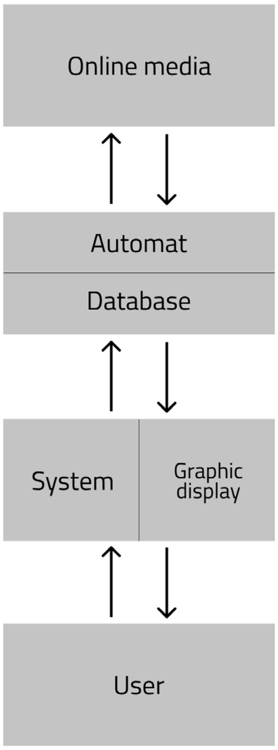


Picture 6: MVS display after login (keyword entry)
Source: Own processing.

The user enters a keyword into the system. The system sends a request to the database server and the data comes back, which the system then visualizes for the user. The automation part of the collection is prepared by the authors and data are collected.

Picture 7: After entering a key phrase in MVS, the user visualizes the data and displays the frequency of phrase use
Source: Own processing.

The results of data visualization are published in a study entitled Dominant Topics in Online Journalism. The authors examine media reports focused on coronavirus in Slovakia and abroad for their subsequent comparison. The researchers intend to find out the coronavirus-related media outcomes over a period of time and to compare the results.



Picture 8: Demonstration of MVS functionality connected to the database of own processing through an automated data collection system
Source: Own processing.

The authors believe that it is extremely important during this period to monitor the introduction of topics through keywords such as "covid, covid-19, pandemic, coronavirus, coronavirus" and associated keywords, respectively the thematic focus of individual media.

The authors of the project set another goal to examine thousands of Slovak and foreign media outlets in the Slovak and foreign media, to visualize the obtained data into clear graphs and conclusions and to draw conclusions.

Conclusion

From a psychological point of view, we know that people learn to receive information faster through images than text. Several areas of neuroscience also address the visual perception of information, examining how people respond to picture messages[41] and our brains can process visual information alone 60,000 times faster than text.[42] The advent of new technologies, in this case the Internet, has brought new opportunities for traditional media. It created space for them to create new journalistic expressions, such as data journalism.[43] When deciding which approaches to journalism deserve our attention, we should rethink what the democratic public needs and expects from its journalists at all. The public needs more kinds of information and more ways of communication than just direct factual messages.[44] In any case, objectivity in journalism has always been difficult to define precisely. Most current journalists still believe that pure objectivity is impossible to achieve. Journalists do not reflect reality only in the form in which it manifests itself. They often rely on witness statements and sources with often limited opinions.[45] The basic principles of journalism, such as impartiality, objectivity, fact-based information and the use of multiple sources, are still valid, but in a social networking environment they seem rather counterproductive.[46] Czech journalist T. Engelová also reminds that journalists are currently facing great challenges. They are confronted with time-consuming work, overwhelmed with information and facing pressure from the public and politicians. In addition, they face commercial pressure from publishers, competitive pressure and also ego pressure.[47] Not only the emergence, but also the upward trend of data journalism was supported by criticism of journalism and its output. As we can see, many journalists present a subjective approach in their journalistic work. Sometimes, however, even with conscientious and hard work, journalists come from the ranks of the reading community to doubt and distrust the media and their bias. We can see this today in the area of the pandemic, where some citizens in the country do not believe in numbers about infected people, do not believe in the number of hospitalizations or the number of deaths. They are convinced that the data is manipulated. This is where there is a great opportunity for data journalism and data visualization for a possible restoration of confidence in the media and journalism through hard, consistent and, above all, transparent journalistic work with hard data. But be careful, bad visualization can create the opposite impression, make false arguments or mislead the

[41] PRONER, J.: *Dátová žurnalistika v podmienkach súčasnej mediálnej praxe*. [Dizertačná práca]. Trnava : UCM FMK in Trnava, 2020, p. 40.
[42] *Humans Process Visual Data Better*. [online]. [2021-10-22]. Available at: <https://www.t-sciences.com/news/humans-process-visual-data-better>.
[43] PRONER, J.: *Vývoj a predpoklady pre vznik dátovej žurnalistiky.* In GÁLIKOVÁ TOLNAIOVÁ, S., GREGUŠ, Ľ., PRONER, J. (eds.): *Quo Vadis 2019: Masmedia and marketing*. Trnava : FMK UCM in Trnava, 2019, p. 101.
[44] WARD, S. J. A.: *Ethical Journalism In a Populist Age.* London : Rowman & Littlefield, 2019, p. 121.
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[47] ENGELOVÁ, T.: *Novinářská objektivita a úskalí současné žurnalistiky*. Released on 11th March 2019. [online]. [2021-10-22]. Available at: <https://www.youtube.com/watch?v=DDwodVa86as>.

reader.[48] It is important to know not only the methods of building analysis of visualization systems, but also the overall climate of big data analysis in the media environment, specifically in the online environment. Due to a thorough analysis of available literature, electronic resources, all acquired theoretical knowledge and practical examples, the authors of the conference article consider it important to test the functionality of their new system and declare the importance of data visualization through the frequency of use of individual keywords.

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"WHAT'S NEXT? PEOPLE WHO PRODUCE SPERM?" ON DEGENDERING AND PERIOD POSITIVITY

Michaela Fikejzová – Martin Charvát

Abstract
Period products' advertisement is well-known for depicting blue liquid, women running in fields in white pants, smiling and smelling flowers. In other words, it is known for not depicting periods at all. The period positivity movement and the academic field of critical menstruation studies aims to destigmatize the reality of periods in advertising and in societal discourse in general. In this study, we focus on the reception of period positivity in advertising among the debaters in Czech marketing experts' group exclusively for women called *#HolkyzMarketingu*. The aim of the analysis is defining specific points of the divide between the perspective of debaters, marketing experts, and the perspective of critical menstruation studies scholars. As a method, we are using feminist discourse analysis with the emphasis on the debaters themselves being mostly in the subordinate position of the discourse. Through analysing four debates taking place in the *Facebook* group, we pinpointed one important characteristic of the divide - the way menstruation is destigmatized in advertising is often taken as an attack on the notion of womanhood the debaters hold themselves, therefore they do not debate whether the destigmatization could be helpful for women in general, instead they debate their personal practices (e.g., concealing menstruation at all costs, defining womanhood through menstruation).

Key words:
Critical Menstruation Studies. Degendering. Period Positivity. Progressive Advertising. Woke Advertising.

Introduction

In 2020, *Pantone* introduced a new red shade called "Period", which is supposed to "embolden people who menstruate to feel proud of who they are."[1] Lately, destigmatization and degendering have been a significant trend in period products' ads. The aim of this study is to show the discrepancy between the academic discourse, especially in the field of critical menstruation studies, where degendered language and destigmatization are considered to be a purely positive change and the next logical step in emancipation, and the marketing discourse, where such a change is considered controversial. The sample we are focusing on is a Czech marketing experts' *Facebook* group exclusively for women *#HolkyzMarketingu*, as period products' ads are a polarizing issue among the members, when it comes to degendered language and period positivity. As a method, we are using feminist discourse analysis.

1 #HolkyzMarketingu

The *Facebook* group *#HolkyzMarketingu* (further only *#HzM*, as the name is usually abbreviated in such a way) claims itself to be a group for women ("girls") in a field, where it is allegedly unusual for women to be in leading/managerial positions, for them to connect and support each other[2]. The founder of the group and other female experts connected to the group usually talk about "empowerment" and "wanting equality, not female domination"[3], the discussions in the group itself align with such rhetoric, avoiding the label of "feminists", which

[1] *Presenting "Period".* [online]. [2021-10-16]. Available at: <https://www.facebook.com/PantoneColor/photos/a.144486817628/10158659340537629>.
[2] *#HolkyzMarketingu.* [online]. [2021-10-16]. Available at: <https://holkyzmarketingu.cz>.
[3] HOUDEK, P., KLENÍKOVÁ, I.: *"Nechci ženskou nadvládu, chci rovné příležitosti," říká zakladatelka komunity Holky z Marketingu.* [online]. [2021-10-16]. Available at: <https://www.heroine.cz/zena-a-svet/4370-nechci-zenskou-nadvladu-chci-rovne-prilozitosti-rika-zakladatelka-komunity-holky-z-marketingu>.

has quite a lot of negative connotations in the Czech context. The main aim, empowerment, enabling individuals to reach their goals by supporting each other, despite the patriarchal societal context, is, nevertheless, feminist. As we will see further in this study, the feminist position predominant, or at least the loudest, in this group is more specifically a neoliberal feminist position. This is significant even in the group's description, as the aim is "career progress" of individuals, not societal change per se. According to the founder herself, "the point is to educate the field of marketing, to give girls a choice, to help them to get to higher positions and similar."[4]

2 Academic destigmatization of menstruation

The stigmatization of menstruation may be divided in several categories as Johnston-Robledo & Chrisler's remark[5]. Along the lines of their argumentation, we may find the stigmatization of the menstrual blood itself, as it is considered to be a sign of dirtiness in the societal discourse, or even poisonous. On the other hand, menstrual blood is often fetishized as magical, ever-healing, not only in societal discourse, but particularly in feminist discourses, where menstrual blood may even be considered sacred, connected to the concept of eternal feminine[6]. The stigmatization of menstruation is supported also by the euphemistic display in advertisements, such as depicting women in white pants, running through the fields with flowers and similar[7]. According to Bhartiya, period products' advertisement leans heavily on shaming women for menstruating, which is the reason why, for example, there is, still predominantly, blue liquid instead of red one depicted[8]. McHugh[9] elaborates further on the concept of menstrual shame, where even talking about menstruation may be considered an act of resistance, defying what Wood[10] calls the menstrual concealment imperative. Concealing one's own period is, according to Wood, "constituted in menstrual discourse as an individual "women's" choice as part of her own pursuit of her health."[11]Stigmatization is further stabilized through popular culture, e.g., through jokes about "crazy" women during their PMS[12] be it during an interpersonal interchange or in the media. This strengthens the medicalized idea of menstruation, where women (menstruators) are perceived to be weaker, fragile, or ill.[13] Altogether, different types

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[4] OSIČKOVÁ, K.: *Pavlína Loužemská: Nejen holka z marketingu nebo žena v zenu.* [online]. [2021-10-16]. Available at: <https://www.prozeny.cz/clanek/pavlina-louzenska-nejen-holka-z-marketingu-nebo-zena-v-zenu-71453>.
[5] JOHNSTON-ROBLEDO, I., CHRISLER, J. C.: The Menstrual Mark: Menstruation as Social Stigma. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 181.
[6] BOBEL, C.: *New Blood: Third Wave Feminism and the Politics of Menstruation.* New Jersey & London : Rutgers University Press, 2010, p. 90.
[7] JOHNSTON-ROBLEDO, I., CHRISLER, J. C.: The Menstrual Mark: Menstruation as Social Stigma. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 182.
[8] BHARTIYA, A.: Menstruation, Religion and Society. In *International Journal of Social Science and Humanity,* 2013, Vol. 3, No. 6, p. 524.
[9] MCHUGH, M. C.: Menstrual Shame: Exploring the Role of 'Menstrual Moaning'. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 410.
[10] WOOD, J. M.: (In)Visible Bleeding: The Menstrual Concealment Imperative. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 324.
[11] Ibidem.
[12] JOHNSTON-ROBLEDO, I., CHRISLER, J. C.: The Menstrual Mark: Menstruation as Social Stigma. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 190.
[13] WOOD, J. M.: (In)Visible Bleeding: The Menstrual Concealment Imperative. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 330.

of stigmatization create, according to Persdotter, so called menstrunormativity.[14] Persdotter, impeccably, draws on what they call "sibling concepts" such as cisnormativity and heteronormativity, through which they introduce the concept of menstrunormativity, a set of unattainable norms (similarly to gender norms and their explanation given by Butler[15]) that reproduce the stereotype of menstrual monster. These norms are regularly mentioned in period products' advertisements, such as the "normal" number of days that period lasts, how long "normal" menstrual cycle is etc.

Through naming the phenomena connected to stigmatization of menstruation aims the field of critical menstruation to find a way to destigmatize it. By some scholars, destigmatization of menstruation is tightly connected to changing the definition of menstruation itself. Guilló-Arakistan calls for disconnecting menstruation from the concept of womanhood, mainly because not all women menstruate, e.g., young girls, women after menopause and for other reasons, and not all those who menstruate are women, which is a call for including trans*[16] and queer menstruators[17]. Rydström neatly sums up the inclusionary tendencies as following: "[...] my main point is to bring forward the argument that we - as scholars and activists - can make our work inclusive of a variety of menstruators, and non-menstruators, by questioning continuously the nature of menstruation."[18] Bobel reaches a similar conclusion, explicitly connecting the linguistic choices, e.g., calling menstruating women menstruators, to the fundamentals of the third-wave feminism[19]. Here it is important to point out that a lot of feminist activists, who we may call second-wave feminists or trans-exclusionary radical feminists, are sticking to the distinction that only women menstruate and those who do not go through "normal" menstrual cycle (including menopause) are not women. This standpoint is or may be connected to strategic essentialism tightly bound to second-wave feminism, where the stable category of what the term "woman" means is the absolute fundamental of the line of thinking. This distinction between second-wave and third-wave feminism is crucial to our discursive analysis of the debates taking place in the *Facebook* group *#HzM.*

3 The Sample

In explaining the divide between marketing experts and critical menstruation (feminist) scholars and activists, we focus on four debates taking place in the group *#HzM*. The first debate is on a campaign called *MENstruation*, which aims to destigmatize menstruation through talking to

[14] PERSDOTTER, J.: Introducing Menstruonormativity: Toward a Complex Understanding of 'Menstrual Monsterings'. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 375.

[15] BUTLER, J.: *Bodies That Matter: On the Discursive Limits of "Sex".* New York : Routledge, 1993.

[16] We understand the term trans* in the broadest sense, thus we consider all persons who do not identify themselves as cisgender, as somebody whose gender fully aligns with the one, they were assigned at birth. We use the written form with an asterisk as a signification for this broad definition. The term in our usage does not indicate any need for operational and/or medical treatment, as we see the process of transitioning from the cisgender binary to be open without any definite end of such process.

[17] GUILLÓ-ARAKISTAIN, M.: Challenging Menstrual Normativity: Nonessentialist Body Politics and Feminist Epistemologies of Health. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 880.

[18] RYDSTRÖM, K.: Degendering Menstruation: Making Trans Menstruators Matter. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 995.

[19] BOBEL, C.: *New Blood: Third Wave Feminism and the Politics of Menstruation.* New Jersey & London : Rutgers University Press, 2010, p. 156.

men about it[20], the second one is about ads changing the blue liquid, usually used in period products advertisement, to a red one[21], the third one is a post about the brand *Always* changing its period pads packaging[22] and the fourth one regards a new shade of red introduced by *Pantone* called Period[23]. The argumentation of our study follows a simple scheme: starting from the least controversial debate regarding the destigmatization of menstruation to the most controversial one. The aim of our analysis is tracing out the limits of destigmatization that the group members find, in majority, acceptable.

4 The Analysis

As it was already mentioned, stigmatization of menstruation is an essential part of period products' advertisement. This practice is, to some extent, changing. In 2019, the Australian brand *Libra* introduced an ad, where menstrual blood trickles down the legs of a woman starring in the advertisement. Several complaints about this ad were filed in Australia, all of them denied. *Libra* argued that menstruation is normal and common, therefore menstrual blood should be depicted as normal and common as well[24]. Similarly, advertisement through destigmatization is the route that alternative period products', such as menstrual panties or cups, approach[25]. The mainstream period products' brands usually undertake the way of empowering women in general, probably to avoid the controversy that may come through showing red liquid on pads, or they take the humorous way. The first debate we are analysing is about the "humorous" way of destigmatizing menstruation. The marketing experts are reacting to a campaign from the brand *Ria* called MENstruace, where Czech young men are reacting to period products, and they are answering questions about the menstrual cycle in general. By large majority, the commentators in *#HzM* are amused by the campaign, find it funny and easy-going. This type of "destigmatization" doesn't destigmatize menstruation and period products, it's basically a reproduction of the stigma through humor. The men depicted are acting like they have an alien product in their hands. This is also, most probably, the reason why no controversy about the campaign came to life in the *#HzM* group, as the campaign is completely in line with the way menstruation is debated in general discourse.

In the second debate, the campaign itself is called "really controversial" by the original poster. They are also asking "Should society really see everything, or should we lighten up some topics, visually and communicationally?". In the campaign, there is a red liquid poured onto the period pad, instead of the usual blue one. The usage of red liquid, itself novatory, therefore provocative, is translated by the debaters into the usage of real blood, a fairly significant

[20] #HOLKYZMARKETINGU: *MENstruace: Nosili by kluci radši vložku nebo tampon?* [online]. [2021-16-10]. Available at: <https://www.facebook.com/groups/holkyzmarketingu/posts/2698101060264483/>.

[21] #HOLKYZMARKETINGU: *Hodně kontroverzní téma.* [online]. [2021-16-10]. Available at: <https://www.facebook.com/groups/holkyzmarketingu/posts/2050835128324416/>.

[22] #HOLKYZMARKETINGU: *Always mění obaly.* [online]. [2021-16-10]. Available at: <https://www.facebook.com/groups/holkyzmarketingu/posts/3171571712917413>.

[23] #HOLKYZMARKETINGU: *Nová barva Patnone.* [online]. [2021-16-10]. Available at: <https://www.facebook.com/groups/holkyzmarketingu/posts/4575654159175821/>.

[24] MEADE, A.: *Libra ad depicting menstrual blood did not breach standards, watchdog rules.* Released on 18th September 2018. [online]. [2021-16-10]. Available at: <https://www.theguardian.com/society/2019/sep/18/libra-ad-featuring-real-menstrual-blood-did-not-breach-standards-watchdog-rules>.

[25] *Lunette Menstrual Cup – Aerobic Ad.* [online]. [2021-16-10]. Available at: <https://www.youtube.com/watch?v=2TwMBJEGcrQ>

discursive shift as it leads to debating whether we should see real urine and stool (e.g. in diapers advertisements) or real vomit (e.g. in medical advertisement). This problem is, of course, constructed by the marketing discourse itself, as period product advertisement started with showing how good the liquid absorbance of pads is through pouring (blue) liquid on them. Therefore, a step into a "more realistic" direction, pouring red liquid onto pads, is a fairly logical one, when it comes to ads that are supposed to be empowering for women and aim to show period "as it is". The debaters in *#HzM*, who take a negative stance against the advertisement, call this step either inappropriate, pointing back to the comparison with stool and urine, or a "pure calculation", meaning that the brand is trying to be provocative and woke only to get attention and/or raise sales. The ones, who take a positive stance regarding the ad, mostly agree that it tries to be provocative, but also think that it shows period as a natural thing and helps with empowerment and it is "a start of the conversation". They are implicitly defending the so-called "period positivity" movement. Labelling this ad empowering, in the sense of destigmatizing menstruation, also caused another disagreement among the debaters - whether showing "the real" menstruation actually helps with "making women more equal". Several debaters mentioned their stories about using menstruation as an explanation for temporary indispositions in the work environment. The original poster reacted to such stories followingly: "If we label a woman as an employee, who is unable to perform their work duties due to period nausea for a few days a month, the majority of women in important and demanding positions will not benefit from that." This stance is labeled "a bad feminism" or "an effort to become a man for the man's world", in academic literature we may find this argument mostly in the analysis of debates regarding menstrual leave policies[26]. From the critical menstruation studies point of view, we may see here how women become complicit to the patriarchal pressure to conceal menstruation by reproducing the pressure in feminist groups. The original poster emphasizes the possible, and according to them, inevitable, negative consequences of breaking the ground rule of the menstrual concealment imperative. The divide between the calling for more destigmatizing of menstruation in advertisements coming from critical menstruation studies and the personal and strategic refusal of such destigmatization from a perspective of marketing experts is starting to be fairly visible exactly in the stance expressed by the original poster.

Even more vivid becomes the gap between these two fields in the debates regarding trans* inclusion in period products advertisement. The introduction of pads' packaging without the female symbol by the brand *Always* attracted a lot of attention[27] [28], in the *#HzM* group the move led to not just controversy about gender, but also regarding the extent to which the marketer/manufacturer has a free will to choose how their product is going to look like. A part of the debaters steps back from the marketing axiom "The customer is always right," and demands more freedom for the marketers and manufacturers that are currently not immune to the "woke craze" and "gender activists" and are "falling victim to their demands". Some of the debaters also call this shift "the collapse of democracy" as "a minority is deciding for the fate of the majority". This is a common reaction to "woke" messaging in advertising, the reactions to the woke ads, whether negative, or positive tend to express only either agreement with the message, or disagreement, but they rarely react to the connection of the message to the brand

[26] LEVITT, R. B., BARNACK-TAVLARIS, J.: Addressing Menstruation in the Workplace: The Menstrual Leave Debate. In BOBEL, C. et al. (eds.): *The Palgrave Handbook of Critical Menstruation Studies.* Singapore : Palgrave Macmillan, 2020, p. 562.

[27] MURPHY, H.: *Always Removes Female Symbol From Sanitary Pads.* Released on 22nd October 2019. [online]. [2021-16-10]. Available at: <https://www.nytimes.com/2019/10/22/business/always-pads-female-symbol.html>.

[28] KASULKE, C.: *Brands are getting more "woke." Who actually benefits?* Released on 11th December 2019. [online]. [2021-10-16]. Available at: <https://www.vox.com/the-goods/2019/12/11/21003371/always-sanitary-products-menstrual-lgbtq-inclusion>.

itself[29]. Because *#HzM* is a marketing experts' group, the arguments regarding the relationship between the brand itself and the social problem it is trying to address were voiced more often, but mostly concluded that it is "an easy PR stance", "the brand is everywhere now" and similar ones, without any critical inquiry into the policies the company is or is not implementing. The critical points that are raised in the discussion mostly combine the first approach, critique of the "woke craziness", with not enough connection between the product and the social problem, as a brand as *Always* should, according to the debaters, focus more on environmental friendliness such as better packaging materials. Regarding the trans* inclusionary tendency, which *Always* is trying to express through their packaging[30], the debaters either defend the biologically essentialist argument that "only women menstruate and those who menstruate are women". Degendering of the packaging, a practice where a product is not visibly marked by culturally well-known symbols as "female" or "male", is deemed "unnecessary" by most of the debaters, minority of them express their opinion through saying that "it does not hurt them but could help somebody else". Scarcely any comments mention trans* people explicitly, trying to introduce the problematic into the debate, they are also met with backlash in form of a repetition of the "woke craziness" argument.

In the last debate, regarding the newly introduced shade of red by *Pantone* in collaboration with Intima, we may find a very interesting discursive shift when it comes to period positivity. In the case of red liquid shown in an ad, we saw quite a lot of critique of showing such a color at all, in the case of shade of red, pictured along with a drawing of typically female reproductive organs, there is mostly a critique of the color being "too light", so not realistic enough. The debate moved from concealment to the need for the most precise shade of red, nevertheless the menstrual concealment imperative is still very much present in the discourse as the debaters rule out using such a shade of red for "painting anything"[31]. Otherwise, the debaters dive deep into the trans* issues topic, as they are debating the overlapping, or lack thereof, of menstruation and womanhood. The phrase "people who menstruate", an example of linguistic degendering, is debated as unnecessary as women and people who menstruate fully overlap and changing of that is just a sign, once again, of "woke craziness". We may also find trans* allies in the debate that defend the standpoint that people are not "their physical boxes", therefore they do not accept that womanhood and menstruation fully overlap. One debater mentions in an ironic tone of voice that men are going to be "proud people who produce sperm". In this way, they mention something that critical menstruation scholars stand for - degendering is needed for language to be more precise and trans* inclusive. The usage of "people who menstruate" on its own otherwise did not cause too much controversy among the debaters, in comparison with the degendered packaging of pads introduced by *Always*.

Conclusion

In the present study, we analyzed the debates in the Czech marketing experts' group exclusively for women regarding period positivity and degendering in advertising. Our aim was to define

[29] LIMA, H., ØKSNEVAD, H.: *What Affects the Success of Woke Advertising?* [Master's thesis]. Stavanger : University of Stavanger, 2020, p. 29. [online]. [2021-10-16]. Available at: <https://uis.brage.unit.no/uis-xmlui/bitstream/handle/11250/2679191/Oeksnevad_Hilde_Lima_Henriette.pdf?sequence=4&isAllowed=y>.

[30] The word "tendency" is of great importance here as we do not mean specific trans* inclusionary policies that *Always* is trying to implement in their corporate rules, but the image they are trying to build. For more on the divide between woke advertising and the actual socially progressive steps that corporates are, or more precisely are not taking, see literature on "woke-washing", e.g. Sobande (2019), van Tine (2021).

[31] *Pantone* is known for their proprietary color space heavily used in graphic, product, or fashion design industries, among others.

specific points of divide between critical menstruation studies discourse and the marketing experts' discourse. As a method, we used feminist discourse analysis with strong consideration that the experts themselves are in a subordinate position in the societal discoure as a whole. Through analysis of four debates regarding period positivity and degendering practices in advertisement, we identified that marketing experts in the group are usually inclined to obey the menstruation concealment imperative even in period products' advertisement. In majority, the debaters also consider womanhood and menstruation to be completely overlapping phenomena. The main point of divide lies in the very personal approach to the period positivity movement and trans* inclusionary tendencies, even when it comes to their depiction in advertising - the female marketing experts mostly express their personal opinion on the issue instead of reflecting broader societal context or the connection between the brand and the social issue at hand. We consider this discrepancy to be of a high importance in further analysis of so-called "woke advertising" or "progressive advertising", especially from the perspective of critical marketing studies.

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MANUFACTURING PROCESS MANAGEMENT METHODS AND TECHNOLOGIES FOR EFFECTIVE IMPLEMENTATION OF THE COMPANY 'S MARKETING STRATEGY

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Abstract
The marketing strategy aims to combine the potential of the market, the desires, needs and wishes of customers with the aims and intentions of the company. A long-term project includes various tools, steps, and procedures that can bring real customers, customers who will return, the desired profit, and the fulfilment of predetermined goals. Also, we cannot forget how the product is produced and what technologies and methods were used to control production processes because even this can become a different feature of the company from competing companies. Marketing is not only about the competition's ability and presentation of the company on the market, but also about communication and how the customer and the company communicate for a quick response to customer requirements. That is why the processes in the company must be set up correctly and work without severe errors. So, this article focuses on the description of technologies and methods used to manage the production process and their essential role in fulfilling the company's marketing strategy at present, when it is necessary to respond as quickly as possible to customer needs.

Key words:
Marketing strategy. Production Management. Technologies.

Introduction

The marketing strategy aims to combine the potential of the market, the desires, needs and wishes of customers, with the goals and intentions of the company. A long-term project that includes various tools, steps and procedures that can bring real customers and customers who will return. The benefit is also the required profit and fulfilment of predetermined goals and indicators. Marketing strategy in a company is a tactical process that serves to transform the company. The goal of the company's transformation is a new vision that will provide the company with a competitive advantage in all areas, like communication with customers, better production processes, decision-making based on real data just in time, implementation of digitization and advanced concepts of production management and technology. The technological capabilities of humanity have increased over the past twenty years. This is mainly due to the development of information and communication technologies and advances in artificial intelligence, genetics, and nanotechnology. The need for processing large amounts of data has increased; production is a "live" system that shares information online with all company departments. These days, when sales opportunities are growing, brand awareness on the Internet is growing, and there is room for competition. Therefore, it is good to design an analysis and marketing strategy according to what is needed and the purpose, and to include the best production management methods and technologies used for management.

1 Advanced Management Concepts

The management of the production process is based on the principles of management according to deviations and differences. The fulfilment of the short-term operational plan of production is monitored, and differences are identified. Through temporary deviations from the plan, the fact is gradually reconciled with the plan. For a company to respond quickly to customer requirements, it is necessary to consider accelerating not only the production management process but also other processes. Therefore, new production management methods and advanced production concepts are emerging globally, which helps accelerate production. It is possible to talk about methods in terms of the degree of management concentrated in one. It is also differentiated to what detail the production tasks are handed over to the managed units[1]:

- Master control,
- dispatching controls,
- direct control,
- automatic,
- autonomous.

At present, it is possible to use technical equipment for all methods, where the control task is provided by a control computer, which is directly involved in the technological process. Advanced manufacturing systems are further developed to become intelligent, automated, autonomous, reconfigurable, and highly efficient. The highest increases in productivity and efficiency can be achieved mainly by using new knowledge. It is possible to trade with knowledge the same way as with goods, but without the need for extensive and capital-intensive companies, warehouses, materials, human resources, etc. Intelligent production systems are a long-term goal, which is the initiative not only of research teams but also of production companies from all over the world.[2]

1.1 Holonic system

Holonic systems are based on the dynamic cooperation of rapidly adapting devices that can solve complex problems together without being uneconomical and inefficient due to complexity. It combines the rapid adaptability of entirely autonomous, loosely interconnected systems with the stability and efficiency of classical hierarchical systems. Intelligent Holonic systems are not simple automated physical structures, but rather self-organizing entities created by man, which have their own autonomous efforts, and which are a mixture of the physical and virtual worlds[3]. One example of the use of holonic systems is navigational road maps. Agents in the system use these maps (basic models) in combination with a strategy to navigate from the current position to the destination position. The necessary control technology is based on the concept of holons, which are the units of production and behave as autonomous and cooperative agents, providing flexibility, adaptability, agility, and dynamic reconfigurability. This production would have all agents with some form of intelligence, and no central processing unit would be needed, which would mean that the system is entirely decentralized. All participants in the system communicate with each other using a predefined protocol. Holones can be addressed to each other directly without the intervention of a central processing unit, which would transmit information and contain algorithms for operating the system. These algorithms are divided between units

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[1] GRZNÁR, P., GREGOR, M., MOZOL, Š., KRAJČOVIČ, M., DULINA, Ľ., GAŠO, M., MAJOR, M.: A system to determine the optimal work-in-progress inventory stored in interoperation manufacturing buffers. In *Sustainability*, 2019, Vol. 11, No. 14, p. 4. [online]. [2021-10-15]. Available at: <https://www.mdpi.com/2071-1050/11/14/3949>.

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3 JARVIS, D. H.; JARVIS, J. H.: Holonic Diagnosis for an Automotive Assembly Line. In DEEN, S. M. (ed.): *Agent-Based Manufacturing: Advances in the Holonic Approach 2003*, Springer, 2003, p. 195. [online]. [2021-10-15]. Available at: <https://link.springer.com/chapter/10.1007/978-3-662-05624-0_9>.

according to tasks. The autonomy of the system ensures that all units of the system will be able to operate until themselves or neighbouring units decide that they are not operational [4].

1.2 Multiagent System

Agent technology can be classified as single-agent and multi-agent systems. In single-agent systems, the agent performs the task on behalf of a user or a specific process. They may provide some of the value-added services that may be part of a package of information services when they perform different types of tasks in communicating with their user or resources.[5]. A multi-agent system (MAS) consists of a network of computing agents that interact and usually communicate with each other. Agents may have only a partial (and in a sense distorted) model of their environment, they may have a limited set of resources to acquire and integrate new knowledge into their models and to shift the state of the system to their own goals[6]. MAS based on static agents is used in various applications such as distributed vehicle monitoring, computer integrated manufacturing, natural language analysis, telecommunications and network management, aircraft maintenance, military logistics planning, real-world simulation, satellite image propagation, visitor communication system, etc. Some of the MAS-based mobile agent applications, in addition to telecommunications, are personal assistance, information dissemination, parallel processing, Grid computing, workflow and groupware management, distributed information retrieval and management, data mining, e-commerce and space exploration.

2 Supporting Technologies for Production Process Management

The production process generates a considerable amount of data and information, which puts pressure on assistive technologies. Companies must consider the technologies they use to collect, process, and analyse the data needed for an effective production management process. The concept of Industry 4.0 resonates in the field of industrial engineering in a significant manner.[7] There is an increasing need for switching to new paradigms in manufacturing and automation systems instead of merely upgrading the technological systems. Production is becoming much more complex. From the product, through production equipment to testing, every element of it will be equipped with intelligent and cognitive abilities capable of identifying, classifying, recognizing, and making decisions. New production systems will generate an unimaginable amount of data that will need to be

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[4] JARVIS, D. H.; JARVIS, J. H.: Holonic Diagnosis for an Automotive Assembly Line. In DEEN, S. M. (ed.): *Agent-Based Manufacturing: Advances in the Holonic Approach 2003*, Springer, 2003, p. 197. [online]. [2021-10-15.]. Available at: < https://link.springer.com/chapter/10.1007/978-3-662-05624-0_9>.

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intelligently filtered, aggregated, represented, and stored in a reduced form [8]. Current progress requires that recent devices be connected to the Internet, which has recently developed the Internet of Things and creates a better user experience through strong connectivity and the efficient use of next-generation devices.

2.1 The Internet of Things

The Internet of Things (IoT) is the key to turning any system into a smart one. So that the IoT benefits the manufacturing industry by connecting objects through a network and remotely managing existing network infrastructure, thus opening opportunities to integrate the manufacturing world into computer systems, improving production efficiency, product accuracy and economic growth, and minimal human intervention. The latest operating systems are used to meet the requirements of modern systems. There are many platforms for the Internet of Things that have been developed. IoT can be used on non-production equipment such as compressors, water tanks, power inputs, energy consumption monitoring. It can also be used in production equipment, for example, on a filling line to monitor the number of incoming bottles by a conveyor or monitor a machine tool. Thus, it is also possible to monitor the data coming from the Programmable logic controller (PLC) to see if the machine is working correctly. So, there are many different places where IoT represents added value. At its core, IoT connects things through a network[6]. IoT is a system of interconnected sensors, and when data needs to be processed, several layers need to be added. IoT can also use artificial intelligence (AI) and machine learning to facilitate and dynamize data collection processes.

2.2 Big Data

In general, the term Big Data describes data that can have a high volume or diversity, that can be collected at high speed with potentially high or low truth. More and more specific analytical technologies are needed for valuable information. Big Data technology can be used for various purposes, for example to:

- Accident prediction and production optimization,
- freight planning and route optimization,
- personal offers and product layout optimization,
- increase profits and attract customers.

Manufacturing companies are exploring product cost reductions and ways to optimise production. They collect many data on the operation of machines, the percentage of waste at each stage of production and then analyse them, companies try to get answers to questions: “Under what conditions do bad pieces occur most often?”, or “Which stages of production are spent most of the time and why?”, or “Which product tests are of little use and do not provide new information?”, or “How can we optimise and speed up their work in the individual stages of production?”, or “How to reduce material consumption?”. Logistic processes such as the transport of goods are also influenced by many different factors: loading warehouses, traffic jams, the condition of the vehicle fleet, the location of filling stations. Companies are looking for answers to questions about how to combine all these factors and compare their impact.

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[8] PAPPA, J., TOKODYB, D., FLAMMINIC, F.: From traditional manufacturing and automation systems to holonic intelligent systems. In MOLDOVAN, L., GLIGOR, A. (eds.): *11th International Conference Interdisciplinarity in Engineering, INTER-ENG 2017*. University of Tirgu-Mures, Romania, p. 933. [online]. [2021-10-15.]. Available at: <https://www.sciencedirect.com/science/article/pii/S2351978918304281>.

The answer is to analyse how routes and delivery times can be planned more efficiently to avoid downtime.

2.3 Cloud Computing

Cloud Computing (CC) has become an option for many organizations; particularly in curbing the current economic situation is forcing every decision made by deciding not to harm the organization. Cloud computing provides plenty of storage space, computing networks, hardware, and software resources as services, without the need for extensive configuration and on-demand, as needed. Communication using cloud systems will ensure a smooth exchange of information. Today, cloud storage is equivalent to storing in infrastructure. In the companies of the future, the security of such storage will certainly increase thanks to intelligent technologies and biometric systems connected to the Cloud[9]. Productivity management is closely related to the production management process. One of the problems that companies must deal with today is productivity. must constantly adapt to changing customer requirements and demands. Cloud software solutions will ensure that companies have the constant material resources for production. Thanks to the information in the Cloud and the connection to IoT, production is efficient in combining the work of humans and collaborative robots. Production information will be constantly collected on the Cloud, where a productivity analysis will be created in real-time. Claud Computing can also be used in all other processes in the company, for example, in the planning process or the process of maintenance, storage.

2.4 Artificial Intelligence

Industry 4.0 has had a significant impact on global manufacturing and industrial development, using technologies such as Cloud Computing, Internet of Things (IoT), Internet Services (IoS), Big Data Analysis and Artificial Intelligence (AI) to optimize real-time production and facilitate vertical, horizontal, and complex integration. When we talk about artificial intelligence, it can be divided into two types of artificial intelligence:

- Software - virtual assistants, image analysis software, search engines, speech, and face recognition systems,
- built in material facilities - robots, self-propelled cars, drones, the internet of things.

Software that has AI can be used to look for irregularities and errors that go through the balance. Such software needs several product images to detect deficiencies in a concise time frame. In intelligent factories inspired by the modern manufacturing industry, the use of AI facilitates rapid decision-making based on real-time and historical data with minimal human involvement. Thus, with the help of AI, it is possible to create a remote mechanical product design system that uses AI for image processing and pattern recognition and uses wireless client / server communication.[10] With the help of AI, it is possible to design an algorithm that predicts the remaining life and usability of industrial equipment and emphasizes its importance for Industry 4.0.

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[9] AMRON, M. T., IBRAHIM, R., CHUPRAT, S.: A Review on Cloud Computing Acceptance Factors. In LWIN, K. T. (ed.): 4th Information Systems International Conference 2017. Indonezia : Department of Information Systems, 2017, p. 639. [online]. [2021-10-6]. Available at: <https://www.sciencedirect.com/science/article/pii/S187705091732968X>.

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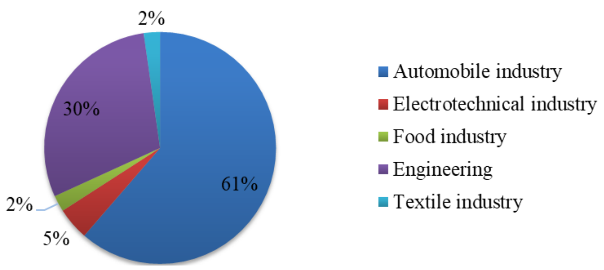
3 Relation of Production Management Methods, Technologies, and Marketing Strategy

A marketing strategy is a plan of processes that will ensure the fulfilment of the goals of a particular company. It is also an effective way for a company to maintain a sustainable competitive advantage focusing on customer needs and desires. Factories needs to define clear goals to determine how to achieve those goals and whether the goals have been achieved. Objectives must always be based on detailed research, not on previous results, estimates or natural intuition.[11] There are some goals for starting an organisation, but they can change over time. Therefore, it is necessary to perform an ongoing marketing analysis. Marketing analysis begins with a comprehensive situational analysis. Factories need to analyse their market and marketing environment to find attractive opportunities and avoid conversions with the environment. It needs to analyse its strengths and weaknesses, obtain information about intermediaries, customers, competition, and other market factors. Marketing analysis provides information for all other marketing functions. It is essential to realise that in production and marketing, the marketing strategy affects all the processes that take place in the company. To achieve the set goals and respond flexibly to changes, whether in the company or the external environment, it is necessary to set up the ongoing processes in production properly. Within the project, the task arose to find out through a survey of companies who used proactive methods and technologies in production management and their impact on the performance of the manufacturing company for the chosen marketing strategy. This research consists of a questionnaire in which companies were identified, and thus also described the methods, technologies and marketing strategies used by companies, and an analysis of this questionnaire to find the relationship between methods, production management technologies and marketing strategies.

3.1 Characteristics of the manufacturing companies involved in the research

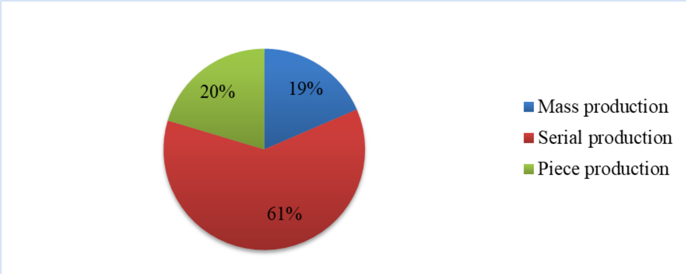
A sample of 150 companies took part in the survey. Brief description of the representative sample of participating companies on the questionnaire. The largest share of respondents was from the automotive industry (67%).



Picture 1: Proportion of industry representation
Source: Own processing.

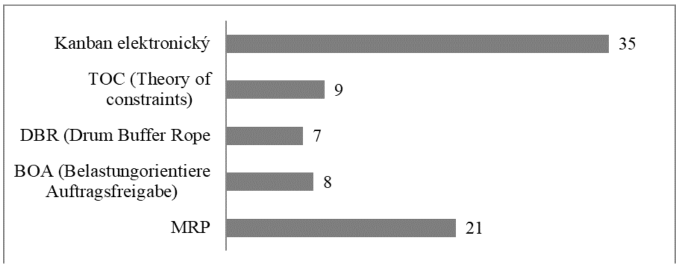
It is also essential to determine what proportion of respondents have serial, mass, or piece production. Of the number of respondents, 57% of respondents have a serial type of production.

[11] ŤAŽKÝ, M., RAKYTA, M.: Increasing the effectiveness of service activities. In *Management: Journal of Contemporary Management Issues*, 2006, Vol. 11, No. 2, p. 5. [online]. [2021-10-15]. Available at: <https://hrcak.srce.hr/19144>.



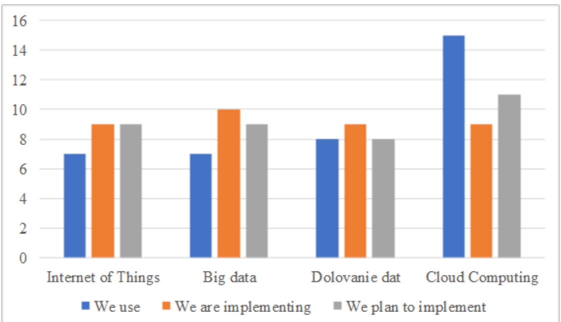
Picture 2: Type of production according to different degrees of repeatability
Source: Own processing.

An essential part of the survey was to find out the management methods used in production. The survey shows that the most used method is Kanban.



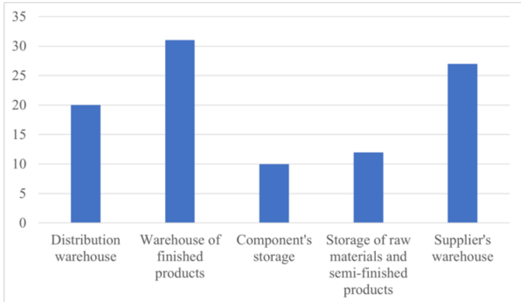
Picture 3: Use control methods in production
Source: Own processing.

So, it was also essential to find out which technologies are used in production. More was the intention for technologies used for data processing and analysis, as company interest in these technologies increases. Thus, these technologies help companies improve the marketing process and simplify data integration from customers into production. The most used technology is Cloud computing. There has been significant interest in data mining or big data. From the results of the questionnaires, we can identify that companies are already collecting data but do not yet use the critical analysis of data, data mining to gain a competitive advantage.



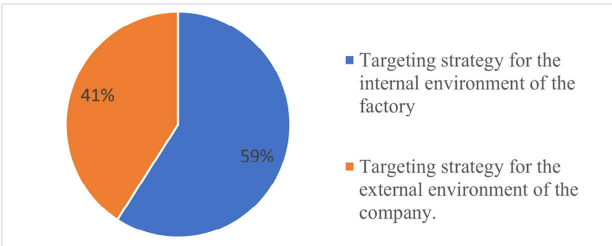
Picture 4: Technologies in production
Source: Own processing.

It turned out that 33 respondents prefer that the point of disconnection by the customer's order be in the warehouse of raw materials and semi-finished products. This significantly affects management in that companies usually make a production plan based on the order, and it is questionable how flexible they can react to changes in the order.



Picture 5: Preferred disconnection point by customer order
Source: Own processing.

It is also an important question how the company's strategy is set and whether it is tailored to the internal environment or the external environment. This question answers what is essential for the company. Internal factors are influenced by the technologies and methods used or even by human resources. Furthermore, external factors are influenced by industry and competition or even the market itself. It turned out that 59% of respondents have a strategy set for the company's internal environment.

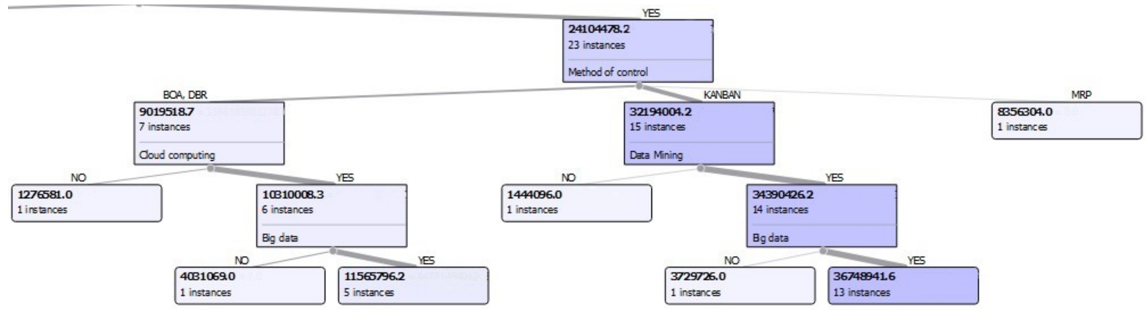


Picture 6: Proportion of marketing strategies used
Source: Own processing.

The questionnaires showed that companies have completed the collection and placement of data in the Cloud and are currently planning to implement progressive methods and tools that would help them use the data to improve the strategy and management of the company.

3.2 Analysis of provided data and creation of a model

The project analysed data provided by companies on the methods used, management technologies and achieved Key Performance Indicators (KPI) values for fulfilling the marketing strategy. The researchers hypothesised that technologies and methods influence the implementation of marketing strategies. To obtain the answer to the question, a data model was created over which analyses were performed. The model consists of the company's characteristics, which includes the type of industry, the type of equipment used, the technologies used for production management, and answers to questions of marketing strategy. The ORANGE, data mining system was used to evaluate the hypothesis, where a model was created, and tests were performed on a sample of data. All surveyed companies were according to the strategy used. Companies that have a non-targeted strategy for the external environment have been shown to have losses. Companies that have a strategy that does not target the internal environment have been more profitable. Furthermore, companies were already different according to the methods and technologies used.



Picture 7: Application of data mining using tree classification
Source: Own processing.

Furthermore, companies were divided according to management methods, showing that companies that use KANBAN are more beneficial than companies that use Material Requirements Planning (MRP) or Belastungorientierte Auftragsfreigabe (BOA), Drum-Buffer-Rope (DBR). Then there was a division according to the technologies used. The companies that use the one mentioned in point 2 are more beneficial than those with only some of these technologies. Therefore, by applying data mining methods, results were obtained based on which it is possible to confirm the hypothesis that technologies and methods affect the implementation of marketing strategy.

Conclusion

The long-term success of any company depends on satisfying emerging social and market needs. However, over time, the markets became oversaturated, and demand was no longer constant but was foreseeable. At that moment, the market ceases to be homogeneous and shows a wide range of products. Flexible production systems have begun to be applied to enable companies to meet these needs. Due to this, every company must respond diligently with its production systems and marketing processes to these trends. Therefore, companies must decide on advanced production concepts that incorporate the described technologies while constantly analysing the environment in which they operate. To properly set company goals.

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MARKETING WITHIN THE MIXED REALITY CONTINUUM

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Abstract
The rapidly growing and dominant trend of digitization brings a wide range of process innovation opportunities for companies, and it directly affects the field of marketing. Companies must adapt to this trend and incorporate new technologies into their marketing activities. It is the continuum of mixed reality, which includes augmented reality (AR) and virtual reality (VR), that offers space for the creation of modern applications that can also be used in the field of marketing. This article presents the possibilities of using augmented and virtual reality in the field of electronic marketing. The introduction explains the basic concepts of the issue, the core of the article is the design of applications using mixed reality for marketing, then summarizes the necessary basic software and hardware requirements for application development. At the end of the article, the authors summarized the possible limitations for the creation of applications in mixed reality and the expected benefits of their use for marketing. The article also presents applications for AR and VR, which were created at the authors' workplace.

Key words:
Augmented Reality. Marketing. Mixed Reality Spectrum. Virtual Reality.

Introduction

Nowadays, we can encounter mixed reality in various areas, from the entertainment industry, through industrial applications, to use in the military or medicine. In the field of marketing, however, mixed reality has untapped potential, especially for domestic companies. Mixed reality experiences a great interest in the development of applications for virtual and augmented reality. Especially, the development in the field of gamification and education is steadily on the rise.[1]

1 Marketing and new directions for the 21st century

The traditional view of marketing in the past mainly involved sales and advertising. This view is becoming obsolete and companies are trying to establish a valuable and long-term relationship with customers using new technologies.[2,3] The digital transformation brings innovation and companies need to adapt.[4,5,6] For this purpose, cyberspace is used, which

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[3] MARČEKOVÁ, R., SAJTLAVOVÁ, L.: Nové trendy v marketingovej komunikácii a ich využívanie v kúpeľných podnikoch na Slovensku. In PACHROVÁ, S., DOLEŽALOVÁ, M. (eds.): *Aktuální problémy cestovního ruchu* (10. Medzinarodní konference), Jihlava : Vysoká škola polytechnická Jihlava, 2015, p. 303. [online]. [2021-10-01]. Available at: <https://pdfroom.com/books/aktualni-problemy-cestovniho-ruchu-cestovni-ruch-vyvoj-zmeny-perspektivy-topical-issues-of-tourism-tourism-development-transformation-future-prospects-10-mezinarodni-konference-10th-international-conference/kon5bGwZd6V>.
[4] GENZOROVA, T., COREJOVA, T., STALMASEKOVA, N.: How Digital Transformation Can Influence Business Model, Case Study for Transport Industry. In BUJNAK, J., GUAGLIANO, M. (eds.): *13th International Scientific Conference on Sustainable, Modern and Safe Transport* (transcom 2019), Amsterdam : Elsevier, 2019, p. 1054. [online]. [2021-10-01]. Available at: <https://doi.org/10.1016/j.trpro.2019.07.147>.

offers a wide range of applications and technologies based on mixed reality. According to Pilík,[2] there are four selected new directions of marketing for the 21st century:
1. Electronic marketing,
2. relationship marketing,
3. value marketing,
4. direct marketing.

The field of electronic marketing has the potential for the implementation of augmented and virtual reality technologies.

2 Mixed Reality Continuum

The continuum of mixed reality combines real and virtual elements and can be defined as the relative share of the real and virtual world.[7] Mixed reality (contains both virtual and augmented reality) is a creative concept of cyber-real space evoking an interactive digital 3D narrative that supports new patterns of interconnection and communication of tangible (3D objects) as well as intangible (activities, practices or knowledge) elements. The word "narrative" refers to a set of events that take place during a specified period and under various specified circumstances. This allows the simulation of aesthetic, technical and emotional elements, as well as the simulation of 3D objects associated with their metadata and new approaches to the transfer of information. Standard ISO / IEC 18039: 2019 defines mixed reality as a spatially coordinated combination of media and information that, on the one hand, represents the real world and its objects, and, on the other hand, represents virtual objects - computer-generated. Virtual components can be represented and presented in various modalities, such as visual, auditory, tactile, haptic, and olfactory.[7]

2.1 Augmented reality

Augmented reality is an area of computer research that combines the real world with computer-generated data.[8] Research in the field of AR is focused on the use of real-time captured video feed, which is digitally processed and enhanced by computer-generated graphics. The content enhanced by augmented reality can be displayed via smartphones, tablets or augmented reality headsets. The essence of augmented reality is to combine elements of the real and virtual world into one view. Azuma defines the basic characteristics of augmented reality as follows:
- Augmented reality is interactive,

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[5] WIECEK, D., WIECEK, D., DULINA, L.: Materials requirement planning with the use of activity based costing. In *Management Systems in Production Engineering*, Vol. 28, No. 1, p. 3. [online]. [2021-10-01]. Available at: <https://doi.org/10.2478/mspe-2020-0001>.

[6] FUSKO, M. et al.: Reducing of Intralogistics Costs of Spare Parts and Material of Implementation Digitization in Maintenance. In BUJNAK, J., GUAGLIANO, M. (eds.): *12th International Scientific Conference of Young Scientists on Sustainable, Modern and Safe Transport* (Transcom 2017). Amsterdam : Elsevier, 2017, p. 213. [online]. [2021-10-01]. Available at: <https://www.sciencedirect.com/science/article/pii/S1877705817325833?via%3Dihub>.

[7] ISO/IEC 18039:2019. *Information technology — Computer graphics, image processing and environmental data representation — Mixed and augmented reality (MAR) reference model*. [online]. [2021-10-01]. Available at: <https://www.iso.org/standard/30824.html>.

[8] AZUMA, R. T.: A survey of augmented reality. In BARFIELD, W., FEINER, S., FURNESS, T., HIROSE, M. (eds.): *Presence-teleoperators and virtual environments*, 1997, Vol. 6, No. 4, p. 356. [online]. [2021-10-01]. Available at: <https://www.cs.unc.edu/~azuma/ARpresence.pdf>.

- augmented reality is captured in 3D,
- augmented reality takes place in real-time,
- augmented reality combines real and virtual elements.

2.2 Virtual reality and immersion

Virtual reality (VR) represents the extreme of the mixed reality spectrum with the maximum share of virtual elements and the highest level of user immersion. In this case, the real world enters only in the form of information and data, which are then represented by their virtual representative. The induction of strong immersion significantly depends on the design of a virtual environment, which uses various action, social and narrative factors, as well as sensory stimuli.[9] Depending on the applied factors, several types of immersions can be identified:

- Action immersion - motivating a person in the virtual world to initiate activities that have unknown or interesting consequences. Discovering new abilities that will affect the world around them is highly motivating and significantly increases their attention.
- Narrative immersion - evoking strong semantic associations through the content of (virtual) experience. The narrative is an important motivating and intellectual part of all forms of learning. The evocation of intellectual, emotional and normative factors deepens the experience by presenting complex mental models.
- Sensory immersion - this immersion occurs when a user uses an immersive medium, such as a headset (VR headset) or CAVE (Computer Assisted Virtual Environment).
- Social immersion - rich social interactions between participants in the same environment of virtual or mixed reality deepen their immersion. In the real world, people participate in shared thinking processes between people who use their environment to make decisions and do things.

Virtual reality has gone through many years of development. Today the market offers many hardware alternatives with different parameters and functions. With a wide selection of alternatives comes a wide range of possible implementations. One such application is marketing.

3 Possibilities of applying continuum of mixed reality to the marketing

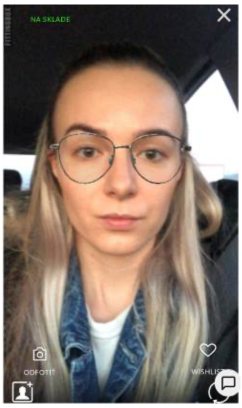
3.1 Augmented reality in marketing

The benefits of using augmented reality in marketing are endless, especially for creative businesses that can use this technology to attract customers Augmented reality can present the product or service to the customers from the comfort of their homes and provide enhanced instructions for the product or service usage without the need to read lengthy manuals. Furthermore, it is possible to use this technology to improve product presentation and design by simulating a selected product directly in a customer's home or virtually testing this product using a mobile application for augmented reality (Picture 1). At present, there is no need to purchase special equipment for the use of augmented reality applications. A smartphone or

[9] DEDE, CH. J. et al.: Introduction: Virtual, Augmented, and Mixed Realities in Education. In LIU, D., DEDE, CH, J., HUANG, R., RICHARDS, J. (eds.): *Virtual, Augmented, and Mixed Realities in Education*. Singapore : Springer, 2017, p. 3. [online]. [2021-10-01]. Available at: <https://link.springer.com/book/10.1007/978-981-10-5490-7>.

tablet is fully sufficient to run these applications. In general, existing augmented reality applications for marketing can be grouped into four areas:[10]

1. Applications that allow interaction with the users and their bodies - for example, the ability to virtually try on shoes, clothes or accessories.
2. Applications that allow you to insert static or animated 3D models into augmented space. For example, IKEA offers an application in which the customer can view and place the selected product in their own home via a smartphone or tablet.
3. Educational applications - applications that can be used by schools, museums, libraries, but also companies to enhance the learning experience and train their employees or students.
4. Applications for the entertainment industry - games that are controlled by facial expressions or hand movements and interact with the real world.

	
a) Trying on glasses virtually using AR	b) Trying on shoes virtually using AR

Picture 1: Examples of the use of augmented reality for online shopping.
Source: VRÁBLOVÁ, N.: *Rozšírená realita ako marketingový nástroj*. [Diploma thesis]. Žilina : Žilinská univerzita v Žiline, 2021, p. 52.

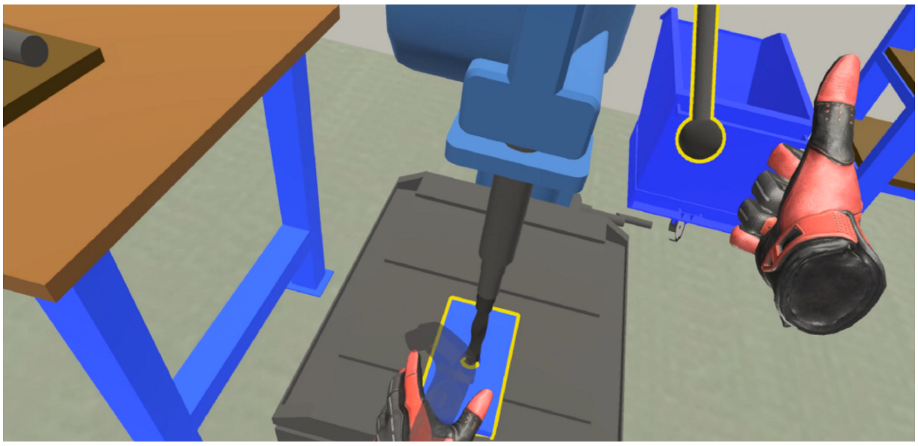
An application for the use of augmented reality as a marketing tool was created at the authors' workplace. The subject of the application was a coffee machine (Picture 2), which the customers could try to place in his home before purchasing it. In addition, the application allows them to select the colour variants of the product, display the product functions and display the operating instructions.

Picture 2: An example of using augmented reality when buying products online
Source: Own processing.

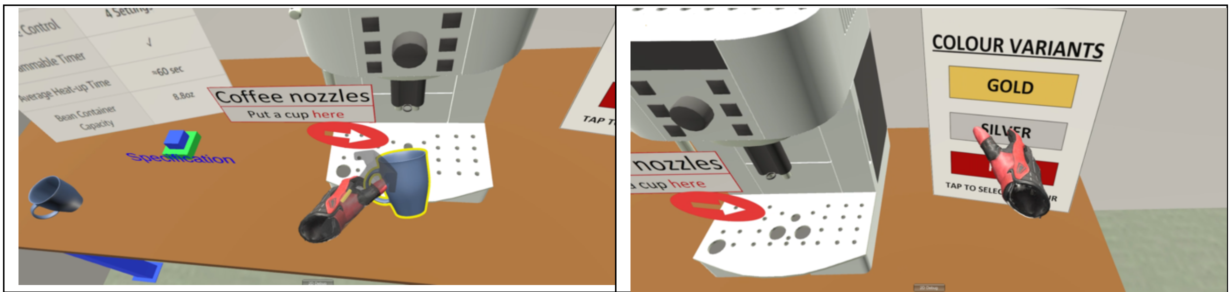
[10] VOBORNÍK, V.: *Rozšířená realita a jej využití v online marketingu*. [online]. [2021-09-22]. Available at: <https://www.netmagnet.cz/blog/rozsirena-realita-a-jeji-vyuziti-v-online-marketingu/>.

3.2 Virtual reality in marketing

Unlike augmented reality, virtual reality provides a fully computer-generated virtual environment. It can reliably simulate various processes and workflows. Businesses and other institutions can use this virtual reality capability to faithfully simulate the real process during training and education (Picture 3). Activities that are dangerous and difficult to imitate are especially suitable for this technology.[11] For this reason, virtual reality creates a suitable environment for safe and effective training. The potential possibility of using virtual reality in marketing may lie in the display of products or large models through full immersion, such as presentations of cars or apartment tours.



Picture 3: An example of training in virtual reality
Source: Own processing.



a) Instructions for product usage in virtual reality	b) Choosing and viewing colour variants of the product in virtual reality

Picture 4: Demonstration of virtual reality utilization in marketing
Source: Own processing.

3.3 Software and hardware support for creating mixed reality applications

Designing and implementing a marketing application based on virtual or augmented reality is often a complex process. It often requires a combination of knowledge from different industries, the scope of which is based on the complexity of the application itself. For this reason, a wider range of software solutions is often needed to process different parts of a project. Software support can be broadly divided into 3 main categories:

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[11] OSVALDOVÁ, L. MAKOVICKÁ, GAŠPERCOVÁ, S.: The Evaluation of Flammability Properties Regarding Testing Methods. In MELCER, J. et al. (eds.): *Civil and Environmental Engineering*, Žilina : Žilinská univerzita v Žiline, 2015, Vol. 11, No. 2, p. 142. [online]. [2021-09-22]. Available at: <https://www.sciendo.com/article/10.1515/cee-2015-0018>.

- 3D modelling - implementation of virtual reality in the field of marketing, requires a high degree of interactivity and a high level of immersion. 3D modelling can significantly affect these parameters. The 3D model is the element of the virtual environment with which the user will interact the most. At the same time, a correctly created model of a real object can better immerse the user into the environment. 3D models are mostly created using 3D modelling software, such as Blender, Autodesk Maya, 3Ds Max.
- 2D objects and graphic design – software such as Visio or Photoshop can be used to create graphic or text-based information and descriptions.
- Creation and building of the application - in the case of virtual reality, the application itself, its logic and scenario can be created in the game engine (Unity 3D, Unreal Engine) and in the case of augmented reality, it is possible to use software solutions such as Vuforia Studio, ARToolkit or D´Fusion Studio.

The choice of hardware is highly dependent on the complexity of the application. The usage of smartphones and tablets are sufficient for simple visualization applications through augmented reality. However, applications with a high degree of interactivity and a level of immersion place high demands on the computing power, functionality and accuracy of the virtual reality headset. Immersive virtual reality applications, which can also include VR marketing applications, require full-featured desktop headsets that can capture full body position, limb movements, or even precise finger movements. Such VR headsets include, for example:

- HTC Vive,
- Oculus Rift,
- Valve Index.

3.4 Limitations in the creation of mixed reality applications

When creating mixed reality applications for marketing purposes, it is necessary to take into account certain limitations, which are summarized in the following points:

1. Software solutions - there are currently several software solutions available on the market that offer a free platform for creating applications in AR and VR. However, free solutions often have limited functions. With paid licenses, the range of features can be much wider.
2. Hardware solutions - as already mentioned, smartphones and tablets are the most used option for AR applications. For VR applications, it is often necessary to obtain a headset that will allow full immersion in VR. This also creates certain limitations and possible discomfort for the customer.
3. The need for quality 3D models - complex VR implementations require a high degree of interactivity and a high level of immersion. 3D modelling can significantly affect these parameters. As mentioned before, the 3D model is the element of the virtual environment with which the user will interact the most. At the same time, a correctly created model of a real object can better immerse the user into the environment. The influence of the 3D model on the VR environment is based on its parameters and the way it was created. Not all 3D models are usable for virtual reality.

3.5 Benefits of using mixed reality applications for marketing

The benefits of using AR and VR in marketing can be summarized into five points:

1. Providing information about a product or service engagingly - the customers can view the product from the comfort of their home before purchasing it, test how it fits in their apartment, or get acquainted with its functions. After purchasing the product, mixed reality

technologies can provide visual services, such as installation, operation, or maintenance instructions.
2. User Involvement - AR and VR provide a more immersive experience, potentially increasing the likelihood of the desired feedback.
3. Saves customer time when choosing a product/service.
4. Advertising in an unlimited space – advertising at trade fairs on 3D projectors or LCDs for a larger group of people, or presentation of products and services on smartphones and tablets for smaller audiences.
5. Increasing the competitiveness of the company - using VR and AR as support in marketing activities, companies can differentiate themselves from the competition and create a new image.

Conclusion

In the current period, when the trade and services markets are also affected by the pandemic, it is important to maintain the speed of innovation processes in companies.[12] Mixed reality, which includes augmented reality and virtual reality, can be used in marketing not only in terms of product and service promotion but also in terms of providing product information. This can be achieved through virtual visualization of product design while additional information can include instructions for installation and maintenance manual. The customer can use the application to get enhanced information about the product or company. Virtual reality is also a powerful tool in education and training. By using these new technologies, the company can increase its competitiveness, market diversity or productivity.[13] A product that can adapt to its customer is a great benefit and at the same time a great challenge for its creator.[14]

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NEGATIVE CAMPAIGN ON SOCIAL NETWORKS: CLASHES OF YOUTH POLITICAL ORGANIZATIONS ON FACEBOOK

Michal Garaj – Jaroslav Mihálik

Abstract
Social networks are current prime space for the activities of youth political organizations. They are used not only as a marketing tool to present their activities to the target audience, but also to communicate various content. The focus of the paper is to identify forms of negative campaigns in communication and promotion posts on social networks of youth political organizations in Slovakia. Data are obtained from official Facebook profiles. They are processed through statistical software. The monitored categories focus on: the ratio of contributions with a negative campaign to the total number of contributions, the direction of the negative campaign (person / entity), the topic of the negative campaign contribution, the form of the negative campaign contribution (post type). The results show the active use of forms of negative campaigns on social networks of youth political organizations.

Key words: Facebook. Marketing. Negative Campaign. Social Networks. Youth Political Organization.

Introduction

The review of studies and research offers a complex set of different approaches as the authors examine the use of negative campaigns in political struggles. An important finding is the fact that the research of youth political organizations in connection with a negative campaign does not have a significant number of implemented outputs. In some cases, the research may in some way be a partial intention to examine a negative campaign in connection with youth political organizations, a specific setting, but it is not mentioned. Youth political organizations are examined more from the point of view of political communication and marketing in general.[1] The research of the negative campaign thus primarily focuses on the environment of the main political parties and their representatives. Usually, studies focus on a specific element in conjunction with a negative campaign. The general nature of a negative campaign in the political environment is low.[2] Research on the use of the negative campaign during pre-election[3] communication activities[4] is proving to be an important element.[5] At the same time, they focus

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on elections to various types of institutions or bodies: congress, [6] federal,[7] house,[8] senate,[9] and presidential.[10] As in the case of different types of elections, space or the environment where the negative campaign is used has a wider application. The negative campaign is researched in direct communication,[11] on billboards / posters,[12] websites[13] or social networks.[14] The negative campaign is not only examined in political communication through its presence on the Internet in the statements of politicians, parties and their contributions, but it is also examined through paid forms of advertising on social networks.[15] The research of the negative campaign is carried out primarily in the USA[16] and the European area.[17][18]

1 Data and Methods

The main focus of the paper is to identify the use of forms of negative campaigns on the social network Facebook of selected Slovak youth political organizations ("YPO"). The partial objectives identify: the number and frequency of posts on Facebook; structure of published contributions (communication of political topics, marketing, negative campaign); targeting contributions with a negative campaign (individual, subject); qualitative content of contributions with a negative campaign; types of posts with a negative campaign (combinations of content types used: text, images, videos, content sharing). The set of monitored entities is limited to 5 Slovak YPOs: Young Social Democrats, Christian Democratic Youth of Slovakia, Young SaS, Young Progressives, Young Together. The 5 most active YPOs were selected in the 60-day monitoring interval (1.8.2021 - 30.9.2021). The source of data is the official Facebook profiles of the YPOs. The data are collected and processed according to the categories listed in the sub-objectives into a basic data matrix. In the next step, graphs and tables are

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created with a description for each subject. The contributions with a negative campaign are accompanied by picture examples together with a description and analytical analysis according to partial objectives.

2 Use of negative campaign on social networks by youth political organizations in Slovakia

The analytical part of the paper focuses on identifying the incidence of the monitored categories in relation to the main objective and sub-objectives. For each selected subject, we provide a display through graphs, tables and figures with a descriptive-analytical description.

Young Social Democrats (YSD)
The frequency of publication of YSD contributions (Chart 1) does not show a fundamentally high rate. The frequency of contributions is distributed relatively evenly in both monitored months. In just one day, YSD published more than one contribution, in other cases it is a maximum of one contribution. Absolute number of contributions - 19, YSD ranks third in this criterion compared to other entities. On average, YSD published 0.31 articles per day.

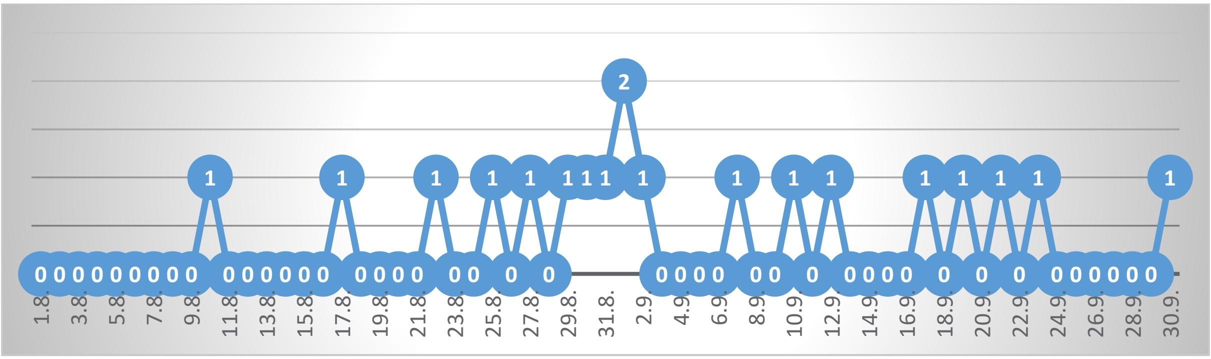

Chart 1: Frequency of published post on YSD´s Facebook official fanpage
Source: Own processing.

The primary two groups predominate in the structure of YSD contributions (Table 1). They focus on the active presentation of the organization's activities (9 contributions) and a negative campaign (8 contributions) towards other entities or individuals. Communication of topics or attitudes receives only a minimal degree of representation (1 post). Marketing activities for your own benefit are situated around a positive presentation of your organized events, meetings, interviews of members of the organization or the provision of assistance by members of the organization.

Table 1: Structured Categories of Posts on YSD´s Facebook official fanpage - Promotion

Interviews	Events of organization	Meetings	Help Activities	Topics (History)	Negative campaign
1	5	1	1	1	8

Source: Own processing.

The negative campaign by YSD has a diverse character of subjects and individuals to whom the contributions are targeted. In the perspective of subjects, we find a critical negative campaign of the most represented attitudes towards the current government as a collective body (6 posts). From the YSD's point of view, the campaign's efforts are aimed at the negative effects and form of governance of the coalition. The scope of this category of contributions focuses primarily on protests. YSD also uses interactive collaboration with its fans (Image 1) in the form of a competition in this type of negative campaign. YSD selected and appreciated the best protest links on their part, and subsequently used them to participate in the protest. The direct interactivity between the fans and YSD was used once, with 4 entries around the competition. The negative charge on the subject still appears in the criticism of the media. In this respect, it targets exclusively the media, which YSD describes as liberal. The awareness of YSD highlights the ideological aspect in the conflicting rival lines of left and liberal values. YSD uses a relatively wide range of contribution forms in a negative campaign. In each of the posts we find a text form of a link, which is extended by other additions. The basis is the use of images and videos. In addition to processing its own production, the video attachment also uses the shared video content of YSD members. The traditional form of the paper combining text + image represents a minimal basis for a moderately negative campaign at YSD. The last category of negative campaigns against an individual person / politician is aimed at SaS party leader Richard Sulík. The article explains why R. Sulík should no longer be in politics with the addition of two of his inconsistent statements in political communication.

Picture 1: Negative campaign example on YSD´s Facebook official fanpage
Source: *YSD.* [online]. [2021-10-6]. Available at: <https://www.facebook.com/582911831720503/photos/a.582925911719095/4628739673804345/>.

Young SaS (YSaS)

The frequency of publishing YSaS posts (Chart 2) shows the highest rate of all evaluated subjects (50 posts). On average, almost 1 post a day appears on their Facebook page. The most posts published in one day reach the value of 3, while we record two days with the publication of this number. The YSaS profile most often uses the publication of one article.

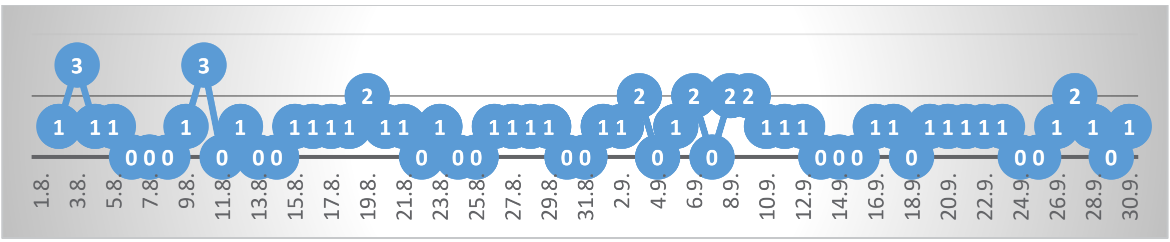

Chart 2: Frequency of published post on YSaS´s Facebook official fanpage
Source: Own processing.

The structure of YSaS contributions is situated into two main groups (Table 2). The first focuses on the marketing of YSaS activities (18 posts), the second tries to communicate attitudes to political topics (18 posts). They are accompanied by contributions with a negative campaign, which combine the intention for individuals and entities as in the case of YSD (15 posts). All three groups of contributions are relatively proportional. YSaS marketing aims to present its own activities and the SaS party. YSaS publishes contributions from participation in events, cooperation with other domestic YPOs and assistance provided by mSaS members. Similarly, it continues with a positive presentation of SaS events. In one case, it reserved marketing space for SaS representatives. Areas of foreign policy, education, history, environment and selected EU policies are integrated into the communication of topics. Attitudes target minority rights or the decriminalization of marijuana. In addition to them, mSaS in two cases also went the way of verifying the veracity of articles on web portals, where it pointed out erroneous and fabricated statements of competing entities.

Table 2: Structured Categories of Posts on YSaS´s Facebook official fanpage - Promotion

Help Activities	Participation with other slovak YPO	Events	Activities of SAS	Representatives of SAS	Topics (COVID-19, Hoax, Foreign, Education, History, Ideology)	Negative campaign
2	5	9	1	1	18	15

Source: Own processing.

The negative campaign by mSaS focused on criticism from selected politicians, members of other youth organizations and entities. Anna Belousovová and Robert Fico were the targets of mSaS when criticizing politicians. Primarily Robert Fico is the leader of a negative campaign by mSaS (5 posts). With regard to political parties, mSaS has a negative advantage over SMER-SD and also against entities that took part in protests during September 1 - KSS, Kotlebovci - ĽSNS. In particular, SMER-SD is a key target of the mSaS negative map. To the set of mentioned opposition political parties (SMER-SD, Kotlebovci - ĽSNS) and one non-parliamentary (KSS), mSaS adds a negative campaign aimed at the coalition partner of SaS - the movement Ordinary People and Independent Personalities (OĽaNO). We also include within the category of negative campaigns against entities (Image 2) the support of the Slovak sweet producer - Sedita, which called for an active approach to vaccination, which earned negative reactions from several political parties (these entities proposed a boycott of their purchase of their products). In the last category there is a contribution with a negative saturation towards Erik Kaliňák - a member of YSD and also a member of SMER-SD (Image 3). The purpose is to draw attention to the procedure when Erik Kaliňák transformed his personal TikTok account into a TikTok account of the political party SMER-SD. The form of negative campaign contributions uses two basic types. The first combines the text form of the hyperlink supplemented by an image attachment. The second uses, similarly to the first case, the text form of the hyperlink, the image attachment is replaced by a video. For posts with a negative campaign, mSaS does not use content sharing from other Facebook profiles or websites, but publishes only its original content.

Picture 2 and 3: Negative campaign examples on YSaS´s Facebook official fanpage
Sources: *YSaS.* [online]. [2021-10-06]. Available at: <https://www.facebook.com/1655476864528931/photos/a.1839309319479017/4241218925954699/>.
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Christian Democratic Youth of Slovakia (CHDYS)
The frequency of publishing CHDYS posts shows the second highest level of all subjects (Chart 3). CHDYS published 27 posts for the entire period with a daily average of 0.44 posts. We record the highest publishing activity within one day in four days, when CHDYS published two posts. The more significant frequency of publication comes primarily in the second half of the observed period. In comparison with the days when at least one post was published and the days when no post was published, we record a slight predominance of inactive days.

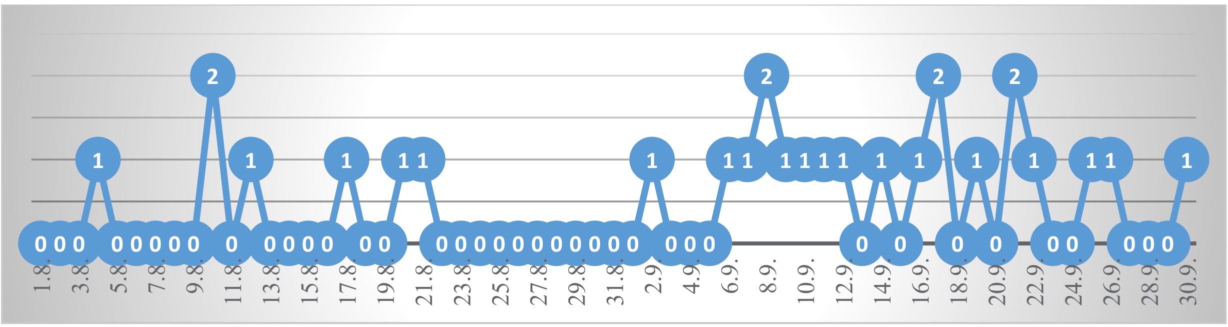

Chart 3: Frequency of published post on CHDYS´s Facebook official fanpage
Source: Own processing.

A structured view of published posts revealed the same groups of papers in CHDYS as in YSD and YSaS (Table 3). The difference in comparison with YSD and YSaS is significant especially in the communication of topics and attitudes. These form an essential core for CHDYS and the remaining groups of posts focused on marketing and negative campaign are represented to a lesser extent. The key topic is dominated by the Pope's visit to Slovakia in connection with ideological contributions focused on the Christian faith. The communication portfolio is completed by topics of EU and foreign policy, historical events and emphasis is also placed on the issue of COVID-19 in connection with vaccination. Posts devoted to marketing have a relatively similar character as we find in YSD and YSaS. Auxiliary activities of CHDYS members, participation in events and cooperation with partner organizations were presented. CHDYS also reserved space for a KDH representative.

Table 3: Structured Categories of Posts on CHDYS´s Facebook official fanpage - Promotion

Help Activities	Participation with partners organizations	Events	Public events	Representatives of KDH	Topics (COVID-19, EU Policies, Foreign, History, Ideology, General Informations)	Negative campaign
1	3	3	1	1	17	3

Source: Own processing.

We record three contributions in the negative CHDYS campaign. Two are dedicated to COVID-19 and vaccination, while in each of them there is also an ideological or value context. In the ideological context, it ranges from the left through liberals to conservatism or nationalism. Based on the findings, a negative campaign is set for both individuals and entities. At the same time, a certain form of uniqueness is represented by a negative approach to a group of Facebook users criticizing their participation in a press conference of Young Progressives on the topic of vaccination. In addition to traditional objects, political representatives, political parties and other entities, the negative campaign thus gained a part of the public as a goal. CHDYS uses the connection of the left-wing ideology of communism for the negative campaign of the representative of SMER-SD Ľ. Blaha in connection with the issue of vaccination (Image 4). In conservativeism, its negative campaign encounters other political entities that present themselves more far-right and radical than conservative (Image 5). CHDYS uses the same type of contributions for a negative campaign. The text combines an image that has a fun meme form. There are several hashtags attached to them, which try to complete the final form of the negative campaign contribution.

Picture 4 and 5: Negative campaign examples on CHDYS´s Facebook official fanpage

Sources: *CHDYS.* [online]. [2021-10-7]. Available at:<https://www.facebook.com/KDMSSLOVENSKO/photos/a.2198969180656682/4331983366856996/>.

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Young Progressives (YP)

The posts have a relatively even distribution in both evaluated months. In total, the YP published 12 posts, which represent the lowest number of all surveyed subjects. We can find two added posts within a maximum of one day. Based on the obtained data, the average reached the value of 0.20 posts per day. Chart 4 offers a look at several longer series of days without activity on the YP's Facebook profile. The longest interval reached 10 days of inactivity.

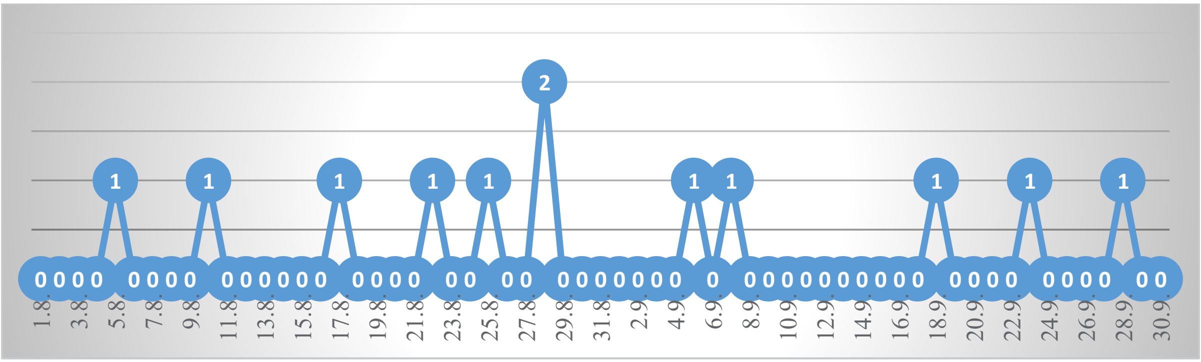

Chart 4: Frequency of published post on YP´s Facebook official fanpage
Source: Own processing.

The structure of YP post categories (Table 4) has a complex of groups the same as in all previous cases. A relatively balanced share is represented by marketing activities and communication of topics. Positive marketing YP emphasizes cooperation with Slovak and foreign youth political organizations. The complex is completed by activities in the online space and participation in events. A specific element that we find exclusively in the YP is aimed at emphasizing one's own identity through the symbolism and logo of the organization. The second separate category is complemented by the communication of topics and attitudes. In this case, we identify two essential topics. The first is represented by the rights of minorities of the same sex. The second seeks to motivate YP fans to participate in discussions about veganism.

Table 4: Structured Categories of Posts on YP´s Facebook official fanpage - Promotion

Participation with slovak YPO	Participation with foreign YPO	Podcast/Live stream/Press Conference	Events	Identity of organisation	Topics (Ideology, Vegan, Foreign)	Negative campaign
1	1	3	2	1	6	1

Source: Own processing.

The negative campaign at the YP does not gain a significant place compared to the above groups. It is represented by only one contribution (Image 6), which is aimed at a pair of politicians Ľ. Blaha and M. Kotleba. The central theme is vaccination, the YP is trying to criticize the negative attitude to vaccination by Ľ. Blaha and M. Kotleba. It draws attention to the use of the phrase "vaccination fascism", which makes sense to provoke a negative attitude towards vaccination in public. The criticism of the two representatives who defend positions on opposite poles of the political spectrum also makes deeper sense.

Picture 6: Negative campaign examples on YP´s Facebook official fanpage
Source: *YP.* [online]. [2021-10-7]. Available at: <https://www.facebook.com/740884882770905/photos/a.1196628403863215/1677948452397872/>.

Young Together (YT)
According to the data, YT got the second lowest activity (Chart 5) of publishing posts. Despite the active approach at the beginning of the period, the YT eventually reaches a series of 16 days of inactivity. In total, the YT published 13 posts with an average of 0.21 per day. Despite the overall lower activity, together with YSaS, it has the highest value of posts published during one day. On the other hand, like the YP, it records several longer series without active activity.

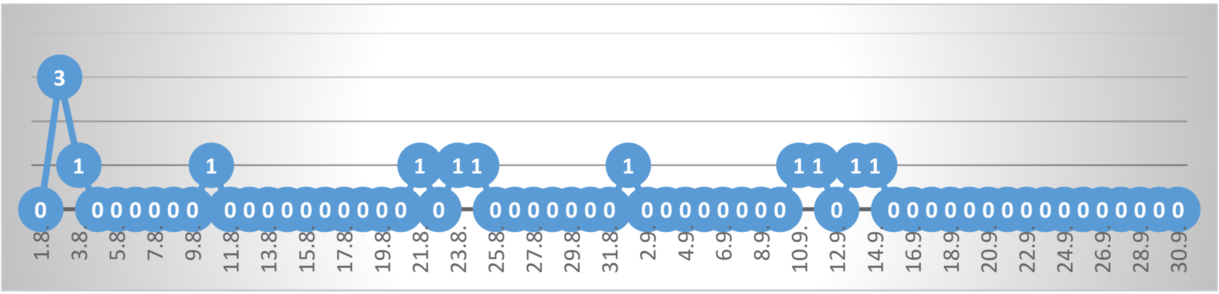

Chart 5: Frequency of published post on YT´s Facebook official fanpage
Source: Own processing.

Table 5 with a categorized structure of posts shows one of the most important differences that distinguishes YT from all other entities. In their case, the primarily investigated negative campaign does not enter the communication space. YT uses the Facebook profile predominantly for political communication. To a lesser extent, it also adds several posts, the purpose of which is a positive marketing presentation of one's own identity, participation with YPO and events. In political communication, a certain area or issue does not gain more ground. Rather, it represents a complex of various topics, to which the YT complements its position connected with the party program and values of the party.

Table 5: Structured Categories of Posts on YT´s Facebook official fanpage - Promotion

Participation with slovak YPO	Identity of organisation	Events	Topics (History, EU Policies, Foreign, Health, Political System, Environment)
1	1	2	9

Source: Own processing.

Conclusion

The analysis of the use of the negative campaign on the Facebook profiles of the Slovak youth political organizations identified several important findings. At the level of basic findings, we can talk about a relatively low frequency of publishing articles on social networks. None of the monitored subjects exceeded the limit of 1 post per day, while the presence of longer series of days without activity is a frequent phenomenon. Most cases showed the structure of the contributions into three basic groups: topic communication, marketing and negative campaign. The exception is represented only by the MS, which did not use the form of a negative campaign in the monitored period. In other cases, the negative campaign has gained a relatively significant place. It was targeted at selected individuals or subjects. In the case of entities, we speak of other YPOs or political parties. The negative campaign incorporates ideological / value differences, or point to inconsistencies in political communication. The key form of a negative campaign is based on a combination of a text hyperlink and images. In most cases, the YPOs also come up with their own original work and do not use the sharing of other posts with a negative campaign. The frequent type and form of a negative campaign is based on MeMe images, which carry a reference to a certain political conflict. At the same time, this type of posts tries to sound ironically.

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DIGITAL MEDIA AND ITS USE IN SPORTS MARKETING: TURKISH AIRLINES EUROLEAGUE BASKETBALL FINAL FOUR 2021

Marcela Garza

Abstract
New media has brought changes that impact sports marketing strategies such as a strong focus on the use of social media for fan engagement, over-the-top streaming platforms for sports broadcast, immersive technologies, and new data collection and analytics tools. With the COVID-19 pandemic the sports industry was disrupted and digital media became an invaluable tool for fan engagement and to give visibility to marketing partners and sponsors. This paper presents the Turkish Airlines Euroleague Basketball Final Four 2021 case study with a focus on the decision-making process for adopting new media and technologies. The situation was unprecedented in the history of the event, as the global pandemic forcead the event to be held behind closed doors. Euroleague Basketball managers were interviewed after the 2021 Final Four to provide the event organizer's perspective, and the results from a survey undertaken at the 2019 Final Four are used to contrast information with the 2021 experience. Findings reveal that the digital strategies achieved their objectives and a drive existed to further accelerate digital transformation processes in Euroleague Basketball and its wider ecosystem.

Key words:
Digital media. Euroleague Basketball. Marketing strategies. Social media. Sports sponsorship.

Introduction

Euroleague Basketball is an international leader in the sports industry that has been organizing the top-tier professional basketball competitions in Europe since 2001[1]. The culmination of the Euroleague regular season and playoffs is a 'Final Four' weekend where semi-finals and the final are played in a different host city every year. The title sponsor of the event is Turkish Airlines and the media rights for the event are sold to over 190 countries around the world, attracting audiences in the millions across multiple digital media platforms. While media rights are a key revenue stream and digital channels provide global exposure, the Final Four involves live fan engagement in the host city, the center-piece of which was the Fan Zone. It is a space to interact with basketball fans and locals where they can enjoy, play and get involved in the basketball celebration occurring that specific weekend. The Fan Zone was central for sponsorship activation and provided a space for fan engagement and brand exposure. Due to the COVID-19 pandemic the 2020 Final Four in Cologne was cancelled and when the event was held in the same city in 2021 edition it was behind closed doors. In preparing for the 2021 Final Four, Euroleague executives were facing the challenge of how to engage fans and provide exposure to their marketing partners through media channels only. Digital media was key for creating marketing opportunities to engage fans at the 2021 Final Four, Euroleague Basketball embraced the challenge thorough the use of digital platforms: social media, influencers on Instagram, all day content, augmented reality at the opening ceremony, and the introduction of some new devices such as the opportunity to live the games in a virtual reality experience. To know more about the journey and how Euroleague Basketball embraced new digital marketing strategies, Euroleague managers were interviewed between June and July 2021. In addition, information from a fan survey undertaken at the 2019 Final Four Fan Zone in Vitoria-Gasteiz city is used to help explore the differences between the last pre-COVID-19 event and the fully digital strategy adopted for the 2021 event.

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1 Background literature

Since its spread and resulting pandemic status, COVID-19 has disrupted the global economy, including the sports industry. Lockdowns, social distancing, and other containment measures imposed by governments to fight the global health emergency have prevented many sporting events from taking place or, in the best-case scenario, they have been rescheduled with changed format and capacity constraints[2]. For instance, for the first time in the history of modern games, the Tokyo Olympics and Paralympics were postponed to 2021 and celebrated behind closed doors[3]. In 2020 the global sports events segment, one of the key pillars of the sports value chain, experienced a 75% drop in revenue of compared to 2019[4]. Euroleague Basketball is no exception. In 2020 the league had to cancel the Turkish Airlines Euroleague Final Four event and in 2021 it was celebrated behind closed doors. Different digital technologies have been adopted for marketing strategies in the sports industry to keep fans engaged such as investments on improving infrastructure to create 'smart venues' bringing opportunities for fan data collection[5], the use of immersive technologies such as virtual, augmented or mixed reality[6], or the development of strategies to reach the fans via smartphones[7]. Marketing partnerships such as sponsorship are taking advantage of these new technologies and use digital media such as social media to engage fans[8]. Without any precedents, Euroleague Basketball executives embraced the challenge of going fully digital at the Cologne 2021 Turkish Airlines Euroleague Final Four. The aim was to provide their fans with an opportunity to live the experience of the final matches. Examples include the use of augmented reality for the first time in the pre-game show; being the first European sport to stream in virtual reality; the creation of a virtual seating using a hi-tech video 'fan wall' aside the court inside *Lanxess Arena*, and the 'Final4Fans' digital show sharing live and on demand content through social media channels[9].

2 Methodology and data

Primary data was gathered by conducting semi-structured interviews with Euroleague Basketball senior managers that were key involved in the planning and execution of the Cologne 2021 Turkish Airlines Euroleague Final Four. The focus of the interviews was to understand

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[6] *Next-Generation Fan Engagement: The coming together of content, commerce, code & the consumer*. [online]. [2021-01-22]. Available at: <https://sport-gsic.com/wp-content/uploads/2021/01/Whitepaper-4_-Fan-Engagement.pdf>.

[7] HA, J. P. et al.: *Sport fans in a "smart sport" (SS) age: drivers of smartphone use for sport consumption*. In *International Journal of Sports Marketing and Sponsorship*, 2017, Vol. 18, No. 3, p. 281-297.

[8] KAUSHIK, K., et al.: The tweeting sponsor': effect of a sponsor's SNS message articulation/interactivity on consumers' online response. In *European Sport Management Quarterly*, 2020, p. 1-24.

[9] *Technology brings Final Four to a new era.* [online]. [2021-05-27]. Available at: <https://www.euroleague.net/news/i/bjqiynog49ra8ipw/technology-brings-final-four-to-a-new-era>.

the decision-making process behind the Euroleague's fan engagement and sponsors digital activation strategies. The interviewees were:

- New Events & Entertainment, Senior Manager [NE&E, s.m.].
- Business Intelligence & Analytics, Senior Manager [BI&A, s.m.].
- Innovation Manager [INN m.].
- Former Euroleague Chief Operations Officer [FCOO].

Survey data collected at the Vitoria-Gasteiz 2019 Final Four will be used to bring context of the fans' insights at the last Fan Zone celebrated. 399 people were face-to-face surveyed by 5 researchers during the Final Four weekend (Friday May 17th to Sunday May 19th) both at the Fan Zone at *Plaza España* in Vitoria-Gasteiz city center, and at the *Fernando Buesa Arena* just before the semifinals and the final matches. From the 399 surveyed people, 69% were male and 30% female (1% chose not to answer), most of the respondents were people between 36-50 years old with 34%. Most of the respondents were residing in Spain and 47% of the respondents were supporters of a different team that was not playing at the Vitoria-Gasteiz's Final Four. It is important to note that Euroleague Fan Zone was open to the public regardless if they have a Final Four games' ticket. From the people surveyed, 65% had a ticket to the Final four and 35% visited the Fan Zone without attending to the basketball matches at the Arena. More details can be seen in charts 1, 2 and 3.

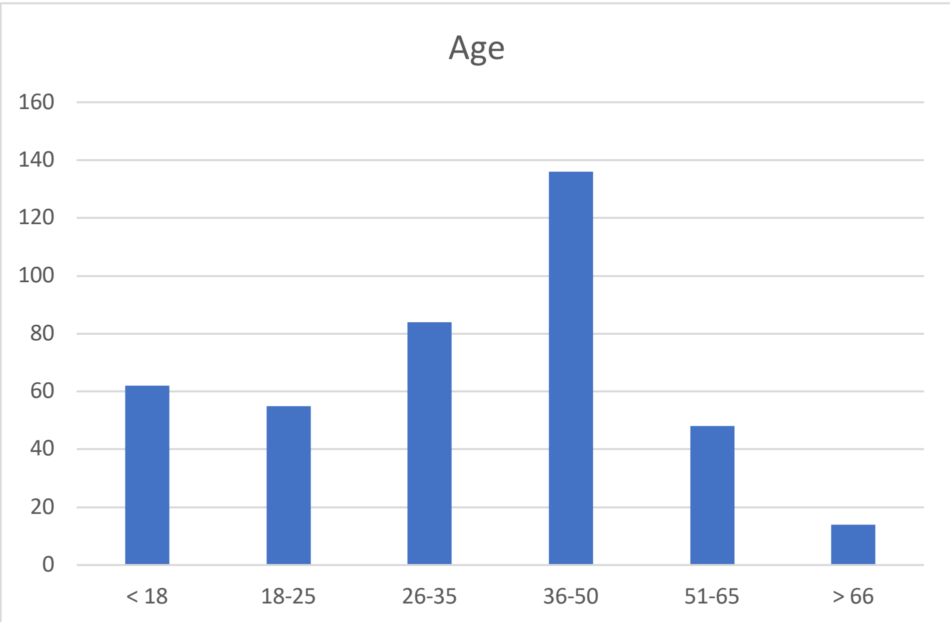


Chart 1: Detailed information about the respondents' age range
Source: Own processing.

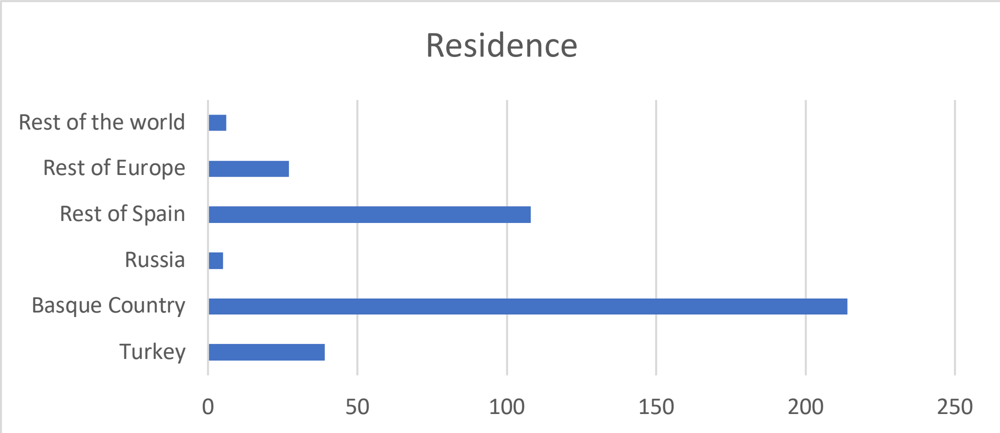


Chart 2: Detailed information about the respondents' residence country
Source: Own processing.

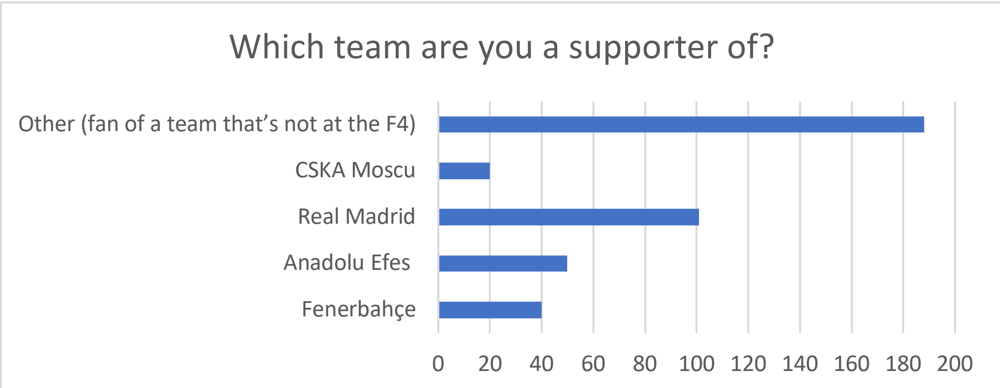


Chart 3: Detailed information about the respondents' supported team
Source: Own processing.

3 Results and discussion

During the disrupted 2020-21 regular season, four scenarios were considered by Euroleague senior management when planning the 2021 Final Four event: 100% fan capacity at the arena; 50% capacity, 25% capacity, or behind closed doors. In April 2021 the decision to hold the event behind closed doors and cancel the celebration of the Fan Zone was taken due to the German government COVID-19 restrictions at the time [NE&E, s.m.]. With these decisions taken, besides the loss of ticketing revenue and the need to adhere to constantly changing COVID-19 safety protocols, one of the key challenges was to find the way to engage fans and enable them to experience the Final Four games without physically being there. As the innovation manager said, "we had to rethink the event itself". An example was the open ceremony and pre-game show incorporated augmented reality for the first time: "as a TV product, it was a huge success" according to the organizers. Besides broadcasting the games in television and established streaming platforms, all the games played at the Final Four 2021 were streamed live in Euroleague's official TikTok channel. This was the first time a professional basketball league had been broadcast live on this fast-growth platform[10]. Euroleague Basketball took the challenge of broadcasting live using virtual reality and bring the fans an immersive experience "we had cameras replicating like if the fans were sitting in

[10] *In a first for any team or ball sport, Euroleague streams Final Four on TikTok*. [online]. [2021-05-29]. Available at: <https://www.euroleague.net/final-four/cologne-2021/news/i/bjw54erl6hhiauxc/in-a-first-for-any-team-or-ball-sport-euroleague-streams-final-four-on-tiktok>.

the front row on the court. We put some stats plus all the TV cameras so the fan could act as if they were the TV director and choose any camera that they would like" [INN m.]. The virtual reality tickets were launched two weeks before the Final Four games, the time for promoting and selling the project was limited resulting in few sales [INN m.] regardless the fans' openness to new experiences "in the future, maybe somebody will run the London Marathon from home, they will have a VR headset, there will be cameras that follow their pace, and they will feel like they are running through the streets of London the whole distance" [FCOO]. Digital activities in social media channels were also key for fan engagement and to give visibility to marketing partners and Euroleague Basketball invested in social media production in order to offer content to the fans. "We were always online: with live stories, influencers that were doing stuff at the athletes' hotel, during rehearsals, creating content from scratch to make the fans feel part of the event as if they were there" [NE&E, s.m.].

Picture 1: 'Final4Fans' Digital activities conducted by Euroleague Basketball in different platforms during the Cologne 2021 Final Four.
Source: Own processing.

In previous years, most of the Final Four sponsorship activations were held at the Fan Zone during the weekend providing sponsors a space for brand exposure. In 2019 Euroleague sponsors were physically present at the Fan Zone and some of them also had digital activation strategies in social media. When surveying the people at the Vitoria-Gasteiz 2019 Final Four Fan Zone, they were asked about how attractive (in a scale from 1 to 5) different elements were in order to visit a sponsor's stand. 86% of the respondents said that they find games and challenges *attractive* or *very attractive;* 76% find digital and technological innovations *attractive* or *very attractive;* 70% of the people find *attractive* or *very attractive* to receive a gift or a free giveaway; 64% of the respondents find *attractive* or *very attractive* to compete to win prizes; and 60% answered that they find *attractive* or *very attractive* the presence of celebrities or influencers. Details can be seen in table 1.

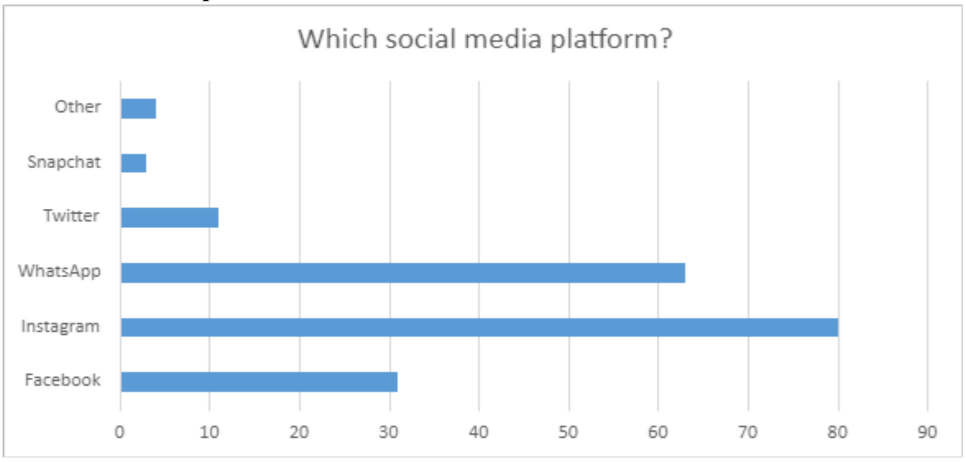
Table 1: Detailed information about the respondents' preferences when visiting a sponsor's stand.

	1 - Not attractive	2 - Bit attractive	3 - Somehow attractive	4 - Attractive	5 - Very attractive
Games and challenges	1%	2%	11%	26%	60%
Celebrities / influencers	9%	11%	20%	16%	44%
Digital innovations	3%	7%	18%	29%	44%
Giveaways (free gifts)	5%	8%	17%	21%	49%
Competitions	2%	12%	22%	28%	36%

Source: Own processing.

The most popular sponsor's stands at the 2019 Fan Zone were Turkish Airlines, Adidas, Endesa, and Oscar Mayer stands. All of them had games, challenges and/or competitions to win prizes which can be said is in line with the respondents' preferences. All of them required physical activities such as shooting games or 3x3 tournaments. Regarding their digital activations at the Vitoria-Gasteiz 2019 Final Four, only 25% of the respondents said that they participate in any Euroleague Basketball sponsor's activity or activation at the Fan Zone that involves social media. There was a clear preference for experiential activations "that is what you do at the Fan Zone, you interact with people, you want people to come to your stand and do activities" [INN m.]. Still, 47% of the respondents shared their Fan Zone experience in a social media platform while being there; being Instagram the most popular platform with 42% of the answers, then WhatsApp with a 33%, followed by Facebook with a 16%. More details in Chart 9.

Chart 4: Detailed information about the respondents' most popular platforms where they shared content from their 2019 Fan Zone experience.

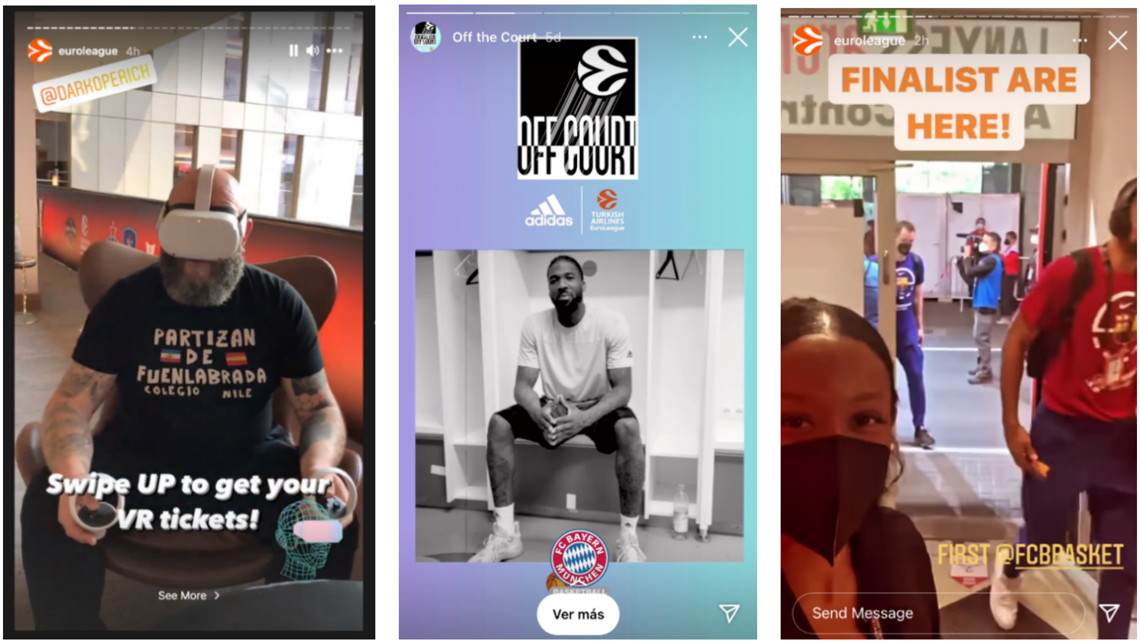


Source: Own processing.

Even so that the 2021 Cologne Final Four was 100% digital for the fans, a small number of digital activations with sponsors happened [INN m.]. "We offer them (sponsors) digital packages, some commercial spots on TV, and then there were huge LED boards behind the benches that was an additional platform for the sponsors to give them visibility" [NE&E, s.m.]. An example of a sponsorship activation that took place was the partnership with the movie "Space Jam: A New Legacy". Fans has the opportunity to listen to the movie soundtrack during the Final Four weekend[11]. Regardless of having limited sponsorship activations in the digital

[11] *Final Four to showcase new live-action/animated "Space Jam: A New Legacy" feature film*. [online]. [2021-05-26]. Available at: <https://www.euroleague.net/final-four/cologne-2021/news/i/bjaxmpuevq8ja6h4/final-four-to-showcase-new-live-action-animated-space-jam-a-new-legacy-feature-film>.

channels, sponsored content was seen in all the Euroleague Basketball official platforms. The data from the 2019 fan experiences at the Final Four show how the focus of Euroleague Basketball was on physical (in situ) activation of sponsorship agreements but that digital activations were already being adopted, as seen at the Fan Zone. By 2021 we see a major shift in Euroleague Basketball's strategy to a fully digital approach enforced by COVID-19 restrictions. This shift results in accelerating digital transformation processes in Euroleague Basketball that remain as the organization begins the 2021-22 regular season and the 2022 Final Four event.



Picture 2: Examples of content shared on Euroleague's account on Instagram.
Source: Print screens of InstaStories taken during the 2021 Final Four weekend.

Digital efforts made in social media had paid off as Euroleague Basketball reported an important increase of followers and engagement in their social media channels after the 2021 Final Four: "The league's social media channels enjoyed huge growth for the recent Final Four in Cologne compared to the 2019 event in Vitoria-Gasteiz, with increases in engagement per post (+112%), total engagement (+82%), views per video (+99%) and total views (+84%)."[12] Turkish Airlines Euroleague Final Four 2021 was considered a success in terms of maintaining sponsor visibility and increasing fan engagement thorough new media marketing activities. Perhaps of greater significance was the realization that this fully digital strategy had accelerated the adoption of new technologies and digital transformation in general: "since we are behind schedule on everything digital, for us doing anything different was new. I think that putting a lot of effort into doing these digital activations has put even more strength on the need for digital transformation" [INN m.]. As a consequence of this accelerated digitalization process, data had become central to Euroleague Basketball's operational and strategic decision-making. In 2019 the league created a Business Intelligence and Analytics department to centralize research, data analytics, and reporting activities within the organization to provide intelligence to every department to take better decisions in the future based on data [BI&A, s.m.]. "The change that can be most noticeable is the change in mentality. COVID-19 just sparked the need for this digital transformation, not only at the league level, but also at the club level as well" [INN m.].

[12] *New research shows growing interest in Euroleague.* [online]. [2021-10-06]. Available at: <https://mediacentre.euroleague.net/mediacentre/en/press_releases/single/2960/no?app=2>.

Conclusion

Digital media and new technologies can bring marketing opportunities to the sports industry. Euroleague Basketball digital media strategies implemented at the Final Four 2021 were successful in continuing to engage fans and give sponsors' brands exposure in the online environment. Euroleague Basketball is now further down the path of digital transformation and are committed to accelerating this process in order to provide a better experience to their fans[13]. Euroleague Basketball is now considering new digital initiatives to bring technological solutions that help continue engaging fans[14], like the launch of the Euroleague Basketball NFT series of digital collectibles using blockchain technology[15]. "The increase and improvement in technology is making the at-home experience of major sporting events better and better… That is a good thing in terms of monetization opportunities, in terms of audience reach, in terms of engagement, but it is important to look at the need for the return of spectators back in the venues" [FCOO]. Cologne 2021 Final Four pushed Euroleague Basketball to innovate and disrupt with new technologies for marketing purposes. The Berlin 2022 Final Four is being planned for the full return of fans and digital media, new technology adoption and data-driven decision-making are now at the center of Euroleague Basketball's strategy, "we need to try something in the gamification side, try to involve fans with second screen interactions during the games, for example, which is something that we're looking at for next year, or future years" [INN m.] following a fan-centered mindset to bring the best experience to the fans.

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[13] *N3XT Sports to support Euroleague Basketball on its digital transformation process.* [online]. [2021-10-06]. Available at: <https://www.n3xtsports.com/n3xt-sports-to-support-euroleague-basketball-on-its-digital-transformation-process/>.

[14] *Basketball Innovation Summit to showcase technology in sport.* [online]. [2021-05-25]. Available at: <https://www.euroleaguebasketball.net/euroleague-basketball/news/i/bjlqufwigpgnlxvt/basketball-innovation-summit-to-showcase-technology-in-sport>.

[15] *New digital collectibles celebrate the Final Four!* [online]. [2021-05-28]. Available at: <https://www.euroleague.net/final-four/cologne-2021/news/i/bjsuybeyij9r6dwq/new-digital-collectibles-celebrate-the-final-four>.

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ORGANISING EVENTS IN THE PANDEMIC DAYS

Slávka Gracová

Abstract
In past two years, pandemic situation has touched us in every aspect of our life. Mass events also didn´t have exception in this area. In Slovakia, they could be organised on the base on regulation of Public Health Authority from March 2020. The author of this article is devoted to organising events for many years that have each a different character. Main part of this work is realised on the Faculty of Mass Media Communication UCM in Trnava. In connection with the regulations and with the closed school many events have moved to an online sector. Outside the academic land there were allowed to make events especially during summer time both exlored years. The author was devoted to this theme also in earlier article and she continued dealing with the problems also in this one. Her aim was to analyse and sumarise the restrictions about organising mass events, and the amount of infected people with the new virus from the March 2020 until the October 2021.She compared the results from both years and she also included vaccination against COVID 19 and other restrictions which were not the same in the researched years.

Key words:
COVID-19. Events. Mass events. Organization. Pandemic. Restrictions.

Introduction

Pandemic had impact on normal life and also on possibility to attend events. To meet a lot of people in one place and share a programme with them was quite impossible. *„Event world is going through a big transformation. Because of pandemic situation events have to face a completelly new situation. And even though virtual world has unlimited options we can´t replace emotions, smell or taste.“*[1] The online event management, which has increased with the pandemic, includes the entire process of planning activities such as celebrations, meetings, or promotions to strengthen corporate purposes such as image and reputation in addition to social integration or the perception of social responsibility adopted by the institution, managing the process in all its aspects, and further evaluations.[2] However, emerging online technologies cannot fully replace in-person scientific events. In-person meetings are not susceptible to poor Internet connectivity problems, and they provide novel opportunities for socialization, creating new collaborations. In 2020 lot of events have moved to an online sector and lot of events were cancelled because they couldn´t happen. A study published in India in 2020 states that around the globe, it has reported that maximum loss of about more than $666 million till April is noted in event industry, due to cancellation of events worldwide and have 85.9 million jobs at stake. The businesses are suffering for huge capital shortage to sustain in long run though use of technology and measures like live chat, webinars, online discussion shows, podcasts etc. are being used by companies to continue their services but they cannot replace the revenue from big fat events or events at large scale in terms of money and people inducement. The daily wage workers associated with the industry, the small and medium event companies who do not have the platform or the target customers to provide such services are suffering more harshness of

[1] HRNČÁROVÁ, K.: *Online event nenahradí živé podujatie. No môže byť výnimočným zážitkom.* [online]. [2021-03-11]. Available at: <https://strategie.hnonline.sk/marketing/2313521-online-event-nenahradi-zive-podujatie-no-moze-byt-vynimocnym-zazitkom/>.
[2] ÜNLÜ, S., YASAR, L.: Online Event Managemenst on Twitter in the Covid-19 Pandemic Process: The Example of the Ministry of Culture and Tourism. In *Journal of Erciyes Communication,* 2021, Vol. 8, No. 2, p. 520. [online]. [2021-03-21] Available at: <https://dergipark.org.tr/en/download/article-file/1651892>.

this pandemic.[3] This situation had not only impact on the guests but also on the organisers and event companies. Some of them had to stop their work completelly and some of them survived. For example the slovak event company CREATIVE PRO have said at the end of 2020 that their interannual losts were around 60-90%.[4] The music portal ZONE have said that in September 2021 around 589 events were cancelled in Slovakia.[5] Events which were cancelled were for example concerts, festivals, theatre preformances or programmes for children. Overall amount of cancelled events is unknown. Business with events was one of the first field which was affected from the beginning of pandemic.

The author of this article is devoted to organising events for many years. The main part of this work is done on the academic field. In the next parts she is showing us analysis about restrictions with organising mass events in Slovakia from the beginning of pandemic until October 2021. She has also included the possibility of vaccination.

1 Objective and methodology of research

The author of this article has also devoted to the theme of organising events in the published article Events during and after COVID-19. In this article she was reflecting restrictions in organising events in Slovakia from March until November 2020. In the continuity of dealing issues she wants to show a differences in organising events in 2021. Her aim is to find out how was this cultural and social era effected by vaccination against COVID-19 which was not available in 2020. In this article she uses summarization of valid restrictions in organising mass events in Slovakia and comparison of regulation made in 2020 and 2021. Author analyses the amount of inffected people with coronavirus in the monthly interval during both researched years and she connected it with other researched facts. Her goals are to find a connection between the amount of inffected people, vaccination and changes in restrictions related to organising mass events in Slovakia.

2 Organising mass events in Slovakia in 2020 and 2021

At the beginning we have to remind you that in the beginning of the 2020 there were no restrictions connected with the COVID-19 in Slovakia. It´s because in this period the illness had just begin to spread out in Europe and it bursted out in March of 2020 in Slovakia. All mentioned information have been made on the base of information from Public Health Authority. In the first spreading wave of illness all mass events were in Slovakia during March and April forbidden.[6] In May and June there were allowed events that had less than 100 people. They also had to wear a mask, use desinfection, had 2 meters distance and so on. In the summer months new restriction came which allowed organising mass events with sitting audience if the

[3] MADRAJ. J. S. et al.: The Impact of Covid-19 on Event Management Industry. In *International Journal of Engineering Applied Sciences and Technology,* 2020, Vol. 5, No. 3, p. 533. [online]. [2020-11-11]. Available at: <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3689499>.

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organiser could provide one free seat between every sitting person and the capacity could not be higher than 50%. There were also allowed events where organiser could provide controlled entrance and exit. In one sector there could be maximum 1000 people. For external sector there could be at least 5 m^2 space for one person. For interior there could be at least 10 m^2 for one person etc.[7] In September it was possible to organise events with the maximum capacity of 1000 people in exterior and 500 people in interior. With the worst pandemic situation the restrictions got worse and from the beginning of October in 2020 they could have been organised only events with maximum of 50 people. Later in the same month the restrictions got even worse and events could have been organised with maximum of 6 people with the exception of sports events and sport leagues. The beginning of 2021 had the same regime. There were still allowed just events with 6 people and *„mass events with one-time character where all people had to have negative result of the RT-PCR test or antigen test for the COVID-19 illness. The test could not be older than 12 hours. These events have to be announced on the health regional authority at least 48 hours before. Organisers also have to write specific time and specific place where the event will take place. For this one-time event could be consider only event lasting maximum 48 hours.“*[8]

Same version had also the regulation till May 2021. After the implementation of COVID AUTOMAT which is a system for monitoring progress of pandemic situation and for accepting the antiepidemic regulation depended on the intensity of spreding SARS-CoV-2. This system was dividing districts in Slovakia according to the warning stage. After implementation of COVID AUTOMAT the restrictions have changed. Prohibition of organising events for only 6 people was in district in the third stage of warning. Events for only 10 people were allowed in district in the second stage of warning. In the first stage of warning were allowed events which had 25 people in interior and 50 in exterior.[9] Then there were allowed to organise events in exterior which had just seats for standing. In this events 1000 people coulld attended it. Some positive changes came in the summer months and this caused organising more events especially in exterior because of the warm weather. In August of 2021, there were for the fisrt time included also vaccinated peoplne in the regulation of the Public Health Authority.[10] The vaccination against COVID 19 had impact also on organising mass events in Slovakia. The first vaccination in Slovakia was on 27th of December 2020.[11] First people who were vaccinated were the medical staff. About the accessibility of vaccines, registration for vaccination and also the anticampaign against vaccination were led and also are lead many debates but it is not important for this article. Vaccination for everybody older than 12 years old or for person that has a good health condition was possible from spring 2021 in Slovakia. Apart from including the vaccinated people in the regulation there were also people in the regime of OTP – vaccinated, tested or a person who overcome COVID-19. Events could be organised in this regime. In the basis of this regulation the amount of people in the mass events was lower if it was not in the OTP regime. In the second stage of warning events could be organised for 6 people, in the fisrt stage of warning it could be for 10 people. The restrictions were divided in people that were in the regime of OTP and outside of this regime there were regulated by

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7 *Opatrenie ÚVZ SR: Prevádzky /OLP/5454/2020).* [online]. [2020-07-03]. Available at: <https://www.ruvzpp.sk/opatrenie-uvz-sr-prevadzky-olp-5454-2020/>.

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9 *Verejná vyhláška Zákaz hromadného podujatia.* [online]. [2021-07-25]. Available at: <https://www.uvzsr.sk/docs/info/ut/vyhlaska_223.pdf/>.

10 *Verejná vyhláška Zákaz hromadného podujatia.* [online]. [2021-08-12]. Available at: <https://www.uvzsr.sk/docs/info/ut/vyhlaska_241.pdf/>.

11 *Očkovanie proti covid 19 na Slovensku sa začalo.* [online]. [2021-01-21]. Available at: <https://www.slovenskoproticovidu.sk/aktuality/ockovanie-proti-covid-19-na-slovensku-sa-zacalo/>.

COVID AUTOMAT. Each stage was distinguished by colour. In each colour there were different regulations for one district which were valid. In this time the amounts of people that could attended mass events were: „*maximum of 50% capacity of the space for standing or 75% capacity of the space for sitting, if there are no given limits, there could be 2500 people in interior or 500 people in exterior for mass events which were organised in the stage of monitoring COVID AUTOMAT if the events are organised for just OTP regime people.”*[12] In events which were dedicated to the fully vaccinated people could the capacity be over 1000 people, if it was known before. If the event was in the district which had stage warning 3 the capacity could be just 100 people. Same rules there were also in the autumn 2021, particularly in September and October. In the basis of the stated analysis above about mass events in Slovakia in years 2020 and 2021 we can see differences in comparison with particular months in researched years. To be specific we include analysis from the Public Health Authority about how was the virus spreaded during each month.

3 Factors which have effects on mass events in Slovakia

In march 2020 when the first sick person was found was the highest daily increment 44 people.[13] We can see the process of pandemic situation in the chart with the highest daily increment from PCR tests from March 2020 until October 2021.

Table 1: The highest Daily increment of infected people from PCR test

The highest daily increment of infected people

Month	2020	2021
January	0	4953
February	0	2848
March	44	3600
April	114	1855
Maj	16	708
June	23	145
July	53	82
August	123	161
September	567	1459
Oktober	3042	2406
November	2591	-
December	6315	-

Source: Own processing.

When we analyse the data we have to remember that we don´t compare two identical years. Even if we can see the similarities. In the beginnig of the pandemic the number of new infected people was getting higher slowly and virus was getting through our population. During the summer months the number of infected people was decreasing. When September came also the

[12] *Verejná vyhláška Zákaz hromadného podujatia.* [online]. [2021-08-12]. Available at: <https://www.uvzsr.sk/docs/info/ut/vyhlaska_241.pdf/>.

[13] *Tlačové správy ministerstva zdravotníctva SR v súvislosti s koronavírusom COVID 19.* [online]. [2020-03-14]. Available at: <https://www.health.gov.sk/Clanok?korovavirus-covid-19-14-3-2020/>.

highest numbers of infected people came (in 2020 from 123 to 567 and in year 2021 from 161 to 1459). In the basis of this results we could assume that during the summer months will the restrictions for organising events be more free than in the spring and autumn months. This assumption would be formulated very easily. Beside the speed when the virus was spreading in Slovakia we have to also consider lockdowns and curfew which were the main restrictions. Lockdown was in Slovakia from 19th of December to 10th of January. Except for that there were also many mutations of the virus which had differ in the ability to spread out.
From the analysis above the regulations from The Public Health Authority about the mass events is followed that assumption was not totally confirmed. Into the pandemic restrictions came also the vaccines. In the 13th of October 2021 there are 2 473 996 vaccinated people and 2 352 885 people are fully vaccinated in Slovakia.

Conclusion

We can not formulate basic valid conclusions. There are many factors which influenced the process of making the restrictions about mass events. On the basis of The Public Health Authority in Slovakia in this article we were monitoring changes and similarities that accure on the basis of the amount of infected people, vaccinated people in each month and that all had affect on mass events in 2020 and 2021. The daily curve about income of infected people in both researched years had similar shape even though the values were different. The main similarity is that in months June, July and August we can see a decrease in infected people and in September we can see increase.

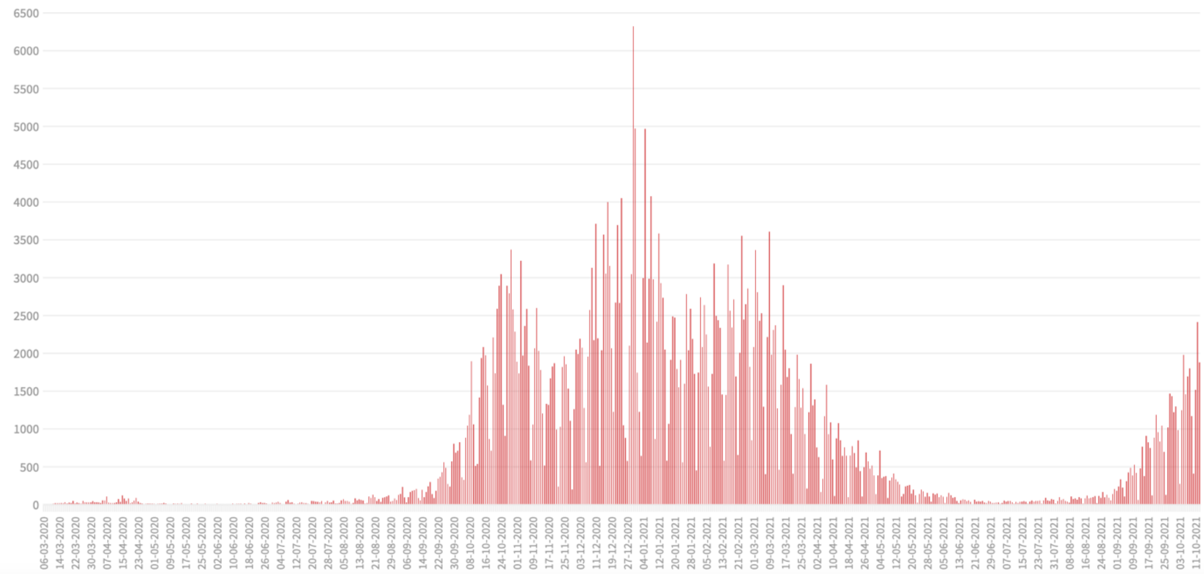

Chart 1: Daily increment of infected people from PCR test
Source: *Koronavírus na Slovensku.* [online]. [2021-10-12]. Available at: <https://domov.sme.sk/t/8284/koronavirus-na-slovensku/>.

In the basis of this article we can assume that the next restrictions will heavily effect organising events. But it´s not like this with the increasing number of vaccinated people. For organising this kind of events the hygienic restrictions are still strict . Their organisation is not completely forbidden as it was in 2020 but the organisers have to follow the rules of COVID AUTOMAT and also follow actual pandemic situation in each district. If the conditions allow the organization of mass events, event management in Slovakia can be inspired by other countries around the world. Given the current situation, there are several sterling examples of how the resilience and innovation of event management professionals are making it possible for the industry to keep the show going, albeit under limited conditions. Convene features several case studies involving VR-style exhibition halls, an online learning & development conference and an online dance party. There are several key takeaways from these and other successful online events that have taken place during the circuit breaker and other countries' respective lockdown measures.[14]

- Optimising platform use. While there are tools and platforms that both enable and embellish online events (such as VR), the success of an event lies mainly in making the most creative use of them.
- Pre-event troubleshooting. Event managers are having to foresee and address the technical difficulties specific to online events.
- Encouraging engagement. Event managers are also doing their best to make online events more interactive, rather than "sit and listen" slideshow sessions
- Pre-recorded events. Some event managers add production value and make it easier for more people to attend by pre-recording their events.
- While virtual events are, in many ways, no substitute for the real thing, there are undeniable and decided advantages to holding events online.
- Lower cost. Without having to pay for locations, accommodation, transportation and so on, the cost of holding an event online is significantly lower than holding one at a brick-and-mortar venue.
- Wider audience. Where event participation may have been geographically limited, going digital makes it possible for anyone in the world to attend an event.
- Data gathering. Using digital platforms makes measuring event performance in real time much easier and more accurate.
- Adaptability. The data gathering advantage of online events also makes it possible to make real-time adjustments to an event set-up.

Following the example of Singapore returning to organizing mass events, there is more talk about hybrid events that will become more common. Hybrid events, used by large companies and other businesses before the outbreak, combine the best of both the online and digital worlds, which means they need to be doubled. While the number of personal participants remains relatively small, the number of registrants is not limited and (depending on the capacity of your infrastructure) potentially a much higher number of (extra) participants.

Some of the security measures that event managers want to implement include:

- Limit the number of participants.
- Restrict participants to a specific geographic area.
- Event duration limitation.
- Selection of open-air areas or areas with more space.
- Thermal scanning.
- Requiring or providing masks and other protective equipment.
- Providing hand disinfectants.
- Arranging sessions with social distance.

[14] *Post-Pandemic Event Management: What We Can Expect Prom „New Normal" Events.* [online]. [2020-01-25]. Available at: <https://academy.smu.edu.sg/insights/post-pandemic-event-management-what-we-can-expect-new-normal-events-4751>.

- Dining / no buffets, dip bowls or the like.
- Food feeder training in safe food handling.
- Regular cleaning / disinfection.
- Contact tracking logs.[15]

A Russian study also talks about the possibilities of hybrid events. In this regard, applications for events are becoming popular, including tools for creating an event program and an individual participation plan, geotagging on maps, electronic registration (smart badges), creating photo and video content, organizing networking and communication of participants, collecting and analyzing feedback, etc. Visitors to the events, in turn, are interested in self-planning of participation and organizing operational communication with the organizers on emerging issues. The active use of digital technologies in the event industry makes it possible to improve the quality of services, individualize the offer and improve interaction among event participants.[16] We don´t know how will the pandemic situation be developing in Slovakia in the following months or if the restrictions and lockdown will be the same. What we know is that mass events can be organised easily for vaccinated people.

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DEVELOPMENT OF NEW PRODUCTION SYSTEMS, APPROACHES AND STRUCTURE OF THE PRODUCT DUE TO CHANGES IN CUSTOMER REQUIREMENTS PAST, PRESENT AND FUTURE

Milan Gregor – Patrik Grznár – Vladimír Vavrík – Štefan Mozol – Lucia Mozolová

Abstract

Today's market environment offers customers a choice of a high number of products. The product's success depends mainly on the differentiability of the product from others and the services offered to the product. The customer decision-making process is affected by many factors but mainly social networks and new digital culture. Individualism begins to prevail in customer behaviour, and although it is supposed to buy according to certain trends, its preferences are always different from others. The design of products and their characteristics is transferred to the customers, which, however, for manufacturers, bring problems to their manufacturing processes. The scientific objective of the article is to describe current trends in the field of production systems, approaches and product structures through which manufacturing companies respond both to the individualism of the customer and the variability of its requirements. At its core, the article describes current world megatrends that affect customer experience. It also addresses the description of the main production approaches (paradigms) concerning the company's business models and their evolution over time. The article also describes new production systems and approaches to the product structure by which companies want to quickly respond to a change in customer requirements following the Factory of the Future principles.

Key words:

Business Models. Change in Customer Behaviour. Factory of the Future. Manufacturing Environment Reaction. Manufacturing Paradigms.

Introduction

Change in the world is inevitable, and nothing is permanent there. The future is stochastic, not deterministic. It is therefore difficult to believe the predictions made by various reputable companies. The butterfly wing effect says that everything in the world can change with one movement of butterfly wings and the only certainty is change.[1] Any living system that exists must be able to respond to changing conditions in its surroundings otherwise, it may disappear.[2] This idea can also be applied to market systems. The market is an ever-changing environment where permanence is an illusion, and how companies that exist in the market system respond to changes can decide their existence.[3] If evolution helps living organisms react to changes, then this process of evolution is also visible in manufacturing factories.[4] There is a global shift in the view of the product and the customer. If in the past the product was offered to markets that were not so crowded at the time and the choice was relatively

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narrow, then today the customer has a choice of many products from different manufacturers.[5] This is pushing manufacturers to look for new business models. These business models are created not only based on customer behaviour but also technological possibilities. Technological development is equally enormous, and further development is exponential. The product's life cycle is becoming shorter, and manufacturers need to make use of the latest technological and technical knowledge to make a profit.[6] In particular, companies are forced to respond by further developing new production systems, approaches or product structures. In their almost 200th existence, the production companies have already undergone several significant transformations, which have always been caused by new economic and market conditions and the constantly forming requirements of the company. Thus, the change in the production approach of enterprises is based on changing market and societal requirements and is realised by developing new types of production systems for the production of products and the development of new business models for their sale.[7] With the business model and marketing strategy perspective, mass customisation and personalised production are currently coming to the fore. These two approaches gradually replace craft production and mass production. The marketing effect of such a product lies in the idea of meeting the customer's requirements as much as possible. The basic between mass customisation and personalised production is that personalised production allows the selection of only those functions of the product that the customer requires. In this way, the new approach seeks to meet the customer's requirements as much as possible through the modularity of the product.[8] New production systems are being developed for these approaches that best manage these new trends in business models. Customisation and personalisation of products are a complex problems that researchers are trying to solve today.[9] Systems must have high flexibility that can be ensured through reconfiguration. These features are provided by Industry 4.0 technology, which in its concept includes the use of real-time data collection, transmission and evaluation via the Internet of Things (IoT).[10] On the one hand, the appropriate construction of new products is used to achieve flexibility, also known as modular, reconfigurable products. On the other hand, the flexibility of the production system is increasing through systems based on reconfigurability. However, future production systems will use completely new principles in their operation. New production systems will require

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completely revolutionary ways of planning and managing production.[11] These must be based on the holonic principles, autonomy and applications of artificial intelligence and evolutionary principles where the common designation for such a factory is Factory of the Future. This is an entirely new area that presupposes close cooperation of departments where the chain design – make – marketing – sale – feedback takes place in a different order according to the chosen paradigm. At its core, the article describes current world megatrends that affect customer experience. It also addresses the description of the primary production approaches (paradigms) that exist concerning the company's business model and its evolution over time. The article also describes new production systems and approaches to the product structure by which companies want to achieve a rapid response to a change in requirements following the Factory of the Future principles.

1 Customer behaviour

Due to the growth of individualism and digital culture, the current customer has different ideas about the product than customers in the past. In the past, the customer appreciated the functionality of the product and its quality. The products have been designed for long service life. The current customer prefers a product that matches his ideas (characteristics and price) that are related only to a specific period. Therefore, the product's life cycle is becoming shorter, and the time for placing new products on the market is also shortened. In particular, the younger generation that is most influenced by the digital age prefers to buy the product of the preferred brand, which will be replaced with newer with better features after a relatively short time. There are also trends where some customers want to be present in the production of their product, for example, several manufacturers already allow their customers such an experience. The shared economy, the principle of which is based on borrowing resources, is also coming to the fore. Each of these trends impacts the behaviour of the manufacturer and how it approaches the production of its products. On the one hand, it tries to detect and satisfy customer ideas proactively and, on the other hand, seeks to influence them with its own mechanisms actively. Consumers' decision-making process is affected by several factors, for example, social networks, motivation, emotions, passion, cognitive or relational aspects. Marketing plays a key role for the manufacturer as it works from each of these factors. From a marketing perspective, actually, active customers can be divided by generation, where they were born, namely Baby boomers from 1946 to 64, Generation X born in 1965 to 1980, generation Y born in 1981 – 1996 [12] so call millennials, generation Z born between 1997 and 2012 so call post-Millenials [13] and the Alfa generation from 2010 till today. This division is mainly visible in their attitude towards social networks. [14] The millennial and generation after is most affected by social networks, and social identity new changes in production systems are triggered mainly by millennials and subsequent generations. While for generation Baby boomers and X generation, mass customisation was sufficient for a generation of millennials and the incoming generations are determined by personalised

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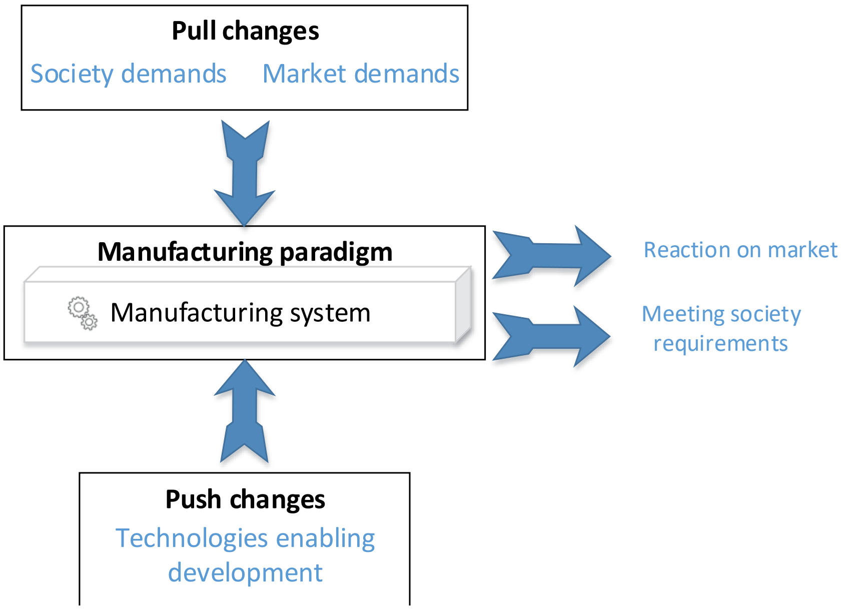
production. This shift is for manufacturer challenge, especially management of complex requirements from the personalised product.

2 Manufacturing Paradigm

Each period of the industrial era has its social, social, market and technological aspects, which are reflected in the production approach of the time of the so-called paradigm.[15] The production approach of the company can be defined as a revolutionary integrated production model that arises in response to changing social and market requirements and is made possible by the creation of a new type of production system.[16] This principle is shown in Picture 1, which clarifies the above description of the production paradigm.



Picture 1: Basic scheme of the principle of production paradigm
Source: Own processing.

Based on this definition, it can be said that any production approach incurred consists of a new type of production system, a new business model, and an appropriate product structure. All previous and current production approaches are based on the following basic elements, these elements being identified as three fundamental pillars (design – production – sale)[17] of the business model of the production plant, which must meet the following requirements:

- The design of the product and its functions must serve to satisfy the specific requirements of the company,

[15] STALMASEKOVA, N., STOFKOVA, J.: The Entry of a Foreign Company ('the New Brand') into the Market in the Slovak Republic. In PETRANOVA, D., CABYOVA, L., BEZAKOVA, Z. (eds.): *Marketing Identity 2016: Brands We Love.* Trnava : FMK UCM in Trnava, 2016, p. 278. [online]. [2021-06-10]. Available at: <https://fmk.sk/download/konferencie/Marketing%20Identity/MARKETING-IDENTITY_BRANDS-WE-LOVE_PART-2.pdf>.
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- the manufacture of the product must be carried out by a production system that can respond rapidly to the opportunities and needs created,
- the sale of products must meet the needs of customers and provide profit for the undertaking.

However, the sequence of these fundamental pillars is not the same for all business models, but each of them is implemented in their specific order. The ranking of pillars of each business model is base on the need for the market and society over a certain period of time. [18] The world's megatrends have a significant influence on the development of pull changes paradigms.[19] The following megatrends are currently identified as the main ones: demographic change, individualism, social and cultural diversity, health and increasing life expectancy, gender reassignment, new mobility patterns, digital culture, learning from nature, artificial intelligence, technology convergence, Globalisation 2.0, the knowledge economy, business ecosystems, changing the world of work, new patterns of consumption, energy and resource shortages, climate change and environmental pollution, urbanisation,[20] the new political order of the world, a global security risk.[21] Their joint action changes social and social areas, which mainly affects how products are sold and how they are produced.

3 Main Manufacturing Paradigms and their Transformation in Time

In order to better understand the currently forming production approaches, it is necessary to understand the requirements, conditions of origin and principles of previous production approaches. In recent decades, four basic approaches to the production of consumer goods have been identified, namely:

- Craft production – the production approach is based on the production of the product for a particular customer. It can also be described as a "single customer market".
- Mass production – only a narrow range of products are produced in the mass production approach, assuming a constant demand for these products.
- Mass customisation – is currently one of the most commonly used approaches of production. Customers choose products from a wide range of options before their production.
- Personalised production – it is a segment of global production, the customer himself designs the products in this production approach. They are then sold and manufactured for a specific customer using advanced production systems.

The above production approaches are different in the areas listed in the table above (Table 1), but it can be said that the personalised production approach returns back to the focus on the individual customer and thus to the tensile business model as in the case of craft

[18] KOREN, Y., HU, S. J., WEBER, W. T.: Impact of manufacturing system configuration on performance. In *CIRP Annals*, 1998, Vol. 47, No. 1, p. 369. [online]. [2021-06-10]. Available at: <https://doi.org/10.1016/S0007-8506(07)62853-4>.
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production approach. However, a significant change is in the sequence of the basic pillars of the business model, which can be understood as a change in the role of the customer in relation to the company. In craft production, the customer initiates the overall sequence and manages the design of his product. On the contrary, in mass production, the customer always stands at the end of the chain (i.e. sales). In the case of mass customisation, the manufacturer makes the main decisions about the basic structure of the product and the number of variants and offers options based on the target group of customers. Thus, a particular customer only selects the most suitable alternative from a given portfolio based on their requirements and the product's price. However, the production by the customer of the selected product is only initiated after the sales stage. However, the personalised production paradigm promises customers the two greatest advantages: a greater possibility of intervention of the customer in the product's actual design at the lowest possible price of the resulting product.[22]

Table 1: Comparison of individual production paradigms

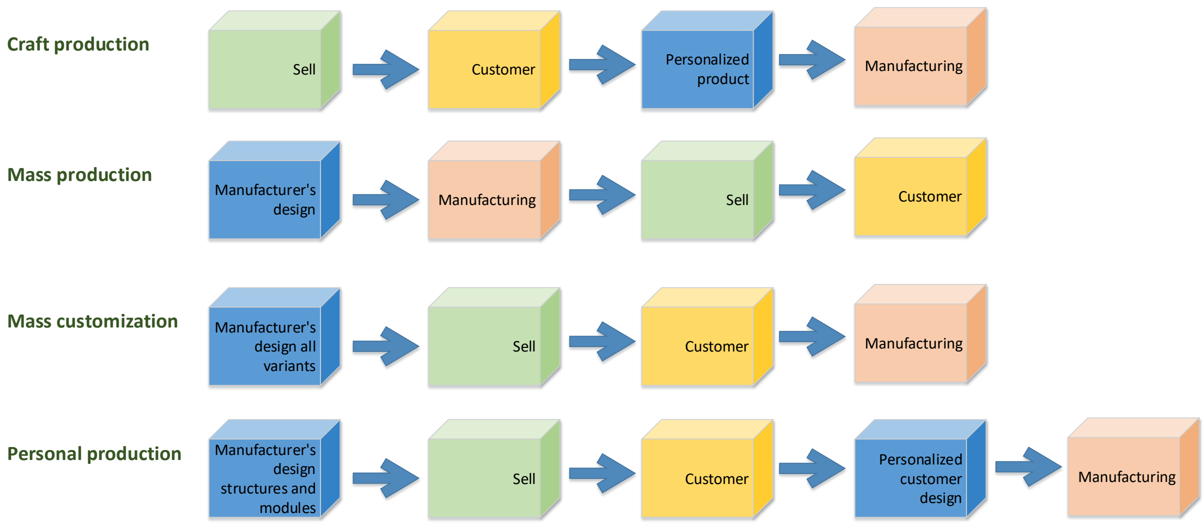
Paradigm	The craft production paradigm	The mass production paradigm	The mass customisation paradigm	Personal production
Focus	The individual	The product	Market segments	The individual
Social new needs	Tailored-made products	Low-cost products	Large product variety	Personal-fit products
Business model principle	Pull Sell-Design-make	Push Design–Make–Sell	Push–Pull Design–Sell–Make	Pull Design – Sell–Design –Make

Source: KOREN, Y.: *The Global Manufacturing Revolution*. New Jersey : John Willey & Sons, 2010, p. 32.

Although both mass customisation and personalised production approaches aim to create greater consistency between product offerings and customer requirements, the strategic decisions of manufacturers vary from approach to approach. Strategic decision-making in mass customisation focuses on the question of how many variants and possibilities of the product will give the manufacturer the necessary profit.[23] A greater number of variants also means a higher complexity of production and the associated increase in costs. On the other hand, a larger number of variants will increase the number of potential customers, which also means an increase in the company's market share and the possibility of higher revenues. In personalised production, a modular product structure and the following strategic decisions of the manufacturer are required: the design of an appropriate basic product structure to which modules will be connected, the type of interface for adding modules, the determination of the type and functions of modules that will allow the customer to fold his own product. The differences between the different approaches are shown in the following Picture 2.

[22] JOVANE, F., KOREN, Y., BOER, C.: Present and future of flexible automation –towards new paradigms: a keynote paper. In *CIRP Annals*, 2003, Vol. 52, No. 2, p. 545. [online]. [2021-06-10]. Available at: <https://ykoren.engin.umich.edu/wp-content/uploads/sites/122/2014/05/53.-Present-and-future-of-flexible-automation-towards-new-paradigms-2003.pdf>.

[23] MIKUSOVA, M., TOROK, A., BRIDA, P.: Technological and Economical Context of Renewable and Non-Renewable Energy in Electric Mobility in Slovakia and Hungary. In NGUYEN, N. T., PIMENIDIS, E., KHAN, Z., TRAWINSKI, B. (eds.): *Iccci* 2018 : *Computational Collective Intelligence*, Cham : Springer International Publishing, Switzerland, 2018, p. 429. [online]. [2021-06-10]. Available at: <https://doi.org/10.1007/978-3-319-98446-9_40>.

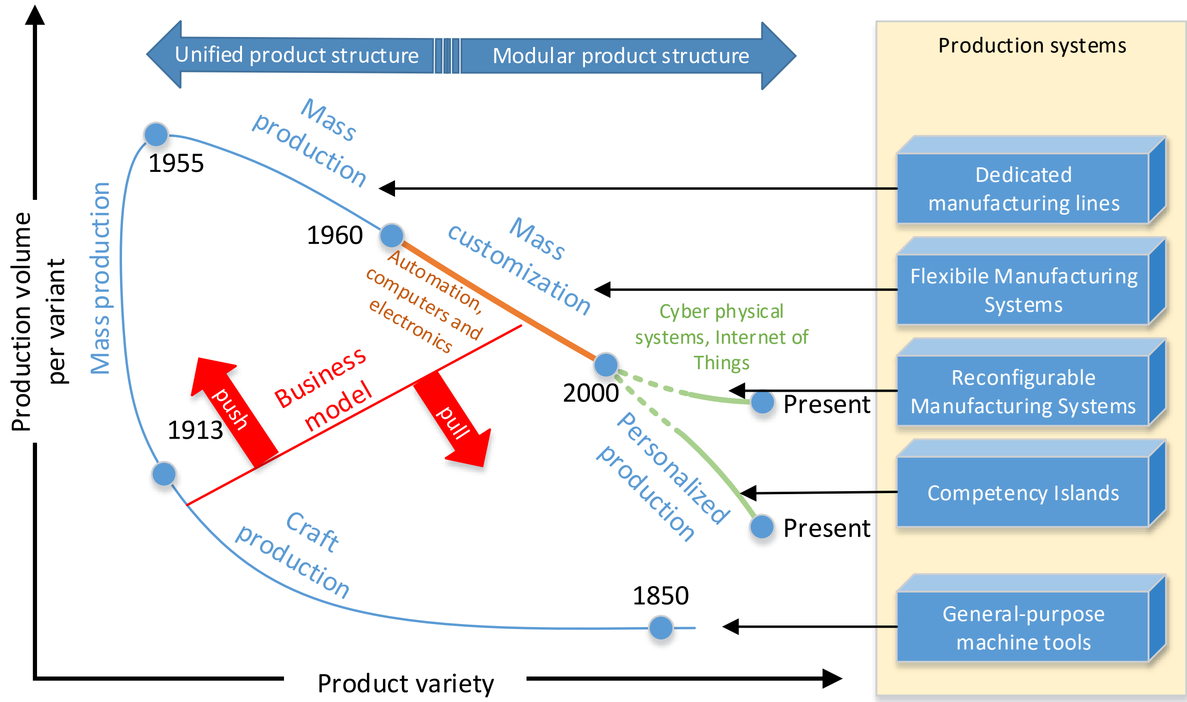


Picture 2: Customer role in individual production paradigms
Source: Own processing.

4 Manufacturing Paradigms and Corresponding Production Systems

Each new production approach was implemented by introducing a new type of production system, the design of which allowed for new technological possibilities of the period. Therefore, the success of the company depends on the appropriate use of innovative technology, the application of which in the production system will suitably meet the emerging social and market needs. Craft production uses general-purpose machine tools to produce products, but they have been gradually replaced dedicated manufacturing lines in the mass production approach, which use hard automation to produce products and their components in large quantities. The fundamental cause of the change in the production system was the need to meet the increasing demand. However, there are currently situations where supply exceeds demand, and customers start looking for products that meet their requirements more than the need for the lowest price. The market is, therefore gradually overwhelmed by a diverse range of products and ceases to be homogeneous.[24] The solution has become the so-called Flexible Manufacturing System (FMS), which meets diverse production conditions, but their main drawback is the need for market stability. The development of this approach has been driven by developments in automation, computers and electronics.[25] At present, the increasing globalisation of the market creates significant fluctuations in demand and therefore, these production systems cease to be an appropriate solution to the problems on the market.

[24] PEKARCIKOVA, M. et al.: Solution of Bottlenecks in the Logistics Flow by Applying the Kanban Module in the Tecnomatix Plant Simulation Software. In *Sustainability*, 2021, Vol. 13, No. 14, p. 4. [online]. [2021-06-10]. Available at: <https://doi.org/10.3390/su13147989>.
[25] SOBASZEK, L., GOLA, A., KOZLOWSKI, E.: Application of Survival Function in Robust Scheduling of Production Jobs. In GANZHA, M., MACIASZEK, L., PAPRZYCKI, M. (eds.): *Proceedings of the 2017 Federated Conference on Computer Science and Information Systems (fedcsis)*, New York : IEEE, 2017, p. 575. [online]. [2021-06-10]. Available at: <https://doi.org/10.15439/2017F276>.



Picture 3: Development of production systems, approaches and product structure over time
Source: Own processing of KOREN, Y.: *The Global Manufacturing Revolution*. New Jersey : John Willey & Sons, 2010, p. 38.

Reconfigurable manufacturing systems and competency islands could become a technological response to the market situation, enabling the necessary production capacity to be set according to market demand. Reconfigurable manufacturing systems and competency islands also allow for the rapid adaptation of their functionalities to the production of several variants, thereby improving the speed of the company's response to the market situation and thus increasing its competitiveness.[26] The previous Picture 3, shows a gradual change in the business models of production systems and a change in the product's structure. It also points to the direction of future production systems, which means their return to pull-based business models. However, a significant difference will be the price factor of the products, which in personalised production will be much lower than for craft production. Factory of the Future will be referred to as factories that are capable of adapting quickly to changes at low cost. It is these characteristics that reconfigurable manufacturing systems and competency islands contain, therefore, they will form the basic system in such factories. Industry 4.0 technologies are currently used as a driving force for new business models requiring a certain production system. These business models need to be based on cooperation and better use of the available resources.[27] Industry 4.0 is based on digitalisation and the application of exponential technologies. Digitisation and application of exponential technologies are directly linked to Cyber Physcal System (CPS). CPSs presaturate physical devices with built-in tools for digital data collection, processing, and distribution, and, through the internet, are

[26] WOMACK, J. P., JONES, D. T., ROOS, D.: *The Machine that Changed the World*. New York : Harper - Perennials Publishers, 1991, p. 8.
[27] GRABOWSKA, S., GAJDZIK, B., SANIUK, S.: The Role and Impact of Industry 4.0 on Business Models. GRZYBOWSKA, K., AWASTHI, A., SAWHNEY, R., (eds.): *Sustainable Logistics and Production in Industry 4.0: New Opportunities and Challenges*. Cham : Springer International Publishing, Switzerland, 2020, p. 31. [online]. [2021-06-10]. Available at: <https://doi.org/10.1007/978-3-030-33369-0_3>.

connected to each other online. CPSs form the basis for technology such as the Internet of Things and, in combination with the Internet of Services, form the base for Industry 4.0.[28]

Discussion and Conclusion

At present, the development of individualism and digital culture can be seen in the world. Today, social networks bring together the realms of a peoples life in a way that never before. Interaction in the digital space has a psychological impact on a person and shapes his preferences and habits. The change in customer behaviour and their requirements for manufacturer is due to the most economically active generation of millennials, who in many cases represent early adopters of new technologies. Digital technologies and social media most influence the generation of millennials and subsequent generations. The rapid launch of a product with the latest characteristics targeted at a specific segment of customers is becoming inevitable for many businesses. The generations that preceded generations of millennials have preferences aimed mainly on product quality so that it lasted as long as possible the life cycle of the product was therefore longer. The development of technologies and individualism, which is widespread in Western culture, allows the application of product personalisation in marketing and use it as a brand mark. The main idea is to satisfy specific customers' preferences directly, so the customer thus has the possibility to choose only the product characteristics he/she requests. It is the personalised production in combination with customised production that manufacturers strive to respond most to the demands of millennials. However, these business models bring a problem because of the increasing complexity of production. The new challenge for the manufacturer is to find a way how to deal with these problems. In another case, the company loses a competitive advantage. To address this problem can be applied Darwin's principle - the survival of species depends not on their intelligence or strength but on their speed at which they react to the changes that have arisen. If we apply this principle to 21st-century companies, it is clear that the most crucial ability of today's enterprises is their rapid adaptation to change. Based on new business models that provide marketing tools to increase the company's revenue, the company starts increasingly reaching for personalised production. But if we applied personalised production to the common manufacturing system, we start to have problems in manufacturing costs and mean lifetime of products. For this reason new concepts of production systems are emerging in the world. A suitable response to the business model of personalised production and even mass customisation and their need for rapid adaptation are reconfigurable manufacturing systems and the competency islands that is the basis for Factory of the Future. These new systems will be supported by Industry 4.0 technologies that will enable data networking and purposeful use for process management. By developing these new production systems, we can start new business models and new possibilities of marketing in the future with high added value and minimum cost for quick manufacturing.

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DISINFORMATION AND HOAXES USED FOR PROFIT INTENTIONS

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Abstract
Dissemination of misinformation, hoaxes and fake news is currently the most prominent problem not only in the world of media, but also in society. Not only during the pandemic, half-truths and disinformation published on the Internet or expressed by politicians proved to be of great strength in shaping the opinions of individuals and groups of people. Therefore, it is not unusual for the tactics and techniques of media manipulation and propaganda in the form of hoaxes to be taken over by organizations whose goal is not to influence society with a political intention, but for financial or material gain. In this study, we therefore deal with basic persuasive and manipulative techniques with an emphasis on hoaxes and misinformation, which are also applicable in marketing. We explain what principles hoaxes work on and why they belong to the tools of manipulation. The aim of the study is to describe in detail what disinformation techniques are used in texts and articles aimed at enticing the audience to buy. Based on the analysis of three articles that have been published on questionable websites, we will generalize in the form of a case study data from the content analysis, which may be further applicable in similar cases. Identifying them can help in other cases of fake messages with an advertising character and thus influence the shopping behaviour of the audience in order to reduce financial damage on the part of users.

Key words:
Debunking. Disinformation. Fact-checking. Fake news. Hoaxes. Manipulation. Marketing.

Introduction

Dissemination of hoaxes and misinformation is carried out in order to fulfill various goals. Often in connection with propaganda and influencing public opinion, other times it is a matter of spreading panic or for the purpose of polluting the population. It is not uncommon for false reports to be disseminated to various profit-giving organizations. They use human naivety, ignorance, information overload or bad financial situations, from which they earn in this way. We are talking about advertising articles, also called PR articles or native advertising, which do not contain true information or promote products on the basis of unsubstantiated information or half-truths. The main goal of this study is therefore to describe, on the basis of three examples, how disinformation with a commercial focus is conceived. Within the set goal, we will look for answers to the following research questions:
1. How do authors work with information in the examined texts?
2. What visual material do the authors of the texts use?
3. Are the authorities and people mentioned in the articles credible?

Based on the chosen research method, we chose a qualitative content analysis, the results of which are reflected in the case study. The partial method we will use in the text is debunking, which is a method of refuting hoaxes and fake news. The task of debunking is to deny various myths and untruths, using various proven sources, evidence, surveys and scientific articles.[1] Regarding the research analytical categories, we will verify in the analysis:
- The veracity and origin of the information provided. We focus on verifying the persons, facts and data mentioned in the texts.
- Origin of photographs used. We will also focus on the originality of the imagery used in the articles, which we will search back through Google and the TinEye platform.
- Authorship. We will focus on the credibility of the editor who wrote the text.
- Authorities. We will monitor whether the people mentioned in the text are real.

[1] ŠVECOVÁ, M.: *Webová žurnalistika: žurnalistické žánre*. Trnava : Univerzita sv.Cyrila a Metoda v Trnave, 2017, p. 134.

The research material consists of three articles, the selection of which was random, as these contents are mostly promoted on social networks as sponsored articles. The first text is an article entitled „*About a mother-in-law who couldn't come to terms with choosing a partner for her beloved son!*" and dates from September 2018. At present, it is no longer possible to find this text on the Internet, it was originally published on the no longer existing VivoBoard website. The second article is a text entitled „*WHAT HAPPENED? Milan Lasica with his latest investment makes Slovaks a millionaire*" published on several websites, but at the time of writing this study is available and can only be found on the Medium blogging platform. It has already been deleted from other websites where it appeared as a contextual ad. It was published in June 2020. The latest text is an article entitled „*Any language in less than 30 days, science says, yes, it is possible,*" which is published on the sciencerookie.com portal from April 2020. The article is no longer searchable today, although information on the training method can be found, for example, at fastphrases.com. First of all, we are obligated to explain how media manipulation based on hoaxes works and implement the knowledge into our research.

1 Introduction into the World of Disinformation

The main goal of all the disinformation and hoaxes is manipulation**.** It can be perceived as a kind of tool that influences public opinion, it is also a media tool used by the mass media. In media or psychological studies, manipulation means the unrecognized processing of people's consciousness through the media in order to systematically and purposefully manage and shape their consciousness, thoughts and feelings.[2] Manipulation is a psychological-social phenomenon that seeks to create an image that prioritizes its interests, involves the use of media manipulation, fraud and propaganda, and often involves the suppression of information, seeks to manipulate people and lead their attention. „*Thus, we understand manipulation as a way of influencing an individual or group, or even the whole community, to change their views and attitudes, without, of course, making individuals or groups aware of it.*"[3] Ways or methods of influencing public opinion, as a result of which the manipulated person is convinced that he or she is so determined. They do not realize that they have become a „victim" affected by the manipulator. The role of the manipulator is to mislead people.[4] We have been dealing with manipulation on a daily basis for centuries, but manipulation techniques have also had to adapt to the Internet age. The basic manipulation techniques were first defined by the German Institute for Propaganda Analysis in 1938[5] and from that time manipulation settled down on various means:

- Stereotype: the most widespread in the media, it is a „prepared form of thinking", it works outside the control of a person and it uses the human psyche and the reluctance to verify information the most.[6]
- Myth: the non-existent view of something that appears to be true is constructed as an unquestionable truth „effectively devalues the facts and falsifies the image of reality."
- Gossip: leads to prejudices, causes damage to a third party, mysterious transmission of unverified opinions and information, serves to discredit, the reader does not know whether it is truth, lie or half-truth.

[2] REIFOVÁ, I. et al.: *Slovník mediální komunikace*. Praha : Portál, 2004, p. 127.
[3] IŁOWIECKI, M., ZASĘPA., T.: *Moc a nemoc médií.* Trnava : Typi Universitatis Tyrnaviensis. 2003, p. 35.
[4] Ibidem.
[5] GREGOR, M., VEJVODOVÁ, P.: *Nejlepší kniha o fake news dezinformacích a manipulacích*. Praha : CPRESS, 2018, p. 59.
[6] IŁOWIECKI, M., ZASĘPA., T.: *Moc a nemoc médií.* Trnava : Typi Universitatis Tyrnaviensis. 2003, p. 53.

- Camouflage: camouflage, deliberate misrepresentation, propaganda falsehood, political lies, hides the real face and focuses on manipulative goals.
- Generality of the proceedings: the information reaches everywhere, in all media but having a common owner.
- Expected information: the media conduct surveys among people to provide the information, ideas or observations that people expect.
- Encouraging emotions: emotional gestures to engage the reader.
- Allegedly obvious: a statement of authority that is immediately considered true.
- Use of means accepted by society: emphasis on religious tradition, national pride, nature.
- Attractiveness: emphasis on external beauty and perfection.[7]

In media praxis, we can also meet various manipulation techniques:

- Fragmentation: Specifically, this technique is most commonly used in advertising. It devalues the view of reality through selection and omission, this technique makes it impossible for a person to fully understand reality. Frequent use of this technique leads to general disorientation in society in very serious and important matters.
- Urgency in information: it is based on the journalistic principle, which states that information must be transmitted quickly, which is accompanied by an increase in the number of information and a strong density of transmission to the recipient. This technique works because it works quickly, immediately and without delay.
- Integration (interference): it appears in the field of interpersonal relations and in the dimension of manipulation, most often seen in the election campaigns of political candidates. It is based mainly on flirting with potential voters by creating an impression of sympathy, striving for friendship, in order to befriend and influence voters.
- Clichés: helps to distort a person's image, overshadows their positive aspects and exaggerates their negative qualities.
- Suggestion: it is most often used with various watchwords, mainly watchwords with an ideological and political character in the press, radio and television.
- Manipulation of the subconscious: this technique mainly affects the human senses, mostly hearing and sight, because „sight and hearing are higher senses because they contribute to the development of mental life“, that is, through sight and hearing they cause deeper traces in the human psyche as might seem at first glance.[8]

1.1 Hoaxes and disinformation as a type of manipulation

The topic of hoaxes, false reports and disinformation is very much present today, even in connection with manipulation and propaganda. There are many types of hoaxes, but they have one thing in common, they encourage the user to send them further or share this information.[9] We can also define a hoax as a fraudulent, warning, mystifying, or humorous deceptive message. Hoax usually becomes a challenge for subsequent dissemination. They are created for a purpose, they must be simple, easy to understand or shocking.[10] Within the issue of the spread of hoaxes, we as well as recognize the term misinformation, which is intentional, misleading and untrue information. Such a report may also consist of true data, but the presentation of the report and its logic may be misleading. In the terminology, we distinguish the term called

[7] ZASĘPA, T., OLEKŠÁK, P., GAZDA, I.: *Etika v žurnalistike*. Ružomberok : Katolícka univerzita v Ružomberku, 2009, p. 53.
[8] ZASĘPA, T., OLEKŠÁK, P., GAZDA, I.: *Etika v žurnalistike*. Ružomberok : Katolícka univerzita v Ružomberku, 2009, p. 53-60.
[9] GREGOR, M., VEJVODOVÁ, P.: *Nejlepší kniha o fake news dezinformacích a manipulacích*. Praha : CPRESS, 2018, p. 45.
[10] NUTIL, P.: *Média, lži a příliš rychlý mozek*. Praha : Grada, 2018, p. 19.

disinformation which can be defined as misleading, false information that aims to influence the judgment and opinion of an individual or society as a whole.[11] There is also the term fake news in our vocabulary, by which we can refer to the *„deliberate dissemination of misinformation"*[12] which often pursues political or greedy goals. In recent years, the term seems to have been overused. Although these three terms are semantically similar they are often confused in practice. Digitization and online media have given us the opportunity to easily manipulate information. The negative truth value, which is the content of misleading information, is the only real indicator of misinformation messages. Several typical warning signs can also help us determine if this is a deliberate misinformation message. Warning signs can be: absence of the author, unreliability of the source, inconsistent headline, problem with sources of information in the report, suspicious facts, excessive emphasis on emotions, shock and aggression, manipulation of the material or its misalignment in the context, some typical and recurring topics, grammar texts. We could call hoaxes disinformation reports that have predictable characteristics and themes. Hoaxes and fake news try to convince others of their importance. The intention is also to shock the public. In most cases, the author of the false report tries to convince others that the warning came from credible sources in order to ensure the highest possible credibility with the recipients, or, conversely, tries to act as leaked secret information, which is officially silent and not allowed to be talked about. We could also characterize it as information, the origin of which is the reason for the manipulation of the true reality. There are more types of hoax than false notifications, newspapers that issue false information, false political claims, various business frauds or news hoaxes, with the above-mentioned activities being linked to a lie or fraud. We can also call a hoax an alarm message, but also a message that contains distorting, inaccurate information or modified half-truths.[13] Disinformation and hoaxes are lies that pretend to be true (rumours, fake reports, edited audiovisual materials, jokes, alarm reports). In their main role, they fulfill the characteristics necessary for understanding and disseminating it to its wide group of recipients. They contain a low level of stylistics, argumentation, but also journalistic quality. They are characterized by the induction of fear, alarming elements, negative emotions and tend to be ideologically and politically distinct. Hoaxes mostly refer to information sources, celebrities or expert authorities in order to achieve greater credibility. The actors are often ambiguously labelled or even silenced.[14] According to P. Nutil, behind the creation of hoaxes are folklore creators - diverse groups of people with different motives such as recessionists, people with false profiles on social networks, others who verbalize their fears and worries through fictional stories or hateful comments. Another group is disinformers - a group of so-called ideologues (with various motives promoting strong political views and traders focused on profit from online advertising, for example through click-bait. A specific group are the so-called trolls, which are represented by teams of commentators who spread political propaganda in discussions, criticize those who disagree with such a worldview, or work to confuse audiences, such as they represent an upset group of citizens, people disappointed with the current representation, etc.[15] One of the means of preventive measures against the spread of disinformation is media teaching aimed at increasing media literacy. This practical measure helps to better understand the media and teaches how to work with them. As M. Mcluhan states in his publication, it is important that society has already acknowledged the existence of an electronic culture.[16]

[11] NUTIL, P.: *Média, lži a příliš rychlý mozek*. Praha : Grada, 2018, p. 18.
[12] NUTIL, P.: *Média, lži a příliš rychlý mozek*. Praha : Grada, 2018, p. 18.
[13] DŽUBÁK, J.: *Co je to hoax?* [online]. [2019-11-15]. Available at: <https://www.hoax.cz/hoax/co-je-to-hoax>.
[14] NUTIL, P.: *Média, lži a příliš rychlý mozek*. Praha : Grada, 2018, p. 140.
[15] NUTIL, P.: *Média, lži a příliš rychlý mozek*. Praha : Grada, 2018, p. 142-143.
[16] McLUHAN, M.: *Človek, médiá a elektronická kultúra.* Brno : Jota, 2000, p. 213.

2 Debunking of Articles with Manipulation Techniques

As we have mentioned in the introduction chapter, our purpose is to explain and show how disinformation and hoaxes work in reality. The first article analyzed is focused on the promotion of the online casino Youkon Gold. The aim is to persuade recipients to gamble with a view to possible and quick earnings. The article itself initially evokes classic lifestyle articles written in the form of a story and fascinates the reader with an engaging headline and anotation, which arouses curiosity in the reader. The story as a form of creating journalistic content is very often used, because it can easily explain various social contexts and, in addition, the reader can identify with the story or provoke a discussion, as it is a so-called. phenomena from life. The text tells the story of husband and wife Paulína and Šimon Dolierecký, who have financial problems, but the husband's mother refuses to help her family. The whole situation of the family problem is described in great detail and in an engaging way with numerous descriptions, so that it looks real, which the author managed to prove so that many people can identify with the text. The author initially describes the relationship of young people, later they put their mother-in-law in a negative light. The reality of the situation is complemented by numerous quotes from the bride, but also mother-in-law. The story ends when the bride finds out that her mother-in-law is financially secured thanks to winnings at the Youkon Gold casino, and this method of gambling will also provides her husband with a rich win. The next part of the article is devoted to editorial content in the form of a report. The portal editor themself tried to make money in the mentioned casino and is reproducing their experience in the form of a long story. The editor describes that they wanted to verify the couple's experience with the story, which we can consider a regular way of obtaining information. They explain how the casino works and that it is a serious institution because it verifies the age of the players. The editor further points out that for the amount of 10 euros, they actually got the opportunity of 125 chances to obtain the winning jackpot worth one million. Finally, the editor's statement states that they managed to win the amount of 1650 euros via prepaid attempts, which is not high, but in their opinion helped them with their basic cost of living. In the next paragraph, they point out that the offer of 125 attempts lasts only for a limited time, which they learned about on television. Finally, they add a tip for using the application. When Yukon Gold or an offer for 125 attempts to win is mentioned throughout the text, the words in question are marked in bold blue. At the end of the article is a button with a hyperlink that redirects the reader to the casino page. The website also contains links to other news texts related to what is happening in Slovakia, so it evokes that it is a news website without ulterior motives. Furthermore, the page contains 11 Facebook comments from readers who either recommend the casino or claim that they are themselves going to play. While reviewing the information, we discovered some conflicting information about the identity of the people in the article, including the editors. It is suspicious that the author uses the full names of the married couple in the text, as well as their mother-in-law, and even provides photographs. This is not a very traditional way, the media usually use their first name or pseudonym, and respondents are not always inclined to publish their photos. On the other hand, the tabloid media work exactly the opposite and we can learn whole identities in them and the texts are also supplemented by real photos. We could not find the names of Paulína and Šimon Dolierecký through Google, the telephone directory, the business register or Facebook, which, however, is not sufficient as relevant evidence that they are fictional persons, even though we did not find their namesakes. We decided to use the Google Images platform to find the photos used in the article, but without success. On the other hand, we managed to find a photo of the mother-in-law, which Joy Lanzerdorfer published on her blog in 2013, so we can say with 100% certainty that it is photo manipulation. We also tried to find out if the identities of the author of the text and the author who tested the casino are real. The editor who is signed under the article is called Alexej Kováč. His photo came from the blog of the American photographer Scott R. Cline and serves as an illustration on the topic *„How to take photos on Linked In.“* We did not find Alexej Kováč on Facebook either in the town of Nové Zámky. The second editor is called Sára Kušnírová and her photo is also stolen from the non-existent website of the American wedding photographer Alexis Buatti Ramos. Although there are several people named Sára Kušnírová, none of them is of the age of the mentioned editor. The commentary part of the article is also contradictory, as the Facebook comments are not functional and are only in the form of an image or illustration and there is no hyperlink in them. There is a suspicion that the comments were made on their own, and the photo and profile name were created randomly based on a computer program or algorithm, as we compared the profiles with real profiles on Facebook and found no match. The VivoBoard website itself also attracts attention, although it contains hyperlinks to other Slovak news, but all content on the website is really in English. We even managed to find a linguistic mutation of the article in Finnish, with the author exchanging a photograph and the names of a married couple from the article, and only the mother-in-law is identical to the Slovak version. We also found differences in the mobile and desktop versions of the article on the website, while the latter contains much more concise information about the story of the couple and mother-in-law, the names are changed and do not include the surname. There is also a controversial call for a time-limited action on the aforementioned 125 attempts to play, which lasts only until a certain date, as it is constantly available on various websites. The fact that it is non-journalistic content is also evidenced by the weaker stylistic level of the text, while the text sometimes appears to be automatically translated from English or another language. Advertising content can also resemble a number of hyperlinks to a given casino directly in the text. The given disinformation article or hoax works on a fictional and purposeful website, which tries to appear local, in our case Slovak. It works well with the story, in which there are set fictional characters as well as editors. The only goal is to convince the reader, based on the personal experience of unreal people, that winning in an online casino is completely normal and normal, but which contradicts the principles of the operation of casinos and the gambling world. The second monitored article tries to persuade recipients to download the Bitcoin Billionaire application, which will continuously earn them money for an initial deposit of 300 euros. It uses many manipulation tactics. The main motive is the positive experience of the Slovak actor, entertainer and singer Milan Lasica, whose person the author of the article also implemented in the title, with the fact that Lasica makes Slovaks millionaires. In the perex itself, however, the editor wonders if it is a legal activity, which may evoke that it will be a critical article. The following is a list of five newspapers that should have covered the topic. However, this is a scam, because, for example, the British Independent has a typical logo of an eagle carrying a newspaper, not the letter I, and also the Singapore Business Review does not have the entire logo with the slogan. Below the logos is a photo of Milan Lasica, which is just a screen shot of the show in which he is performing. The text begins with the word News, in order to give the reader the impression that the article comes from a reliable and credible news medium, which the News portal certainly is. The introductory lines inform readers of how Milan Lasica earns money and that the Slovak government is trying to stop it. Below the text is again a photo of Milan Lasica connected with an illustration of the transactions that he had to perform within the Lasica application and thus earn thousands of euros. The text continues with a quote from Lasica itself, which, according to the article, the author met: „Milan Lasica pulled out his phone and showed us his current account balance in real time.*“* At the beginning of the quote, Lasica is supposed to claim that banks and the state are against cryptocurrencies, because banks lose money, thus repeating the usual conspiracy theory. He also praises Bitcoin Billionaire because it produces the biggest profit of everything he's tried. He further urges people to try this application too, and reiterates that banks are calling for caution only for fear of losing customers. Following that is a photo of Milan Lasica without mentioning the source. The next part of the text explains the principle on which virtual currencies and the Bitcoin Bilionaire platform itself work and how much money one can earn. The author of the text calls for readers to invest as soon as possible. He refers to a quote from a non-existent Bloomberg employee called Michael Constance, which, as we assume, is just an unfortunate mix of the names of two American personalities (Michael Bloomberg and Constance Rogers). The author constantly emphasizes the effectiveness of the application, which makes money constantly and without pause. He also refers to experts such as Elon Musk, Richard Branson and Bill Gates, and Bill Gates was to be part of the development of the application. However, we were unable to locate the connection between Gates and the application. The author adds that the application disrupts the established model of the world, which divides people into poor and rich. The author tries to confirm the connection between Branson and Gates by their joint photo, in which they both sit, behind them there is a banner with the word Bitcoin, although it has no connection with the application in question, as far as the logo and graphic design are concerned. This is probably a photo taken from a shared video. As part of a Google search, we only found it in language versions of this same article. The photo is quoted by Bill Gates: *„I believe that financial freedom is something that everyone is entitled to.“* This is an idea that is taken out of context, because Gates meant the fact that people should have more affordable education and health care. Next, Milan Lasica quotes again, urging people to make quick and trouble-free earnings, also reiterating that banks are trying to cover up such opportunities, and even that Lasica himself had to face threats due to its virtual currency activities. He also refers to the story of US citizen Steven Baker, who, thanks to a crypto trade, was able to buy his brother his dream Ferrari. The article is supplemented by a photo of Steven Baker's Facebook status. When we tried to find out who Steven Baker was, we found many people with that name, so we can't confirm the reality of the person. However, we know that it is not written directly concerning which platform Baker used to get rich and that the same photograph with the status can be found in many language versions of the article, for example in Polish. In this case, too, in order to authenticate the bitcoin platform, the editors decided to test the application, through the personal experience of editor Juraj Jarošík, whose family with two children has financial problems due to his wife's illness. The article is supplemented by a photo of the family, which we found on dozens of websites in different contexts and with different names, so it is an abused photo. We also found no mention of journalist Juraj Jarošík. The editor is very positive about Bitcoin Billionaire, but he is not exaggerating and tries to present his earnings realistically in contrast to Milan Lasic. The editor adds what he spent money on, namely for an exotic vacation and debt repayment, which we consider to be a realistic example. The end of the text consists of instructions on how to use the application. Lasica himself confirmed that he does not cooperate with the given brand and it is a fabrication, while the fraudulent aspects were thus connected to the politician Boris Kollár or the head of the financial group Penta, Jaroslav Haščák. Even the editor who is the author of the article - Gustáv Horák is not real, as he has only three articles on the Medium platform, including two, of which two are the same. All three texts were created in three days. A person with his or her appearance and name does not appear on any social network or as an editor in other media. The third article analyzed concerns an educational method, thanks to which people can learn any foreign language within 30 days. The author of the article, who is not mentioned, but on the contrary the text is marked as *„advertising“*, refers to two polyglots by Andrzej Gawroński (this name is incorrectly written as Andrej Gavronský) and Giuseppe Gasparo Mezzofanti. The first named Polish linguist lived in the 19th and 20th centuries, while the Italian polyglot and cardinal worked in the 18th and 19th centuries. It is verified that they both spoke dozens of foreign languages, but the promotional text does not say via which method they learned. Advertising is based on real authorities, but without a deeper basis of facts and data and, above all, justification of the connection between polyglots and the promoted method of learning. In the next part of the text, the author refers to more than half a million Europeans who stopped going to language schools and switched to a method called the Phenomenal Method of Multilingualism. This information is not supported by any source. Furthermore, the text promises 30 - day progress. The following section explains how the Fast Phrases method works. According to the article, it is based on 100 percent utilization of brain capacity, which is not commonly used by humans. Here, the author indirectly refers to a relatively widespread myth, which states that a person uses only 10 percent of brain capacity. However, neurologists agree that humans commonly use almost all of their brain capacity, although 100 percent use of the brain could trigger an epileptic seizure. Furthermore, the article refers to the results of research of the EOC centre, which claims that the mentioned method as well as the successes of polyglots of Gawroński and Mezzofanti are based on the so-called full synchronization of the brain, which represents the full and simultaneous involvement of the left and right hemispheres. It is not explained further in the text how this connection works, only that it guarantees an increase in cognitive abilities. However, it is known that the two hemispheres of the brain are commonly connected by fibres, and also that the left hemisphere is responsible for speech abilities; it recognizes a sequence of words and letters. The right hemisphere is more responsible for emotions or creativity. We have found no study to support this theory, but MIT has reported that faster learning can be provided by brain waves that form between the prefrontal cortex and striatum, but this is not related to the hemisphere. The introduction of the article is based on the synchronization of the hemispheres, as this cannot be proved, as they are long dead and at that time brain activity was not studied to the extent possible today. Also, the EOC centre deals primarily with meditation rather than education and sells products that are supposed to induce a person into a state of meditation, which in their understanding also represents full brain synchronization. The last paragraph mentions the success of the given method based on phrase cards (which is also mentioned in two paragraphs within the text), which even improves pronunciation, without mentioning that the teaching set also includes recordings. At the end of the article is a hyperlink, through which the reader gets to the page where the cards can be purchased. In addition, the text includes a side column with a picture of cards and an interactive button that takes the reader to the eshop, as well as a money back guarantee if the method does not work. The author refers to the fact that the results of the studies presented in the article may differ from the individual abilities of the reader. There are no specific stories of people from the present in the text that would illustrate the effectiveness of the educational method. In the third article analyzed, the language level was low. In addition to incorrect styling stemming from the automatic translation of the text, there were also typos and incorrectly inflected words in the text.

3 Methods of Manipulation in Marketing according our Research

Based on three analyzed texts with advertising potential, we discovered how disinformation and hoaxes are disseminated and conceived with the aim of commercial gain, while through methods of logical thinking such as induction, deduction, abstraction or generalization, we can generalize the procedures which the creators of commercially prohibited hoaxes follow.

- Articles contain fictional people who do not have real names or photographs. Likewise, if the authors are mentioned, they are not real and traceable. Comments in articles and the people who published them can also be made up.
- Where an article is based on authorities, they are often given statements that they did not actually say, or those authorities are presented in a context with which they have nothing to do, only to add credibility to the text.

- Articles appear on web portals with an English domain, their language mutations can often be traced, using the same photos and changing the names of people in the text based on their location. Websites are removed from the Internet after a short time and cannot be traced.
- Texts are based on false stories of fictional people. Stories are often used as a common journalistic tool in the case of reports or analyzes. In disinformation articles with a commercial goal, stories look very common and usual, so that every reader can identify with them.
- There may also be editorial testing of the product in the texts, the results of which (especially financial reward) are modest and more realistic than the rest of the text, where the product is described as the best and without competition.
- There may be indications of conjectures and conspiracies in articles that are well known and used by the author as facts. It is also common for competition to be described in the texts as unsuccessful or unfavourable to the products being promoted.
- Factual information, such as various surveys, is often presented out of context or in the wrong context, although it may be true.
- In the individual sections of the text, positive information about the effects and meaning of the product is repeated several times, in a very intrusive advertising way.
- The stylistics of the text is low, the sentence constructions are reminiscent of English sentences, the words are not well inflected, so we assume that they are automatic translations.
- Articles using misinformation for promotion and advertising contain direct hyperlinks to a website where the product can be purchased.

Based on the performed content analysis, we can also answer the set research questions. The work with information by the authors is not at the required level. This means that, in addition to a weak style, the authors invent most of the subject information or put it in a context that fits within the chosen goal, namely to sell as many products as possible. They use advertising language, which we know, for example, from teleshopping. The pictorial material used in commercial disinformation articles is illustrative in nature and seeks to illustrate false facts. On the other hand, these articles contain stolen photographs that complement people's identities. The credibility of persons who are in the texts as respondents or as experts is not reliable, as in most cases they are not real persons. Even if they do, their identity is used deliberately, while they have nothing to do with the given product and the author usually selects the ideas of the given expert out of context or invents them. As far as the legal security of these advertisements is concerned, they immediately violate several sections of the Advertising Act. According to paragraph 3 of paragraph 2, advertising may not: *„invoke the statements of other persons without their prior consent, interfere with the rights of other persons without their consent.“*[17] The texts we analyzed referred to statements that real people did not make and also used stolen photographs of people to illustrate a different identity, so that personal rights were also violated. According to paragraph three of the same paragraph, advertising *„must meet the requirements for public speech, adhere to the principles of language culture, grammatical and spelling rules, rules of pronunciation of the Slovak language and established professional terminology.“*[18] As we mentioned, the selected analyzed texts did not meet the basic requirements for stylistics in the public domain. The problem is that those articles as well as websites disappear from the Internet very quickly, so it is then very difficult to prove that they have broken the law.

[17] *Zákon o reklame a o zmene a doplnení niektorých zákonov*. [online]. [2019-11-15]. Available at: <https://www.zakonypreludi.sk/zz/2001-147>.
[18] *Zákon o reklame a o zmene a doplnení niektorých zákonov*. [online]. [2019-11-15]. Available at: <https://www.zakonypreludi.sk/zz/2001-147>.

Conclusion

Based on an analysis of three advertising texts, in which we demonstrated disinformation elements and proved that the selected facts are fabricated or distorted, we can conclude that this type of content is misleading and deceptive in order to sell and expand products or services. The result of this study is a set of features and recommendations that need to be followed when reading articles, especially on the Internet, in order to avoid audience financial losses. One of the most common practices is the use of fictional stories with fake people, illustrated by stolen photographs from the Internet. It is also common to use experts that are real, but authors apply them in articles out of context in order to increase the credibility of the text. Similarly the texts mention scientific studies that have no basis in science. Experts that validate theories also take the form of journalists who are not verifiable. Language mutations of articles using other names and persons are also typical, as well as fictional user comments. In our case, it was mainly ads for products in which readers had to invest. Such practices violate the law on advertising on several points, so it is important to appeal to institutions with international operations to treat such behaviour of fraudulent companies on the Internet, although this is almost impossible due to the ephemeral nature of advertising misinformation, as they often disappear from the Internet although it is possible to find them. Therefore, it is important to look for tools to discover them or change the surrounding legislature.

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CITY MARKETING AS A SIGNIFICANT TOOL TO ENHANCE THE REGIONAL DEVELOPMENT: THE CASE STUDY OF HELSINKI

Lucie Herbočková

Abstract
The article deals with the city marketing on the example of Helsinki, which has introduced this concept in its city strategy from 2016 to 2020 and is considered one of the leading European drivers in its practice. In general, the concept of city marketing is a widely discussed topic in strategic city planning in European countries, as globalisation processes are growing, and the consequences have caused increasing competition between cities. Cities are aware of their position in the market, so they have to adopt a specific strategy to direct them to attract the pre-defined target groups. The paper aims to demonstrate the successful implementation of the city marketing concept on the example of Helsinki, recognised as a small metropolis that is innovative, economically competitive, sustainable, and potentially attractive for international talents. The city of Helsinki was chosen primarily for its characteristics, even though it is a capital that attracts tourists naturally for its cultural heritage. However, Helsinki knows its position in the global attraction market and decided to concentrate on a more innovative and sustainable future than the short-term visits. The research was conducted by the descriptive case study approach through in-depth desk research to describe, understand, and conclude the successful components of such a concept.

Key words:
City marketing. Helsinki. Marketing strategy. Territorial marketing.

Introduction

As the businesses in the global market compete for the attention of either actual or potential customers with their products, traditional business marketing has progressively expanded into a spatial scale due to globalisation development. The first pioneers[1] of territorial marketing introduced the evolution of the focus from the business environment to the non-profitable sphere, thus enriching the field of marketing with a new marketing approach. Although it is difficult to conclude when territories began to apply the concept of territorial marketing structurally, the Dutch city of Apeldoorn starting in 1981 could be perceived as the one.[2] The concept of territorial marketing[3] can be observed as an imaginative umbrella that potentially covers all sub-territories marketing approaches, i.e., municipal marketing, city/urban marketing, regional marketing, national marketing, and international marketing.[4] Although these approaches might have the same cornerstone, they do not replicate the same practices in developing marketing methods and tools. Principally depending on the size of a territory, there are many significant variations, e.g., the territory's market position, target groups, local resources, competitive environments, and its elements, historical focus, budget, local vision and mission, and available marketing specialists.[5] On the other side, the common attributes frequently applied are the extreme focus on tourism and short-term visits, which bring the economic benefits back to the territory. However, the so-called father of marketing and his

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[2] PEELEN, E. J.: City Marketing. In *Vastgoed*, 1987, Vol. 3, No. 1, p. 97.
[3] Remark by the author: often mentioned as place marketing.
[4] KLÍMOVÁ, V., HERBOČKOVÁ, L.: Teritoriální marketing v inovativních městech: případová studie města Graz. In *XXIV. mezinárodní kolokvium o regionálních vědách. Sborník příspěvků.* Brno : Masarykova univerzita, 2021, p. 425.
[5] ZENKER, S., BECKMANN, S.: My place is not your place – different place brand knowledge by different target groups. In *Journal of Place Management and Development*, 2013, Vol. 6, No. 1, p. 8.

colleagues[6] argue that each place's marketing strategy has been formed and suits a particular territory, and it is not adequate to copy and apply to one's own. Besides, it is a long-term process. Thus, there is no one-size-fits-all option in territorial marketing.[7]

As above-mentioned, there are many marketing approaches toward territorial marketing regardless of spatial distribution. For the purpose of this article, the author principally focuses on city marketing, which has been becoming increasingly important in the world, especially in the practical sphere. The concept of city marketing is a desirable topic for both public audiences and researchers in the world. Notwithstanding, the difference is usually detected mainly by the researcher's or territorial background as it has grown into an established discipline.[8] The city of Apeldoorn could be perceived as the pioneer of implementing the concept of city marketing as the methodology and terminology entirely rooted in the Netherlands.[9] Contrarily, there are some arguments[10] that city marketing has been implemented in its historical extension way earlier in the United States of America than in Europe. Nevertheless, whether the origins are from the European or American continent is not as crucial as the practical methods and tools. The concept of city marketing is generally defined as "*a process that includes a wide set of activities.*"[11] The activities could vary; however, the general and frequently mentioned in the academic environment are:[12]

1. To do extensive research and place audits to distinguish the city's assets, SWOT analysis, and target groups.
2. To identify a relevant vision, mission, and goals of the city and stakeholders responsible for the cooperation and realisation of the marketing activities.
3. To plan particular projects in the form of detailed actions of marketing activities.
4. To implement the measures.
5. To monitor periodically and evaluate the results of activities.

There are many city marketing definitions; the most general is often described as the process where cities or other territories use traditional business marketing ideas, concepts, and tools.[13] Here, the author comes back to the claim, i.e., there is no one-size-fits-all option in territorial marketing, which agrees with the discussion that the practice of city marketing is mainly connected with its particular characteristics.[14] As the city management offers the city as a product, it is mainly done through the work and collaboration of multiple stakeholders involved and committed in the particular territory. They are the people who follow and believe in the

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[6] KOTLER, P., HAIDER, D. H., REIN, I.: *Marketing places: attracting investment, industry and tourism to cities, states and nations.* New York : The Free Press, 1993, p. 25.

[7] DINIS, A.: Territorial marketing: a useful tool for competitiveness of rural and peripheral areas. In *European Planning Studies*, 2004, Vol. 14, No. 1, p. 13.

[8] KAVARATZIS, M.: City Marketing: The Past, the Present and Some Unresolved Issues. In *Geography Compass,* 2007, Vol. 1, No. 3, p. 695.

[9] BRAUN, E.: *City Marketing: Towards an Integrated Approach*. ERIM PhD Series in Research in Management, 2008. [online]. [2021-10-03]. Available at: <https://repub.eur.nl/pub/13694/>.

[10] VAN DEN BERG, L., KLAASSEN, L. H., VAN DER MEER, J.: *Marketing metropolitan regions*. Rotterdam : Euricur, 1990, p. 987.

[11] KAVARATZIS, M.: City Marketing: The Past, the Present and Some Unresolved Issues. In *Geography Compass,* 2007, Vol. 1, No. 3, p. 696.

[12] KAVARATZIS, M.: City Marketing: The Past, the Present and Some Unresolved Issues. In *Geography Compass,* 2007, Vol. 1, No. 3, p. 696-697.

[13] BRAUN, E.: *City Marketing: Towards an Integrated Approach.* [online]. [2021-10-03]. Available at: <https://repub.eur.nl/pub/13694/>.

[14] Remark by the author: see the authors KOTLER, P. et al., DINIS, A.

city's interest and cooperate to ensure that local goals are effectively achieved.[15] Even though the demonstrative list of possible stakeholders presented by Kotler et al.[16] has been historical, it is timeless as it covers the stakeholders involved in the territory.

There are distinguished five extensive dimensions of stakeholders:
- Local stakeholders - mayor, city manager, urban planning department, business development department, tourist bureau, convention bureau, public information bureau, infrastructure managers.
- Private sector stakeholders - individual citizens, leading enterprises, real estate developers and agents, financial institutions, electricity and gas utility chamber of commerce hospitality and retail industries travel agencies, unions, taxi companies, architects, media.
- Regional stakeholders - regional economic development agencies, local and state government, regional tourist boards.
- National stakeholders - political heads of government, various ministries, national unions, inward investment agencies.
- International stakeholders - embassies and consulates, inward investment agencies, international chambers of commerce.

Also, Braun[17] thinks that the city's marketing activities and strategy should be coordinated and supported by the people who deliver and follow the value of the city and its community in general. In order to have a comprehensive understanding of the practices of city marketing, there can be applied the nine general principles defined by Kotler and Levy[1] for effective traditional marketing. At the same time, these authors argue that they can also be adapted to marketing in the city marketing field.
- Generic product - at the first stage, it is essential to define the product and the object of marketing activities accurately.
- Target groups - segmentation and definition of the target groups that are the main interest of marketing. The target groups are recognised as the place customers. Some authors[18] classify the target groups as follows: residents, visitors, investors, and businesses. However, the practitioners performing the city marketing concept have focused on more detailed audiences lately.[19]
- Differentiated marketing - refers to the communication mix, how to get information about the product to the target groups. Each target group can be reached with a different tool.[20]
- Customer behaviour analysis - an essential part of when systematic marketers research the target audiences to determine their needs.

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[15] VÁŇOVÁ, A., VITÁLIŠOVÁ, K., BORSEKOVÁ, K.: Place marketing, public and non-profit marketing: case studies. Banská Bystrica : Belianum. Matej Bel University Press, 2017, p. 25.
[16] KOTLER, P., HAIDER, D. H., REIN, I.: *Marketing places: attracting investment, industry and tourism to cities, states and nations.* New York : The Free Press, 1993, p. 34.
[17] BRAUN, E.: *City Marketing: Towards an Integrated Approach* [online]. [2021-10-03]. Available at: <https://repub.eur.nl/pub/13694/>.
[18] ASHWORTH, G. J., VOOGD, H.: *Selling the city: marketing approaches in public sector urban planning.* London : Belhaven Press, 1990, p. 608.
HOSPER, G. J. Place Marketing in Europe – The Branding of the Oresund Region. In *Intereconomics*, 2004, Vol. 5, No. 5, p. 279.
KOTLER, P., HAIDER, D. H., REIN, I.: *Marketing places: attracting investment, industry and tourism to cities, states and nations.* New York : The Free Press, 1993, p. 24.
[19] Remark by the author: for instance, talent attraction and investment promotion (Copenhagen), tech starters (Eindhoven), innovative researchers and excellent students (Ostrava) and Generation Y (Brno)
[20] Remark by the author: see the principle of multiple marketing tools

- Differential advantages - as every product on the market, every city should determine its competitive advantage and develop it.[21]
- Multiple marketing tools - it is recommended to focus on multiple marketing tools according to activities and practices. Therefore, the city can be understood as a separate complex product consisting of many other sub-products or brands. A tool is taken from traditional marketing, i.e., the 4P marketing mix could be applied at this product definition stage. This tool helps the specifiers determine the subject of the marketing strategy and how it fits into the city's overall strategy, vision, and mission.[22] It involves identifying the following four components of the tool (1) Product - the city itself, the city's logo or brand, location, activity, or event, (2) Price - the price for the location, resource, area, workforce, (3) Place - geographic accessibility, (4) Promotion - the communication mix through various channels and tools to inform target audiences.[23]
- Integrated marketing planning - involvement of relevant actors or stakeholders in the process of creating marketing activities.
- Continuous marketing feedback - continuous monitoring of pre-defined indicators and dynamic evaluation behaviour.[24]
- Marketing audit - predetermined periods of evaluation of whether a marketing strategy is effective and successful.

The practice of marketing offers cities a set of tools such as applied above-mentioned theoretical list presented by Kotler and Levy,[25] i.e., target market segmentation, communication policy, media strategy, websites, events, branding, product development, image, storytelling, public spaces, and architecture and cultural institutions to help reach pre-defined target groups. With differentiation from traditional marketing tools, city marketing specialists are beginning to apply branding, mainly involving the city's image and how the target groups perceive the city.[26] Authors[27] agree that the brand is mainly understood as reputation in practice. Contrarily, academic researchers describe the brand as a strategic element and mental association connected to a particular product, service, or territory to achieve urban policy goals and strategic spatial planning.[19] In practice, city branding is the application of branding tools in the concept of city marketing. For instance, Kavaratzis[28] briefly describes what belongs to such a branding tool, i.e., the city's identity, image, and culture. It is more about the feelings of the target groups and their perception of the city as a place in which they want to interact.

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[21] KAVARATZIS, M.: City Marketing: The Past, the Present and Some Unresolved Issues. In *Geography Compass,* 2007, Vol. 1, No. 3, p. 697.
[22] BAKER, J. M.: *Marketing strategy and management.* London : Macmillan International Higher Education, 2014, p. 8.
[23] Remark by the author: Billboards, paid online advertising, bulletin boards, social media – Facebook, Instagram, TikTok, blogs, websites, flyers at events, influencers, and ambassadors.
[24] BRAUN, E.: *City Marketing: Towards an Integrated Approach.* [online]. [2021-10-03]. Available at: <https://repub.eur.nl/pub/13694/>.
[25] KOTLER, P., LEVY, S. J.: Broadening the concept of marketing. In *Journal of Marketing*, 1969, Vol. 33, No. 1, p. 12.
[26] KAVARATZIS, M.: Is „City Branding“ Worth Re-Visiting? In *Tijdschrift Voor Economische En Sociale Geografie,* 2020, Vol. 111, No. 1, p. 25.
[27] ANTTIROIKO, A. V.: *The political economy of city branding*. Oxfordshire : Routledge, 2014, p. 9; OLIVEIRA, E. H. S.: Place branding in strategic spatial planning: A content analysis of development plans, strategic initiatives and policy documents for Portugal 2014-2020. In *Journal of Place Management and Development*, 2015, Vol. 8, No. 1, p. 70.
[28] KAVARATZIS, M.: Is „City Branding“ Worth Re-Visiting? In *Tijdschrift Voor Economische En Sociale Geografie,* 2020, Vol. 111, No. 1, p. 26.

It is not impossible to identify a leader that presents the textbook aspects of accurately performed marketing and its evaluation in European cities. Examples[29] of a successful grasp of city marketing include the city of Utrecht (the Netherlands), which focuses on sustainability, ICT, healthcare, local resources, healthy urban living, and specific target groups in its branding. Verona (Italy) concentrates mainly on the emotional value associated with its city's brand in the form of more cultural events to stimulate urban development. The city of Eindhoven (the Netherlands) also has a very advanced approach to city marketing, where the public administration hired a private agency to take care of the city's brand and image in conjunction with the innovative Brainport. Same cities like Tampere (Finland) and Tartu (Estonia) adjust to attract and retain international talents where many large high-tech companies are clustered and attractive to this target group. Contrariwise, the cities like Lyon (France), New York (USA), Amsterdam (the Netherlands), and Barcelona (Spain) have been struggling with their strong brand, which is associated primarily with the touristic attractions, not with the smart ecosystem, local successes and urban development.[30]

1 Methodology

The article's primary goal is to demonstrate the successful implementation of the city marketing concept on the example of a small metropolis recognised as innovative, economically competitive, sustainable, and potentially attractive for the talents abroad. In the context of the author's PhD thesis, she researches innovative cities applying the concept of territorial marketing without focusing on the tourism influence. The city of Helsinki was chosen primarily for its characteristics, even though it is a capital that attracts tourists naturally for its cultural heritage. However, Helsinki knows its position in the global attraction market and decided to concentrate on a more innovative and sustainable future than the short-term visits. For this reason, the author decided to choose such a city to be researched in detail with the practise-oriented research, i.e., descriptive case study approach through in-depth desk research principally to describe, understand, and conclude the successful components of such a concept.[31] This study is based on the analysis of the following mutually supportive sets of secondary data collection (1) the documentation of The City of Helsinki marketing strategy 2016–2020; (2) the documentation of the Brand New Helsinki 2020 project; (3) and Helsinki City Strategy 2017-2021. As a result, the case study focuses in detail on the marketing strategy, brand, organisational structure, target groups, and marketing and monitoring methods applied.

2 Results and Discussion

Even though Helsinki reflects the status quo of European capital cities speaking of seeking the tourism which allows the economy to prosper, Helsinki's city marketing aims higher in the development of the territory. The trend of particular marketing strategies of a city implementing non-tourism as the main interest has grown recently. The city marketing unit presents the city

[29] *Place Branding Examples.* [online]. [2021-09-25]. Available at: <https://placebrandobserver.com/place-branding-examples/>.

[30] KLÍMOVÁ, V., HERBOČKOVÁ, L.: Teritoriální marketing v inovativních městech: případová studie města Graz. In *XXIV. mezinárodní kolokvium o regionálních vědách. Sborník příspěvků.* Brno: Masarykova univerzita, 2021, p. 427.

[31] WOODSIDE, A. G., WILSON, E. J.: Case study research methods for theory building. In *Journal of business & Industrial Marketing*, 2003, Vol. 18, No. 6/7, p. 493. YIN, R. K.: *Applications of case study research.* Los Angeles : SAGE, 2003, p. 18.

of Helsinki as a dynamic place that makes an impression on the relevant target groups. The uniqueness lies in its interest of local people, professionals, talents, enterprises, and matters which derives the city from other European capitals that intend to boost tourism in its territory[32]. The significant role that directs the city's meaningful thoughts is provided by the technology, innovation, people-driven, and open sources, which provide transparency as the modern approach[33].

2.1 Organisational structure and support of marketing activities

The cities usually establish public enterprises which provide support for the marketing activities in their territory[34]. The city of Helsinki has been approaching in a similar way to secure all the marketing activities. The implementation of city marketing is entrusted to the city marketing unit represented by the particular agenda of Helsinki Marketing, Ltd. in cooperation with public administration, i.e., economic development[35]. The former marketing name of a unit was Visit Helsinki till 2017; since then, the scope, vision, and mission have changed, and its recent designation is Helsinki Marketing. This transformation entirely supports the idea of a proper city marketing strategy, i.e., movement from tourism interest to city marketing company involved in talent attraction, economic and development marketing activities. The unit is responsible principally for its operative and dynamic marketing operations and the business partnerships within the city's ecosystem. The scope of such a portfolio covers many activities, e.g., events, business promotion, and tourist information. Its vision aims to include the stakeholders and target groups to promote a city together, especially content and visibility[36].

2.2 The city's marketing strategy and brand

Like many other European cities, the city of Helsinki intended to enhance the city with strategic tourism in the past, i.e., bring the economic capital into the territory. These touristic-oriented strategies were applied from the 1850s until the mid-twentieth century, when the municipality needed more profound and systematic city promotion[37]. Particularly in the 1980s, the city marketing concept has arisen in Western progressive countries[38]. Based on the study conducted in 1997, the Helsinki image was recognised as a dark and unknown place to live[39]. Since then, the city management implemented modern marketing tools with clear essential messages, created a strong brand and relevant associations with the city's attitude, and focused on more than the tourist and residential target groups.

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[32] *City Marketing.* [online]. [2021-10-03]. Available at: <https://www.hel.fi/helsinki/en/administration/enterprises/competitive/city-marketing/>.
[33] *Open Data Service.* [online]. [2021-10-03]. Available at: <https://hri.fi/en_gb/>.
[34] Remark by the author: To give an example of such cities – Graz, Brno, Eindhoven.
HORNYÁK GREGÁŇOVÁ, R., PAPCUNOVÁ, V.: Business activities of the municipalities as the important factor of territorial development. In *Managerial trends in the development of enterprises in globalization era*. Nitra : Slovenská poľnohospodárska univerzita v Nitre, 2017, p. 90.
[35] BAKER, J. M.: *Marketing strategy and management.* London : Macmillan International Higher Education, 2014, p. 9.
[36] *About.* [online]. [2021-10-03]. Available at: <https://www.myhelsinki.fi/en/about>.
[37] UNIVERSITY OF HELSINKI: *Lecture about urban planning and the profiling of Helsinki's neighborhoods.* [Electronic document]. Helsinki : University of Helsinki, 2016.
[38] ANTTIROIKO, A. V.: *The political economy of city branding*. Oxfordshire : Routledge, 2014, p. 10; JOKELA, S.: Transformative city branding and the evolution of the entrepreneurial city: The case of 'Brand New Helsinki'. In *Urban Studies*, 2019, Vol. 57, No. 10, p. 3.
[39] Pääkaupunkiseudun matkailun kehittämisstrategia: matkailun nykytila, Helsinki : Suomen matkailun kehitys, 1997; JOKELA, S.: Transformative city branding and the evolution of the entrepreneurial city: The case of 'Brand New Helsinki'. In *Urban Studies*, 2019, Vol. 57, No. 10, p. 5.

After many years of implementing a short-term city's marketing strategy, the most well-built and relevant processes were developed in 2016. At that time, the city of Helsinki decided to expand its scope and strategy following this concept as well, i.e., the development from a touristic institution to a proper city marketing organisation. The transformation was built on the City of Helsinki marketing strategy for the four years starting in 2016. The creation of the strategy was based on the engagement of locals, potential foreigners and the research approach. The formulation process adopted tools such as experience maps, research reports, stakeholders' participation, current situation analyses, preliminary assignments for the steering group, and other competitive city analyses.[40] Firstly, the strategy outlines the city's significant objectives and its performance indicators. There are four main objectives: building the future vision and strengthening local pride, increasing awareness and appeal, making Helsinki services and experiences more accessible and attractive, and supporting actions to raise the brand's impact locally and internationally.[41] Table 1 summarises the tools, performance indicators, and target audiences associated with the outlined objectives.

Table 1: Objectives defined in the city's marketing strategy and its components

Objectives	Target audiences	Tools	Performance indicators
Build our future vision and strengthen local pride	Internal target audience	• Material bank of photos • Videos and presentations • Elevator speeches • Success stories	• Image surveys with citizens and local businesses • Functionality and usability assessment of marketing tools • Media monitoring in editorial and social media
Increase awareness and appeal	External target audience	• Events • Sustainable tourism	• Image surveys with select international target groups, including business people • Media monitoring in editorial and social media
Make Helsinki services and experiences more accessible and attractive	External target audience	• Renewing the City's digital world • Ensuring signs, routes, locations, and venues sufficiently and in English for non-Finnish speakers	• User and user experience metrics in select digital channels and physical locations of encounters • Feedback from within the City organisation and cooperation partners about the functionality and usability of marketing tools
Actions to support the Helsinki brand's impact locally and internationally	Internal target audience		City organisation and stakeholder participation in brand work with the commitment to actions that support the brand and related results

[40] *The Brand New Helsinki project.* [online]. [2021-11-03]. Available at: <http://www.brandnewhelsinki.fi/2020/en/#introduction>.

[41] *The City of Helsinki marketing strategy 2016-2020.* [online]. [2021-11-03]. Available at: <http://www.brandnewhelsinki.fi/2020//app/uploads/2016/07/02_Helsinki__strategia_ENG_web.pdf>.

Additional objectives of economic development marketing	
• Attract new businesses to Helsinki, particularly critical sector companies and professionals. • Attract research, development and innovation activities that create highly-skilled jobs in Helsinki. • Achieve a position as the best start-up and growing business hub in the Nordics and be Europe's most business-friendly capital city in 2020. • Invite more international meetings and conferences, business events, delegates and special interest visits to Helsinki, particularly for critical sectors.	The utilisation of the City Council's scorecard (from 2017 to 2020) and tourism statistics. Development of new indicators (e.g., start-ups and growth companies).

Source: *City Marketing*. [online]. [2021-10-03]. Available at: <https://www.hel.fi/helsinki/en/administration/enterprises/competitive/city-marketing/>.

2.3 The target groups

The city's marketing strategy identifies eight motive-based profiles based on the three primary target groups, i.e., residents, tourists, and business people[42]. These motive-based profiles were established and developed based on the key messages and true motives that are important to them. Most importantly, the marketing toward the residents is set. These target groups further identify six different profiles (see Table 2). The key messages summarise such target groups' desirable attitude and approach, providing them attractive, easily accessible, high-quality services and experiences and developing more solution-oriented facilitations that affect daily life. As second defined marketing group, economic development marketing mainly focuses on local and global talents, especially expertise in ICT and digital skills, potential start-ups, decision-makers, and policymakers. The core of the shared key message is the transformation of Helsinki's growth and effectiveness for these special people and actions that might impact, thus raising the city's attractiveness. Lastly, the marketing of international tourism and events is specified. Important to note, the city of Helsinki is, above all, a capital that brought around 16 billion EUR in 2019 through tourism activities[43]. Even though the city's marketing strategy aims to derive itself primarily from touristic projects, it still includes it in its strategy, however, in the way of sustainable tourism. Speaking of sustainable tourism, the stakeholders and city makers seek the people and trendsetters who value sustainability and are interested in global issues[44].

[42] *About.* [online]. [2021-10-03]. Available at: <https://www.myhelsinki.fi/en/about>.
[43] *Finnish tourism and in numbers.* [online]. [2021-10-03]. Available at: <https://tem.fi/en/finnish-tourism-in-numbers>.
[44] *The City of Helsinki marketing strategy 2016-2020.* [online]. [2021-11-03]. Available at: <http://www.brandnewhelsinki.fi/2020//app/uploads/2016/07/02_Helsinki__strategia_ENG_web.pdf>. Remark by the author: the city of Helsinki was awarded by Place Marketing Award in the category for Tourism for its digital service - Think sustainably.

Table 2: City of Helsinki and its target groups in detailed structure

Target audiences	Type of marketing focusing on the target group	Recognised target group profiles
Internal target audience	Residents	1. Citizen activists 2. Quiet folk 3. Novelty seekers 4. Purpose-driven 5. Optimisers 6. Onlookers
Internal and external target audiences	Local and global decision-makers and policymakers Local and global experts (focus on ICT and digital skills) Local and global potential start-ups and entrepreneurs	1. Trailblazers 2. City-makers 3. Talent-on-the-move 4. Experts 5. The rationally-minded
External target audience	Daytime visitors Overnight city vacationers Stopover travellers from Asia Cruise ship passengers	1. Novelty seekers 2. Purpose-driven visitors 3. Optimisers

Source: The City of Helsinki marketing strategy 2016-2020. [online]. [2021-11-03]. Available at: <http://www.brandnewhelsinki.fi/2020//app/uploads/2016/07/02_Helsinki__strategia_ENG_web.pdf>.

2.4 Marketing methods

The city of Helsinki implements a broad portfolio of marketing methods that may be used either individually or may combine, aiming for a practical impact. Among many methods which aim mainly into the digital offering, the marketing strategy defines the following:[45]

- Storytelling (introducing appealing personalities that people can relate to and stories that people will want to participate in).
- Ambassadors: Helsinkians and international opinion leaders (to share local knowledge and experiences of the city).
- Events (to focus on internationally relevant and locally attractive urban events that reinforce Helsinki's unique characteristics).
- Locations and spaces for encounters in an open city (to improve access to services and experiences and support communal well-being).
- Participation in collaborative urban development (to promote people, encounters and actions with impact and collaborative urban development).
- Renewal of marketing tools (to create consistent materials to support the Helsinki brand and its marketing).
- Bold initiatives for international and local joint marketing (to help generate businesses opportunities).
- Visibility and the brand's experience in the urban environment (to develop a unified Helsinki brand).

[45] *The City of Helsinki marketing strategy 2016-2020.* [online]. [2021-11-03]. Available at: <http://www.brandnewhelsinki.fi/2020//app/uploads/2016/07/02_Helsinki__strategia_ENG_web.pdf>.

The city of Helsinki created one unified website which provides dynamic information for all the target groups. The website www.myhelsinki.fi distinguishes four main categories to satisfy internal and external target audiences.[46] Further, it includes the category defined as Think Sustainably which aims to support excellent and long-term living in Helsinki, including all target groups.[47] The entire website is not designed to be an informative website but as a service in a digital form. Besides, the website is adapted for people with disabilities, so they have the same access to the digital offerings as any other user. As the marketing strategy mentioned digital offerings, the city focuses on social media regardless of the segmentation. The Facebook page copies the structure of the website and shares the news (www.facebook.com/myhelsinki). Secondly, Instagram profile myhelsinki is way more favourite than Facebook account speaking of followers (www.instagram.com/myhelsinki/). Another auxiliary account is provided by Twitter (www.twitter.com/myhelsinki). Finally, the YouTube channel mainly provides the materials for all target groups to present the brand and attitude of Helsinki city (www.youtube.com/c/MyHelsinki).[48] It is important to note that most of the content provided by digital offerings is put together with the locals.

Following the marketing methods, branding processes and projects are often the most effective. In the context of the Helsinki case, a brand is a powerful tool in reshaping how the city works[49]. The project started in 2015 in the former name Brand-New Helsinki aiming for the shared future – for Helsinki 2020. The project creation took around ten months to complete with the strategic brand design agency.[50] Speaking of stakeholders who participated in the formation and creation of the brand, the public administration included all interested target groups in the form of the stakeholders, i.e., local people, businesses, visitors, organisations, and partners. The entire brand portfolio was built at the four cornerstones, which are following:[51]

- The process of transforming Helsinki and related opportunities (to become competitive and keep up with dynamic change).
- Innovative and functional Helsinki (to support the knowledge hubs, attractive business scene, and triple helix concept).
- Fascinating contract of Helsinki (to let the target group identify and grow with the city environment).
- Unique and diverse Helsinki (to support the diversity and make the most of it).

All these four cornerstones are covered and expressed by the "One Hel of an Impact" attitude, which manifests the former vision of the brand, i.e., in the future, Helsinki will be known for its people, encounters and actions that make an impact. The city does not have any slogan or motto; it cares more about the attitude, aiming at the challenges of everyone to think big with exceptional actions that have a significant impact and get global attention.[52] The uniqueness of this attitude mainly lies in its opportunity for a diverse society, thus combining the urban everyday life with the vision and potential to get to the global market. To support the right direction in branding concept, in her study,[53] Jokela confirms the branding process from selling

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[46] Remark by the author: The categories are: See & Do, Eat & Drink, Work & Study, and Business & Invest.
[47] *About.* [online]. [2021-10-03]. Available at: <https://www.myhelsinki.fi/en/about>.
[48] *About.* [online]. [2021-10-03]. Available at: <https://www.myhelsinki.fi/en/about>.
[49] *Brand concept by the people, for the people.* [online]. [2021-10-03]. Available at: <https://kuudes.com/work/bnh/>.
[50] Ibidem.
[51] *The Brand New Helsinki project.* [online]. [2021-11-03]. Available at: <http://www.brandnewhelsinki.fi/2020/en/#introduction>.
[52] Ibidem.
[53] JOKELA, S.: Transformative city branding and the evolution of the entrepreneurial city: The case of 'Brand New Helsinki'. In *Urban Studies*, 2019, Vol. 57, No. 10, p. 14.

the city towards transforming urban realities. Her research partially suggests coming together with the soft space of governance, addressing more critical strategic issues, and finally adjusting the city to global realities rather than urban ones. The project phases of the creation of the branding formation were following:[54]

- Get insights into the environment – including the combination of eight workshops and seventy-three interviews and revision of successful European case studies and reports.
- Creation of concepts and cornerstones, including different scenarios.
- Testing – the concept was presented to nearly two thousand people, and five-hundred comments and feedback were implemented into the process.
- Finalisation – formulation of final brand strategy consistent with the city's marketing strategy based on the previous phases.

In response to the branding identity, there was no uniform identity and logo until 2017. For this purpose, the City of Helsinki chose the strategic brand design agency Werklig to rebrand the identity and brand.[55] The city's logo was created with the recognisable historic Helsinki symbol, i.e., the Helsinki crest. The entire rebranding process aimed to differentiate the city from other competitors in the global market. Last but not least, the author presents the SWOT analysis outlining the strengths, opportunities, weaknesses, and threats of the entire Helsinki's city marketing approach.

Table 3: SWOT analysis

Strengths	Weaknesses
• Build on the target groups' needs - bottom-up city brand and strategy • Its adaptability to the dynamic marketing methods and relevant monitoring key performance indicators • Thinking and promoting sustainability • Profound Branding concept • Build on the assets acknowledged by earlier generations of city promoters • Engaging the target groups to get a relevant content	• The end of the city's marketing strategy in 2020 – the time of monitoring has come • Undefined the advantages for the target groups in return for the participation in the strategy activities • Undefined impact of transformation • Undefined possible impacts of the suggested marketing methods • The strategy nor branding project does not include traditional land-use plans
Opportunities	**Threats**
• Covid-19 pandemic situation • Transformation into digital innovations environment • Open-source • To build on sustainable tourism as the city is the capital • Process of collecting and analysing target groups insights • Role of technology and innovation	• Following municipal election • Covid-19 pandemic influence • Not defined what role the new brand concept will play in facilitating and supporting new types of collaborations in the city ecosystem • Building on a bold attitude than a slogan

Source: Own processing.

[54] *Brand concept by the people, for the people.* [online]. [2021-10-03]. Available at: <https://kuudes.com/work/bnh/>. *The Brand New Helsinki project.* [online]. [2021-11-03]. Available at: <http://www.brandnewhelsinki.fi/2020/en/#introduction>.
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Conclusion

Among many limits of not having a prosperous city's marketing strategy, there is the perception from the public administration to be able to attract all possible target groups with the most accessible marketing methods. However, these strategies are not entirely successful. The marketing strategy of a city should have defined specific objectives, vision, and mission, which are the core for further successful activities, same as in traditional business marketing. Another obstacle to researching a city that is a capital at the same time is its focus on tourism. Helsinki has created a different perspective, in any case. It surely cannot leave the tourism field behind as it still brings an economic advantage to the country; however, the city decided to switch to sustainable and smart tourism, consistent with the city's marketing strategy. To see whether it is done rightly, the successes in this field have been achieved.[56] The entire process of creating the brand-new thinking and attitude of the city's marketing strategy had brought a significant impact on the city's development. The city, primarily siloed, bureaucratic, with no story, and a minimal budget, has changed with one consistent brand, end-user oriented, participatory approach, and visibility. The evaluation of the strategy's success is presented by being 7th in the Global Talent Competitiveness Index and 11th most reputable city in the world.[57] If the city's marketing strategy has been successful and practical, the evaluation will have been done in 2021. However, the supported action saying about its partial success could be represented by the municipal election in 2015 – 2020, i.e., the city's marketing strategy period. The strategy remained quite in line with the former, focusing more on digital innovation[58]. This process of monitoring and evaluating the progress, whether the entire strategy was successful or not, is not a must as in traditional business marketing. These limits may be caused primarily by the budget, which cannot be provided to these activities for many different reasons. Nevertheless, if the marketing strategy should be defensive for the following periods, it has to provide the measurement of the progress.

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SOCIAL MEDIA UNDER THE INFLUENCE OF TECHNOLOGICAL INTERFERENCE AS A TOOL FOR PROCRASTINATION IN YOUNG PEOPLE

Vladimíra Hladíková – Anna Hurajová

Abstract
In the last decade, the issue of the use of the Internet and social media as tools for procrastination has become a key topic for researchers, as evidenced by the growing number of research studies in this area. We live in a time of technoference, in which users of social media and smartphones or other technological devices are often disturbed by them. The aim of the paper is to examine this area with emphasis placed on the aspect of technological interference and its impact on academic procrastination from a theoretical-empirical point of view. The theoretical part presents a reflection of the researched topic, the empirical part presents the results of research focused on the attitudes and experiences of university students with online procrastination and the use of social media. 530 respondents took part in the research, qualitative and quantitative research methods were used (phenomenological, hermeneutic, questionnaire survey). The results emphasize the role and status of social media as a tool for delayed performance of academic and other duties. In Conclusion, proposals are made to improve the current situation.

Key words:
Procrastination. Research. Social media. Students. Technological Interference.

Introduction

Social media is currently a stable part of their users' lives. They project a large part of their experience, experiences and daily routines into social media. In this context, we can even talk about the so-called extension of ourselves,[1] as social media at the same time change the way Internet users obtain and share information.[2] According to the latest statistics from October 2021, the world's population is 7.9 billion,[3] half of the people own a smartphone and two thirds own a mobile phone (without applications). From 2016 to 2021, the number of people owning a smartphone increased by 73.88%.[4] In 2020, the average Internet user spent 2 hours and 24 minutes a day on social media, an increase of more than 120% compared to 2012. A particularly noteworthy fact is that 50.1% of the time spent on mobile was done using **social media** apps.[5] Thus, their massive impact and the fact that smartphones and social media have become a key part of our existence can be stated. In line with the above-mentioned specifics of the digital age, social media and the new way of thinking conditioned by the Internet and digital communication (network nature of information and rhizomatic thinking, dromotropic nature of digital communication and weakened abstract thinking determined by image dominance on the Internet[6]) mention clearly needs to be made also of the phenomenon of entertainment

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penetrating into areas in which until recently it was not present at all or only minimally. We are witnessing "entertainization" of the whole society.[7] At present, terms such as fast or instant entertainment are being mentioned referring to the phenomenon that the path to entertainment (in connection with the strong preference for smart digital devices and social media of the so-called digital natives) should not be complicated and demanding. According to Gálik,[8] reference can be made here to Sartori (1997) who talks about the new anthropogenesis of man, his transition from homo sapiens to homo videns. „*Homo videns is a person who rejects difficult rational approaches such as abstraction and logical argumentation, but rather emphasizes images, emotions and entertainment.*" According to Solík,[9] an image that is more saturated with information than text also has an impact on emotions and mood and that is why iconic communication basically implies entertainment and is thus also characteristic of the phenomenon of procrastination. The dominance of images on the Internet supports entertainization, multitasking and academic procrastination. It is in this context that it is extremely important to mention that with the constant use of various types of digital media, especially smartphones, we regularly find ourselves in a situation where we are disturbed by these media. Connecting to the Internet via smartphones or tablets offers owners the opportunity to be constantly online and allows continuous interaction. These phenomena can lead to the obsessive use of technological devices and digital media, which can cause serious problems in the field of interpersonal relationships, but they can also lead to targeted avoidance of situations requiring concentration, accuracy and precision.[10] This phenomenon can be described as *technological interference* or *technoference* and affects all incidents in which the use of digital technologies disrupts people-to-people exchanges (e.g., conversations).[11] In general, we can call technoference any disruption of a real event caused by modern technologies and digital devices. Smartphones with an Internet connection constantly disturb their owners through various notifications, messages from applications, e-mails, or other suggestions which we should pay attention to (e.g., articles in popular online newspapers, new videos on subscribed YouTube channels, etc.). Therefore, it can be clearly confirmed that they also have a significant impact on the process of academic procrastination.

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1 Procrastination

The term procrastination has become relatively well known in the professional as well as non-professional spheres, although its scientific research is not long. Milgram and Tenne[12] stated that "*procrastination has a long history and a short research history*". From an etymological point of view, the term procrastination comes from the Latin verb *procrastinare* which is a combination of the adverb "pro" (indicating forward movement) and "crastinus" (referring to tomorrow) and originally had no negative connotations. Terms such as laxity, backwardness, delay or "*laziness, hesitation, tendency to postpone tasks and duties, especially due to recklessness and laziness*".[13] Milgram (1991) is considered to be the author of one of the first, multidimensional and comprehensively processed definitions, and who considers procrastination as the „*1) sequence of inefficient behaviour leading to postponing; 2) leading to a result of behaviour that is not standard for the individual; 3) concerning a task the fulfilment of which is significant for the procrastinating individual ; and 4) the result of a condition that leads the individual to a negative emotional state*".[14] Devi & Dhull[15] in this context refer to the complete avoidance of tasks and responsibilities or their postponement to a later, often unspecified time. „*To procrastinate is to voluntarily delay an intended course of action despite expecting to be worse off for the delay*."[16]

Although the term "procrastination" is currently rather negative in nature, in some cases it can also be a form of desirable behaviour. These are mainly the two situations: 1. avoiding hasty and ill-considered conclusions and decisions, in which it represents a functional form, and 2. Procrastination as part of creative process, e.g., in the Osborn model (1953) (phase of orientation, preparation, analysis, ideation, **incubation**, synthesis and evaluation) in which, within the incubation phase, we leave and postpone the problem on a conscious, rational level – but the right solution suddenly emerges. This process is sometimes referred to as *creative pause* and contributes significantly to the successful completion of the task.[17] The growing trend of procrastinating behaviour in modern society is conditioned by the number of requirements for the fulfilment of tasks within the set time schedule. Several researchers (Milgram, Steel, Ferrari et al.) state in this context that the term procrastination gained its negative meaning only during the scientific and technological revolution. Knaus[18] points to the development of procrastination in parallel with the development of mankind. In connection with the occurrence of procrastination, Steel[19] relies on its first written mentions, e.g., in the ancient Greek poet Hesiodos (around 700 BC) or the Athenian general Thukydides (around 400 BC), when it was understood negatively. We believe that procrastination is not only a contemporary phenomenon, but it has been present throughout all socio-cultural development. Based on

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research and experts' attention, many of its characteristics are revealed and it can be perceived as more plastic and complex, and not seen only as a flat and reduced identification with laziness.[20]

The categorization and differentiation of this phenomenon varies from author to author, and there are several classifications of procrastination depending on different aspects or priorities. In the literature, we find, e.g., the division of procrastination into functional and dysfunctional, active and passive procrastinators, state and trait procrastination,[21] decisional procrastination,[22] social and personal or optimistic and pessimistic procrastination. [23] One of the most common divisions of procrastination is according to the population in which the phenomenon observed occurs – we talk about general and academic procrastination. General procrastination emphasizes laziness in everyday situations in general population. About 20% of the population consistently suffers from this type of procrastination,[24] Steel[25] adds that 95% do so occasionally. The following part of the paper presents the theoretical background and results of empirical research focused on the degree and form of academic procrastination.

2 Online Academic Procrastination and Social Media

Academic procrastination needs to be differentiated from other types of such behaviour because in the population of students, especially university students, the prevalence of procrastination, regardless of gender or ethnicity, reaches the highest levels. Some people put off the fulfilment of tasks or decisions for later, others only rarely, or in specific situations and under certain circumstances. The academic environment is the typical environment in which there is a natural pressure to fulfil obligations in certain precise terms. Students are subject to increased demands for timely fulfilment of study duties, assignments, tests or other activities that are closely connected with studies at university. It is here, in the phase of planning, organizing time and subsequent fulfilment of tasks that there is room for procrastination tendencies of students which can increase in direct proportion to the number of years spent at university. We can speak of academic procrastination as of the awareness that a student must complete one or more tasks, or solve any other school activity such as, e.g., semester work, exam preparation or elaboration of a project, but they lack the motivation to fulfil academic duties in a specified period of time. It includes "*the irrational postponement of an academic activity despite the awareness of the negative consequences*".[26] So we can talk about the elaboration of school assignments and academic preparation at the last minute, which is perceived as undesirable in the academic environment. This activity is often associated with unsatisfactory learning outcomes and a

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higher degree of stress, frustration, depression and anxiety.[27] An individual may feel uncomfortable, experiencing emotional discomfort associated with conscious and voluntary postponement, but keeps continuing nevertheless. At this point, it is necessary to highlight the aspect of voluntariness. Grunová[28] adds that illogicality and irrationality of procrastination is very often considered to be its central characteristic. Schouwenburg[29] states that "*procrastination pleases neither society nor the procrastinator*". The author talks about a performance-oriented society that emphasizes success, meeting deadlines, cannot tolerate the procrastination of its own members; on the other hand, a procrastinator can increasingly experience negative feelings that come from undermining self-confidence and remorse. In summary, academic procrastination is a voluntary, deliberate, and illogical postponement of academic duties that leads to students developing negative emotional states (e.g., self-pity, anxiety, and the like).Recent studies have shown that this phenomenon is not exceptional in the general student population and can be considered almost universal. The prevalence of procrastination among university students ranges from 20%[30] to 95%.[31] From a statistical point of view, it can be stated that academic procrastination is a completely normal phenomenon and those who do not procrastinate become a minority.[32] In this context, Schouwenburg[33] adds that "*almost everyone procrastinates to some extent*" and around 95% wish to reduce their own procrastination tendency. Regarding the differences in procrastination rates between the sexes, the results of the meta-analysis of previous research studies do not show statistically significant differences. Among the wide range of potential variables that could affect procrastination is the characteristics of the task itself, which can have different levels of attractiveness for students. Tasks considered to be mundane are perceived as unpleasant, which can lead to their subsequent postponement.[34] Procrastinators are often remarkably optimistic about their ability to complete tasks and assignments in short time, with optimism accompanied by assurances that they can control everything or that they give better performance under pressure, and therefore, there is no need to start now. They are characterized by the following characteristics:

- Procrastinators are late.
- Procrastinators find it hard to start working on something.
- Procrastinators always complain about how hard things are and how busy they are.
- Procrastinators don't have systems means no proper planning to accomplish a task.
- Procrastinators usually don't finish what they start.
- Procrastinators don't prioritize task which is important for them and which is not.
- Procrastinators have too many things on their mind, and on their to-do list.
- Procrastinators often forget every important thing.

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- Procrastinators check social networks and emails constantly and most often there is nothing new to see.[35]

Procrastination is often associated with low levels of self-regulation, and although many see it as a pathological delay, it can also be a strategy that can motivate some individuals to perform better.[36] In connection with the wide range of entertainment that the Internet offers during the technoference, and in particular various types of social media, the term "online procrastination" is also increasingly used. Based on the principles of "new thinking" in the digital age (see Introduction) and the findings of You & Kang,[37] it can be stated that online procrastination in particular also leads to the transformation of way. Online procrastination is defined as „*using the Internet at work or school for non-work personal purposes, in order to avoid work or study tasks that are considered tedious, annoying or too demanding* ".[38] Online procrastination can be understood in two ways – either as procrastination in an online environment (e.g., an e-course, e-learning) or procrastination through being online. In this context, the phenomenon of netholism, which is very closely linked to procrastination, can also be mentioned – on one hand, internet addiction is characterized by an enormous amount of time an individual spends online and, on the other, procrastinators spend a lot of time online to delay their duties. Marano[39] states that the primary source of the procrastination boom is precisely the chat and online communication. In connection with online procrastination, several forms can be categorized, e.g., cyberslacking, which is more commonly used in the work-related context and represents behaviour when an employee uses the Internet at work for purposes that are not related to the performance of the work. In academia, cyberslacking behaviour affects students' educational performance and damages their cognitive and retention abilities, mainly due to the surfing of unrelated digital media during class time. Similarly, the term cyberloafing is used, which is basically a waste of time at work through the computer – often under the guise of real work. According to Coker,[40] another form of online procrastination is the so-called personal web usage, which is any voluntary act of using the Internet for personal purposes during working hours or during classes, e.g., playing digital games, shopping online or watching social networks, which can waste time and reduce quality and productivity at work.

Thus, it can be said that the current media-saturated environment and the Internet provide a much greater number of opportunities for procrastination than ever before. For the generation of digital natives who are "permanently online", social networks, streaming audio-visual services, YouTube or digital games are just a few clicks away and provide an easy and immediate distraction from aversive tasks and responsibilities even in the situations and places which would be referred to in the past as "media-free environments". „*In the face of unpleasant obligations, the constant availability of entertaining media content and online communication may thus represent a strong temptation and provide a welcome escape*."[41] The use of traditional

[35] DEVI, R., DHULL, P.: Procrastination: A Behavior Need to be Changed to Get Success. In *International Education & Research Journal*, 2017, Vol. 3, No. 5, p. 475-476.
[36] KIM, K. R., SEO, E. H.: The Relationship between Procrastination and Academic Performance: A Meta-analysis. In *Personality and Individal Differences*, 2015, Vol. 82, p. 28.
[37] See: YOU, J. W., KANG, M.: The Role of Academic Emotions in the Relationship between Percieved Academic Control and Self-regulated Learning in Online Learning. In *Computers & Education*, 2014, Vol. 77, p. 125-133.
[38] THATCHER, A. et al.: Online Flow Experiences, Problematic Internet Use and Internet Procrastination. In *Computers in Human Behavior*, 2008, Vol. 24, No. 5, p. 2238.
[39] MARANO, H. E.: Getting Out from Under. In *Psychology Today,* 2006, Vol. 39, No. 2, p. 41.
[40] COKER, B. L. S.: Workplace Internet Leisure Browsing. In *Human Performance*, 2013, Vol. 26, No. 2, p.117.
[41] REINECKE, L. et al.: Permanently Online and Permanently Procrastinating? The Mediating Role of Internet Use for the Effects of Trait Procrastination on Psychological Health and Well-being. In *New Media & Society*, 2018, Vol. 20, No. 3, p. 863.

offline entertainment such as watching movies or TV and the use of new interactive online media such as social network sites provides pleasurable experiences, positive affect, and media enjoyment. For individuals high in trait procrastination, the use of media content should thus be a highly attractive substitute activity. Rozgonjuk et al.[42] also confirm that procrastination can be deteriorated by technologies such as smartphones and social media. Myrick[43] presents the results of an extremely interesting research in which he analyses the correlation of Internet procrastination and monitoring of online content depicting cats. The results of the research were significant and confirmed the connection of cat followers with the implementation of an increased rate of online procrastination. The author states that in 2014, more than 2 million of videos with cats were posted on the Internet and the total number of views was almost 26 billion (this is an average of 12,000 views per each cat video – more views than in any other YouTube content category). The research found that social network users post photos or videos of cats twice as often as selfies. Myrick even defines cat content on the Internet as „*popular culture phenomenon rooted largely in social media platforms*“ and confirms that the consumption of cat-related online media deserves attention of scientists. Internet and social media users spend a considerable amount of time consuming cat-related media content instead of performing other activities and tasks primarily related to work or study, thus confirming the presence of procrastination. Procrastination is clearly present in this context also because individuals are attracted to watching cat-related videos because of some animal cuteness, which is associated with hedonistic experiences and pleasant feelings. However, if these videos are watched in order to delay unpleasant tasks and responsibilities, they evoke feelings of guilt in the watchers.

3 Main Aim and Methodology

The main goal of the paper is to examine the extent and specific manifestations of online academic procrastination with a view to identifying young people's attitudes and experiences with this behaviour, based on theoretical background and empirical research. The research subjects were students of Slovak universities aged 17 –25, members of both sexes. Qualitative and quantitative methods were used in the research process. In the theoretical part, the phenomenological approach was primarily applied, which suits itself best for capturing the essence or eidos of the Internet and social media. At the same time, it was also used to describe the theoretical background of the issue of procrastination and technoference. The hermeneutic method was also used as a complementary part of research. In empirical part, quantitative research strategy was dominant, the main research tool was a questionnaire created by the authors. In the study, the methods of analysis, synthesis, comparation as well as generalization of data or their graphical representation were used. Since the research was exploratory, in this case, the hypotheses were not formulated but several assumptions were made, based on the comparison of the literature and previous research of the issue:

1. We assume that the majority of respondents mainly implement the online form of procrastination (use of the Internet and its possibilities).
2. We assume that the most preferred way of online procrastination is monitoring of social networks.
3. We assume that most respondents will be disturbed by a smartphone and pay attention to it, despite working on academic assignments and tasks.

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[42] ROZGONJUK, D. et al.: Social Media Use in Lectures Mediates the Relationship between Procrastination and Problematic Smartphone Use. In *Computers in Human Behavior*, 2018, Vol. 89, p. 193.
[43] See: MYRICK, J. G.: Emotion Regulation, Procrastination, and Watching Cat Videos Online: Who Watches Internet Cats, Why, and to What Effect? In *Computers in Human Behavior*, 2015, Vol. 52, p. 168-176.

The obtained data were analysed and evaluated, and certain conclusions and opinions were drawn from them which are presented in the following chapter of the paper.

4 Interpretation of Research Results

The research focused on examining the current state and occurrence of online procrastination among university students with a special emphasis placed on their experience and preferred use of digital and social media in this process. The research sample consists of 530 students of Slovak universities, of which 72.6% are women. The questionnaire contained several types of questions (statement questions with measuring the degree of agreement – disagreement, multiple-choice questions, open-ended questions for expressing the opinions of the respondents). The basic subject of the research was to identify the rate and incidence of procrastination among university students; the results from the introduction of the questionnaire showed that more than 91% of the respondents tend to procrastinate. In the first question, we made enquiries as to whether the respondents associate the process of academic procrastination primarily with the Internet medium and its possibilities (videos, applications, chat, social networks, digital games, online series, etc). Respondents were asked to express the degree of their agreement or disagreement, with the result that 95.8% of the students "agree" or "strongly agree" with this statement. Thus, it can be clearly confirmed that for most students, procrastination equals being online. In the following (multiple-choice) question, which concerned online activities and activities during procrastination, more than 79% of the students answered that they were engaged in social networking and chatting or other communication on online communication platforms. Watching online series and movies via Netflix, HBO GO (67.4%) streaming services or YouTube (65.1%) was also popular. Almost 18% of the respondents procrastinate by playing digital games and less than 9% watch erotic content. When asked to choose only one activity which they carry out the most during online procrastination the majority of the respondents favoured checking social networks content (30.9%). It should be noted that the results generally copy previous answers – the second most popular activity is chatting and online communication (25.7%) and watching series and movies via streaming platforms (17.9%) or YouTube (16.6%).

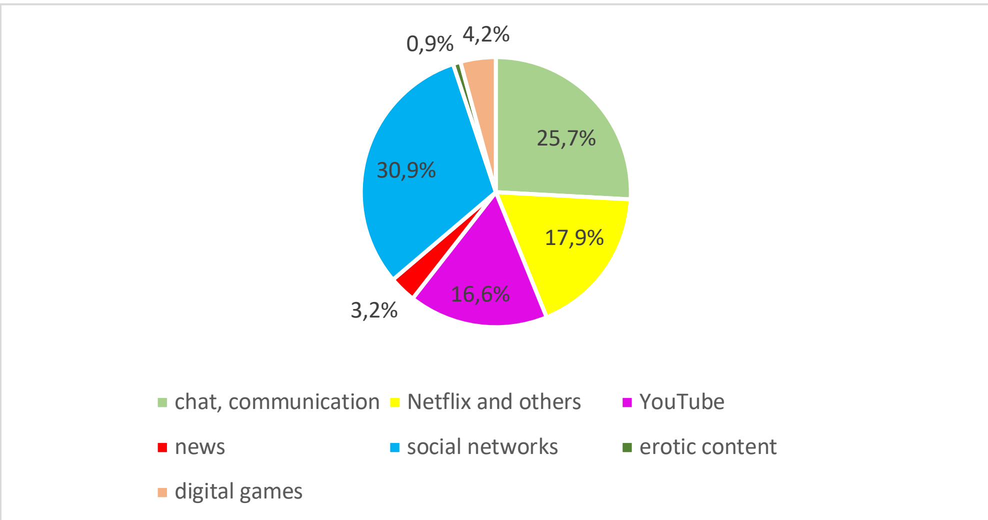

Chart 1: The most preferred online procrastination activity
Source: Own processing.

We were interested in which offline activities the respondents carry out when procrastinating. More than 60% of the research sample procrastinate by meeting their family relatives or friends or by cleaning; cooking (43%), doing sports (37.7%) or beautifying oneself (nails polishing, doing make-up, hairstyles, etc.) are also among popular procrastination activities. A quarter of the respondents also prefer reading books; students also report sleeping or doing crafts or playing musical instruments. Based on the research results, it can be stated that **assumption no.1** that *the majority of respondents mainly implement the online form of procrastination (use of the Internet and its possibilities)* and **assumption no.2** that the most preferred way of online procrastination is monitoring of social networks **were confirmed**. In the next question, the respondents were asked to state which media and devices they use during academic procrastination, while several answers could be marked. Almost 99% of the students use their smartphone to procrastinate and 90.6% of them also procrastinate using a computer/laptop. More than half of the respondents procrastinate simultaneously by watching television; tablets and game consoles were identified by 10% of the students. When asked about the choice of one medium or device that respondents use most during academic procrastination, 87% of them labelled a smartphone and almost 12% prefer to procrastinate via a desktop or laptop computer. The smartphone is a complex multifunctional medium that implies all the possibilities of the Internet, from communication, watching social networks, to entertaining audio-visual content or digital games, so it is no surprise that most students use this device most frequently.

In the context of several research studies aimed at finding out the feelings of procrastinators, a question focused on the emotional experience of procrastination was also included in the questionnaire. The respondents were asked to indicate all the feelings they experience during procrastination. The results of the research brought interesting data, as most students experience strongly negative emotions despite procrastinating voluntarily and to a large extent. Almost 69% of them experience remorse, stress (53.3%) and fear that they not be able to submit or complete study assignments (54.2%). Approximately 40% of the respondents report feelings of guilt, frustration, feelings of failure and self-deception or self assurance (e.g., *"I perform better when under pressure"*). Only less than 20% of the respondents experience pleasant feelings such as joy, relaxation or good mood during procrastination. In this question, the respondents could also provide their own answers which were extremely remarkable and even alarming. For example, one of the respondents stated: "*I am extremely nervous and frustrated when procrastinating, and it affects my life in a negative way, which is why I am trying to fight it but it doesn't always work out.*" Another student said she was experiencing "*feelings of helplessness. If I do not enjoy something, nothing will save me. No self-harm, no better diet, no better sleep and no more caffeine. ... What destroys me when I'm procrastinating or unable to concentrate is that even if I have absolutely nothing – no cell phone or a PC, I wouldn't do the task*".

The next part of the questionnaire was focused on the issue of technoference and seeking interconnections with the process of academic procrastination, for which questions in the form of statements were used, and the students were supposed to express the degree of agreement – disagreement. In connection with examining the impact of technoference on the students and their academic preparation, we formulated the following statement: "*While working on academic and school assignments, I get distracted by my smartphone even though I have other duties*." Approximately 34% of the students "strongly agree" and almost 51% "agree", thus confirming that technologies have a truly dominant influence and can distract and constantly disturb them, especially smartphones and various alerts, chat messages, e-mails and the like. This clearly has a negative impact on the educational process and it can be confirmed that procrastination still persists for this reason. At the same time, in the area of technological interference, we also defined a control question for the respondents – a statement with the following wording: "*If I do not have a smartphone with me when preparing for classes, I procrastinate less.*" The research showed that almost 76% of the respondents "agree" or "strongly agree" with the statement. Based on the research results, the correlation between technological interference and online academic procrastination can be unequivocally confirmed. Therefore, at this point we state that **assumption no. 3** *that most respondents will be disturbed by a smartphone and pay attention to it, despite working on academic assignments and tasks* **was confirmed**.

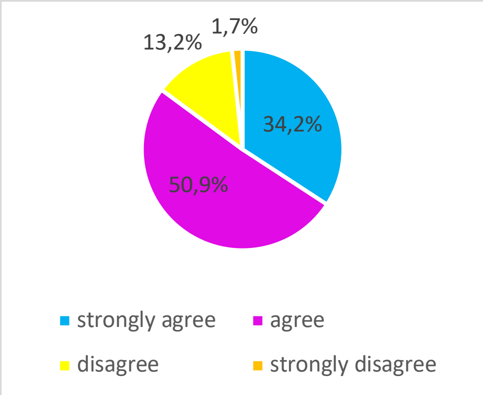

Chart 2: I get distracted by my smartphone
Source: Own processing

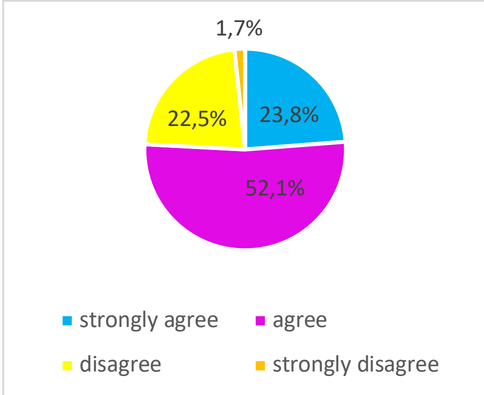

Chart 3: I procrastinate less without a smartphone
Source: Own processing

As part of the study of attitudes and experience with online academic procrastination, the statement "*Although I know that the deadline for submitting academic assignments is close and I no longer have much time, I continue procrastinating online*" was formulated. Understanding the term "I no longer have much time" was a limit to this question because each respondent can think of a different time horizon (a day, three days, a week) in this context, depending on the complexity of the academic assignment. Therefore, the results also showed almost balanced data – 48.1% of the respondents expressed their disagreement and less than 52% of the students stated that they "agreed" or "strongly agreed" with the statement. Another question related to the time management of study obligations focused on the fact whether the respondents start working on the academic assignments as soon as they are assigned. The results were not surprising as only 3% of the students answered positively. More than 73% of the respondents were in favour of "disagree" or "strongly disagree" answers, which again confirms the high rate of (online) procrastination and its negative consequences on the study as well as personality. One of the aims of the research was also to find out the reasons for online procrastination. Therefore, in this context, the respondents were asked the following statement question: "*I procrastinate online to avoid working on annoying or demanding academic tasks*." Almost 74% of the students "strongly agree" (21.9%) or "agree" (49.8%). Based on this, the findings from the theoretical part can be confirmed saying that the most common reason for procrastination is to postpone boring, uninteresting or demanding study obligations until later. In the last part of the questionnaire, two more statements were formulated concerning online procrastination on social media. Through the first, we looked at whether it was difficult for students to stop procrastinating and focus on completing academic assignments when they were involved in a chat or ongoing online conversation. 67% of the respondents agreed in full or in part. A similar, even stronger agreement of the respondents was confirmed also in the last statement: "*I spend more time on social networks than I originally intended because I am automatically suggested relevant, interesting content*", which almost 78% of the respondents agree with. Thus, it can be stated that social media bring respondents precisely targeted content based on various algorithms and other specifics so that they are interested and spend their time consuming it.

Based on theoretical reflection and the results of the empirical research, it is clear that social networks and the media are, by their nature and characteristics in times of technological interference, a significant tool for academic procrastination of university students.

5 Discussion

Procrastinators are very active people, but it is always at the expense of a task that is much more important and on which they should work. According to several studies,[44] 30-60% of university students regularly suffer from this phenomenon. In recent decades, the topic of procrastination has become increasingly interconnected with the use of the Internet and especially social media. Researchers are also focusing on the empirical study of these phenomena, thus confirming the high prevalence rate. Holdoš[45] even states that procrastination can be a key indicator of Internet addiction. Also, the amount of time young adults spend online is constantly increasing, with data from October 2021 showing an average of 35 hours per week.[46] In connection with the increase in time spent online and technoference which is determined by our technological devices, a recent study by Reinecke and Hofmann[47] showed that more than 60% of media use episodes were carried out contrary to the original and intended goals. According to research by Quan-Haase and Young,[48] students often use social media to "put off what I should do". Meier et al.[49] confirm that the use of social media at the expense of other activities, especially education, is a specific type of procrastination. Similarly, Sternberg et al.[50] state that procrastination connected with social media has unique features or that social networks have specific characteristics that trigger the procrastination process.[51] In addition, two intervention studies by Hinscha ańd Sheldon[52] found out that reducing the Internet use (e.g., Facebook or online games) led to reduced procrastination and increased life satisfaction. Pychyl et al.[53]

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[44] See: RABIN, L. A., FOGEL, J., ESKINE, K.: Academic Procrastination in College Students: The Role of Self-reported Executive Function. In *Journal of Clinical and Experimental Neuropsychology*, 2011, Vol. 33, No. 3, p. 344-357; KIM, K. R., SEO, E. H.: The Relationship between Procrastination and Academic Performance: A Meta-analysis. In *Personality and Individal Differences*, 2015, Vol. 82, p. 26-33; DOLOBÁČ, M. et al.: Personnel Management and the New System of Dual Education in Slovak Republic. In *Actual Problems of Economics*, 2016, Vol. 181, No. 7, p. 282-289; STEEL, P.: The Nature of Procrastination: A Meta-Analytic and Theoretical Review of Quintessential Self-regulatory Failure. In *Psychological Bulletin*, 2007, Vol. 133, No. 1, p. 65-94.

[45] HOLDOŠ, J.: Závislosť od internetu u mladých ľudí. In *Výchova a vzdelávanie ako nástroj (de)formovania hodnotového systému spoločnosti*. Ružomberok : Katolícka univerzita v Ružomberku, 2013, p. 9.

[46] DEYAN, G.: *How MuchTime Do People Spend on Social Media in 2021?* [online]. [2021-10-07]. Available at: <https://techjury.net/blog/time-spent-on-social-media/#gref>.

[47] See also: REINECKE, L., HOFMANN, W.: Slacking off or Winding down? An Experience Sampling Study on the Drivers and Consequences of Media Use for Recovery versus Procrastination. In *Human Communication Research*, 2016, Vol. 42, No. 3, p. 441-461.

[48] QUAN-HASE, A., YOUNG, A. L.: Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging. In *Bulletin of Science, Technology & Society*, 2010, Vol. 30, No. 5, p. 356.

[49] MEIER, A., REINECKE, L., MELTZER, C. E.: "Facebocrastination"? Predictors of using Facebook for Procrastination and its Effects on Students' Well-being. In *Computers in Human Behavior*, 2016, Vol. 64, p. 69.

[50] STERNBERG, N. et al.: When Facebook and Finals Collide - Procrastinatory Social Media Usage Predicts Enhanced Anxiety. In *Computers in Human Behavior*, 2020, Vol. 109. [online]. [2021-10-27]. Available at: <http://selfcontrol.psych.lsa.umich.edu/wp-content/uploads/2020/04/Sternberg-Luria-Vickers-Kross-Sheppes-2020-When-Facebook-and-Finals-Collide.pdf>.

[51] ALBLWI, A. A. et al.: Procrastination on Social Media: Predictors of Types, Triggers and Acceptance of Countermeasures. In *Social Network Analysis and Mining*, 2021, Vol. 11, Article No. 19. [online]. [2021-10-27]. Available at: <https://link.springer.com/article/10.1007/s13278-021-00727-1>.

[52] HINSCH, C., SHELDON, K. M.: The Impact of Frequent Social Internet Consumption: Increased Procrastination and Lower Life Satisfaction. In *Journal of Consumer Behaviour,* 2013, Vol. 12, No. 6, p. 499.

[53] See: PYCHYL, T. A. et al.: Five Days of Emotion: An Experience Sampling Study of Undergraduate Student Procrastination. In *Journal of Social Behavior and Personality*, 2000, Vol. 15, No. 5, p. 239-254.

confirmed in their research that procrastination is associated with tasks that are stressful, challenging or boring. Panek[54] found that when taking into account the correlation between self-control and increased media use, students stated that they felt guilty for spending too much time online on social networks at the expense of study and academic obligations.

Conclusion

We emphasized and identified the topics discussed above also in our research. The aim of the paper was to examine the issue of online procrastination and social media from a theoretical-empirical point of view. Based on the results of our research, it can be confirmed that social media currently – in the age of technoference represent a specific environment and opportunities which can significantly increase the rate of procrastination. In view of this, emphasis needs to be placed on developing certain measures and proposals to improve the current situation. This could be, for example, targeted digital detox or the use of tools such as calendars, timers or other applications that record time spent on social media. This allows users to get a better idea of the real time they spend online, at the expense of academic work. It is appropriate to strengthen critical thinking and to train the ability to manage one's time. These areas are also an important part of media education and literacy, which can be in times of technological interference considered a key element in the fight against online academic procrastination within the given topic.

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CORPORATE ENVIRONMENTAL RESPONSIBILITY AS A SOURCE OF SUSTAINABLE COMPETITIVE ADVANTAGE

Jana Hroncová Vicianová

Abstract
Corporate environmental responsibility in business practice should focus mainly on limiting negative impacts on the environment, investing in environmental technologies and evaluating the environmental performance of the company. Within this context, it represents a constraint for many small and medium-sized enterprises, which represents an increased expenditure in its implementation, but on the other hand, it highlights the importance of ensuring sustainable management and, at the same time, brings economic effects in the form of increased efficiency and effectiveness of product production, growth in the competitiveness of the enterprise, employment, productivity and, ultimately, the financial performance of the enterprise, which can be considered as a source of sustainable competitive advantage. The article presents the results of its own research, analyses and evaluates the application of selected elements of environmental responsibility in small and medium-sized enterprises in Slovakia and identifies potential sources of competitive advantage for the enterprise.

Key words:
Competitive advantage. Eco-innovation. Environmental responsibility of enterprises. Enterprise. Investments in environmental technologies. Sustainable business.

Introduction

Climate change and its impact on society and the economy represent one of the most significant challenges of our time. Environmental responsibility in business has started to gain importance not only at the level of professional and scientific discussions at national and international level, but in recent years it has also increasingly dominated business circles not only through legislative guidelines but also on a voluntary basis. World business leaders are not only actively seeking solutions for a gradual transition to an environmentally sustainable production and consumption model, but are also setting the trend in sustainable business. Their influence thus creates the need to respond flexibly to changes in business and to gradually adapt the production process in order to maximally the potential of resources. Not only Slovakia, but also other countries in Europe and the world are facing many challenges in the field of social responsibility, which mainly concern social and environmental issues. One of the problems is the fact that the Slovak economy is currently dominated by small and medium-sized enterprises, which often lack the financial and human resources to implement all the principles of a comprehensive concept of socially responsible business and at the same time maintain the economic prosperity of the enterprise. Corporate social responsibility and profit-making are often perceived as opposites. The comprehensive application of corporate social responsibility and all its principles may cause entrepreneurs to be concerned about increased expenditure. For SMEs, the solution may be to start applying a partial concept - e.g. corporate philanthropy, which can be further developed in the social area of corporate social responsibility and the company will gradually start to adopt other principles in the economic and environmental area of the concept. According some author[1], the environmental area of CSR was mentioned in 59% of the 37 definitions of CSR, the economic area was mentioned in 86% of the definitions, and the social area was mentioned in 88% of the definitions. We

[1] DAHLSRUD, A.: How CSR is defined: an Analysis of 37 definition. In *Corporate Social Responsibility and Environment Management*, 2008. Vol. 15, No. 1, p. 5. [online]. [2021-10-10]. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/csr.132/pdf >.

can conclude that this area pulls the short end in the definitions. However, in the European Commission's definitions, the environmental area and the environmental aspects of business are firmly part of the concept of corporate social responsibility, through the voluntary integration of environmental aspects into their business activities and interactions with stakeholders[2] and through taking responsibility for all their impacts on society in order to identify, mitigate or prevent potential adverse impacts[3]. Slovakia is characterised by a large number of energy-intensive sectors of the economy, which are characterised by inefficient management of waste, water and emissions, while activating unsustainable patterns of consumption and production. Also many strategic documents of the European Union[4] in the environmental field point to the transition of countries to a green economy as an opportunity to develop their economy on the principles of sustainable management of their natural capital. Accordingly, corporate environmental responsibility is now becoming an equal area of corporate social responsibility and is thus becoming an important prerequisite that will not only reverse negative environmental trends, but also encourage the use of cost-effective tools to addressenvironmental issues, thus also becoming a source of investment. One option is a voluntary approach to environmental protection by business.[5]

1 Theoretical background

Enterprises can apply corporate environmental responsibility by monitoring and reducing the negative environmental impacts of the enterprise, e.g. by reducing energy and material resources, investing in environmental technologies or eco-innovation, eco-production, waste recovery and the use of eco-packaging. Eco-innovation is any innovation aimed at making significant and visible progress towards sustainable development by reducing environmental impacts or achieving more efficient and responsible use of natural resources, including energy[3]. Today, we can speak of a growing interest in eco-innovation among young people. The increase in market demand for green products is also related to the fact that young people have a higher awareness of the environment[6], climate change, the use of alternative materials, greener production processes, distribution, packaging[7] and eco-design[8]. Environmentally

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responsible businesses are often considered prestigious[9] and as such, their stakeholders distinguish them from environmentally irresponsible businesses.[10] Benefits accruing to businesses from the application of environmental responsibility can take the form of a means to gain a better standing in the eyes of the public and especially customers, increased profits, greater customer loyalty, increased trust, positive brand attitudes, and present an opportunity to avoid negative publicity[11] or can increase social awareness and environmental awareness of conscious customers[12], enable new markets to be developed, positively influence customer loyalty and facilitate purchasing decisions[13], or influence their future decision making[14]. Closely related to these benefits is the sustainable competitive advantage that businesses can gain from applying environmental responsibility. Profesor Porter[15] defined competitive advantage as the ability of an enterprise to generate more value for itself and its stakeholders than competing enterprises. This can be achieved by offering higher value products or services. According this author[16] considers the creation of shared value within areas where, for example, the state has failed as a source of sustainable competitive advantage. Businesses can improve the environment, achieve sustainability, make production more efficient by reducing water consumption, energy, emissions, reduce waste e.g. by eliminating redundant packaging. The more sustainable a competitive advantage is, the more difficult it is for competitors to neutralise its effect. Gupta[17] considers customer satisfaction and corporate reputation as the key components of competitive advantage through which a company can achieve a more advantageous position relative to its competitors. In this regard, state that the development of new environmentally sustainable products and services leads to higher efficiency of resource investment, better market, better corporate branding, higher sales, and ultimately to sustained competitive advantages. In the concept of corporate social responsibility, enterprises can also evaluate the proportion of suppliers complying with internationally recognised environmental standards, through which not only manufacturing enterprises but also non-manufacturing enterprises can prevent the activities of enterprises that do not comply with environmental protection laws. Supplier selection can have quite a significant impact and a chain reaction when an important member of the supply chain implements the principles by taking into account the environmental responsibility of the

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supplier or includes it in their selection criteria, influencing their suppliers or potential suppliers who also start to engage in social or environmental responsibility[18]. The introduction and implementation of environmental management and the evaluation of the environmental performance of the enterprise, assuming the evaluation of investments in environmental solutions, can greatly influence the effectiveness of the evaluation of their return and is related to the obligation of enterprises to evaluate the environmental impact of their activities on the environment. There is no doubt that there is now a growing number of investors who are targeting investments in specific social, environmental or economic projects, including those outlined in the Sustainable Development Goals[19], which may represent a source of competitive advantage for companies that apply environmental responsibility. Increased activity in this area by companies in manufacturing sectors is also linked to companies' efforts to change negative perceptions of society in relation to manufacturing as a whole. This particularly affects energy-intensive industries[20]. Environmental responsibility is also declared by enterprises through joint environmental protection programmes, where a certain environmental problem can be shared and jointly solved. Such partnerships are formed between companies within individual sectors, sometimes in cooperation with an NGO that is the guarantor of this cooperation. The interest in environmental tools in corporate practice is increasing, especially from companies in the manufacturing sector. The implementation of environmental management systems (EMS) is seen as an environmental organisational innovation. Environmental management system certification in Slovakia according to ISO 14001 is a part of the overall management system in a company, which includes the organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for preparing, implementing, achieving, reviewing and maintaining environmental policy. A certified EMS in terms of ISO 14001 is a tool to enable an increase in the competitiveness of the enterprise, a preventive tool to minimize the consumption of raw materials and energy, prevent waste and environmental accidents, as well as a tool to demonstrate the quality and credibility of the established environmental management system[21]. ISO 14001 is a globally applicable voluntary internationally recognized standard that allows companies to certify also a certain part in the enterprise (economic centre, warehouse or only a certain activity, process, personnel department), EMAS is a European standard applied in EU countries and allows participation in the EMAS scheme only to the business unit as a whole. The actual competitive advantage from the application of environmental responsibility can take the form of the social capital of the firm and the reputation that the firm gains, and the reputation that the firm gains, reputational improvements in the local community, but also mitigation of legal measures, e.g. direct financial savings associated with environmental and social practices [22]. According to other authors[23], competitive advantage arises for businesses mainly from implementing

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environmental practices in the strategic management of the business and from differentiating themselves from competitors. In relation to the mentioned sources of competitive advantage that could accrue to enterprises from the application of social responsibility in practice, several researches have been conducted that confirm[24] or do not confirm the causality of good financial results and the implementation of responsible activities in practice[25].

2 Data and Material

The aim of the present paper is to analyse and evaluate the application of selected elements of environmental responsibility in enterprises in Slovakia and to identify the possibilities of gaining a competitive advantage for the enterprise. We have analysed the issue under study by means of a primary survey, the aim of which was to analyse the environmental responsibility of enterprises in selected sectors in Slovakia. The survey was carried out in May 2021 and 64 enterprises participated, including 14 micro enterprises, 27 small enterprises, 17 medium enterprises and 6 large enterprises. Almost half of the enterprises were in the food industry (45%), 11.5% were in the agriculture sector, 22% were in the tourism industry and the rest were in the chemical and pharmaceutical industry (7%), paper and pulp industry (7%) and other industries. In terms of territorial distribution, all counties were represented in the research sample and 92 % of the enterprises had exclusively domestic capital. In addition to the primary survey, we also used secondary data sources, namely available statistics in the area. In accordance with the aim of the study, the subject of the research is defined as corporate environmental responsibility and the object of the research is enterprises in selected sectors in Slovakia. The key methods of scientific investigation are methods of classification analysis, comparison and abstraction; methods of quantitative analysis using statistical methods of information processing and evaluation and methods of synthesis and partial induction in drawing conclusions of the research.

3 Results and discussion

Thus, in our survey we focused on the efforts of enterprises in the field of environmental protection beyond the legislative requirements, on the activities that enterprises carry out in the environmental field, on the introduction of eco-innovations in corporate practice, on the existence of a research and development department, also a document declaring the environmental policy in the enterprise, and on the benefits that enterprises have identified after the introduction of the principles of environmental responsibility, which can potentially be a source of sustainable competitive advantage. The specific activities that enterprises undertake in the environmental field are captured in Chart 1. As part of the examination of enterprises' environmental efforts, enterprises were given the opportunity to indicate a number of options and to indicate the level of the activity on a scale from 0 to 5, with 0 indicating no activity and increasing activity towards 5 in that area. In the graph we can observe that, for example, material saving is rated as a reasonable activity by 20 enterprises, it is applied to an increased extent in 9 enterprises and 7 enterprises are developing the highest possible level of activity in this activity. Water efficiency is practiced to an increased to the highest possible

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extent by 12 enterprises, moderate activity by 30 enterprises and adequate (3 points) by 25 enterprises.

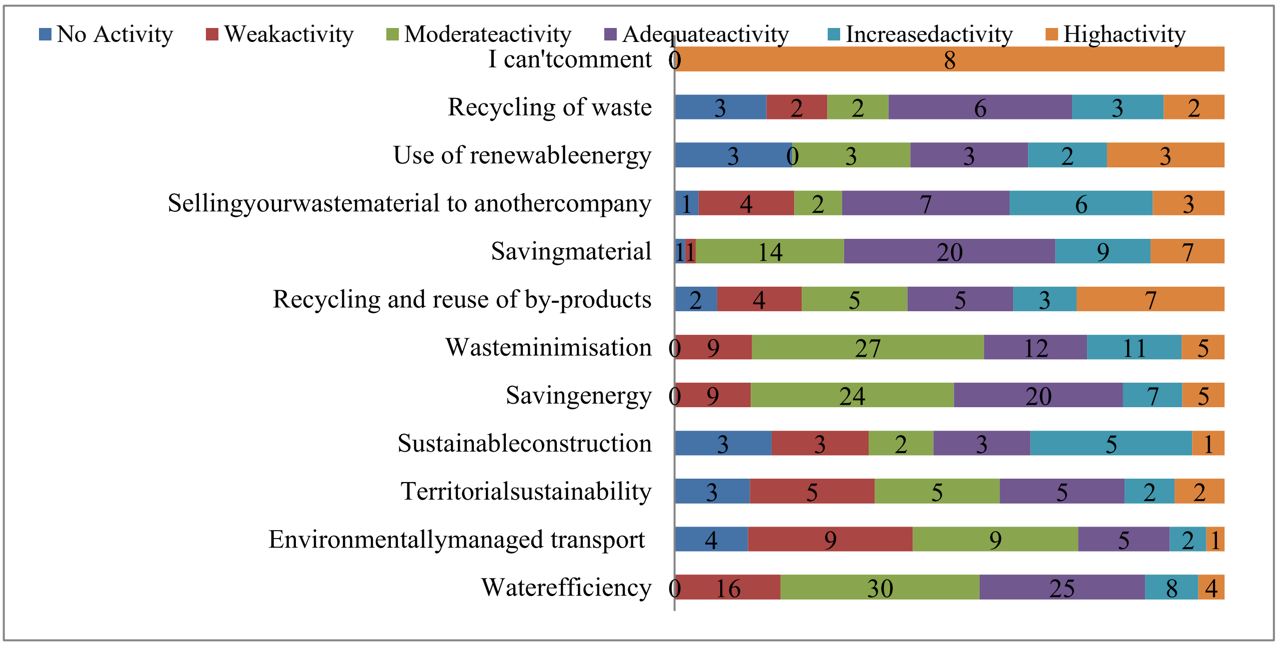

Chart 1: Environmental activities of companies in the field of corporate social responsibility
Source: Own processing.

The implementation of environmentally responsible measures in business (e.g. environmental management, eco-labelling, etc.) lags slightly behind the innovative activities of small and medium-sized enterprises in Slovakia[26]. During 2019, almost a third (31.2%) of SMEs implemented environmentally responsible measures in their business. The majority of these enterprises (70%) do not have their own science and research department, and 28% of enterprises have an approved environmental policy document. The existence of a document declaring an environmental policy in an enterprise, especially in energy-intensive sectors, indicates the responsibility of the enterprise towards the environment. The document should declare compliance with relevant environmental legislation and standards, eliminate or at least minimise the environmental impact of the activities and operations carried out by the enterprise on its affected environment and protect the environment beyond the legislative requirements. Thus, almost one third of enterprises in the surveyed set declare environmental responsibility in a formal way. These are mostly medium-sized (8) and large enterprises (4). The number of small and micro enterprises that have a formalised environmental policy document is 6. Although businesses are often reluctant to adopt the principles of corporate environmental responsibility, especially in manufacturing companies, this move can not only save money by avoiding fines, but can also have direct economic benefits, as effective environmental management represents a reduction in costs and the prospect of higher profits for businesses. As we consider a formal document declaring an environmental policy to be crucial, we investigated whether there are differences in the application of selected environmental activities in enterprises that have such a document and in enterprises that do not (Chart 2).

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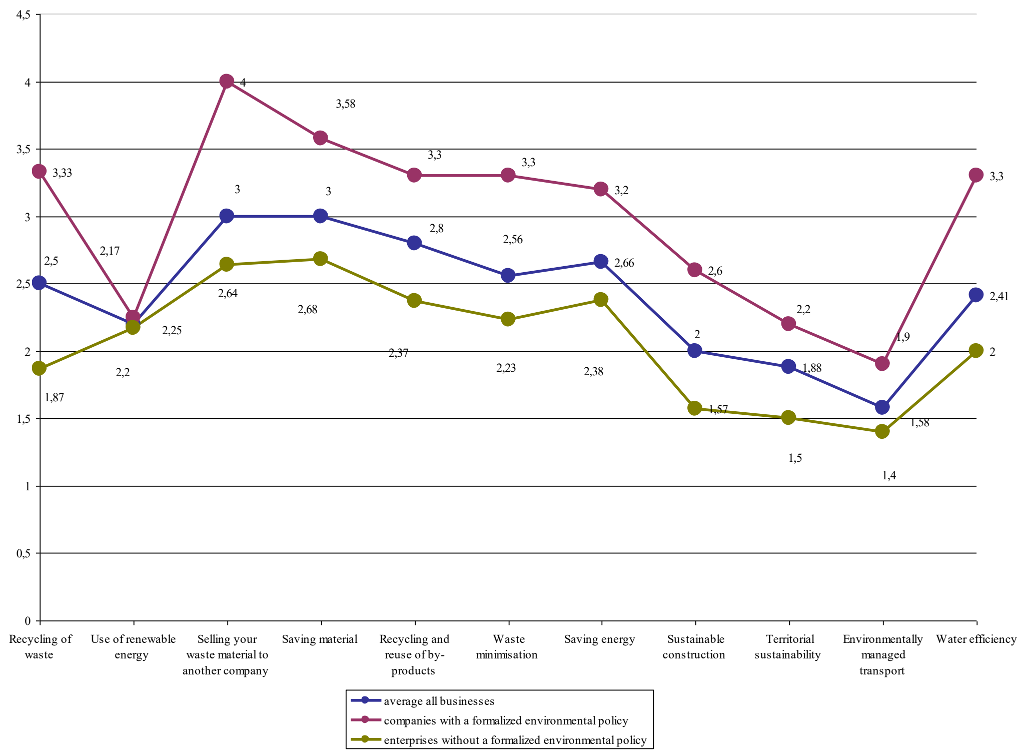

Chart 2: Corporate environmental CSR activities by formalisation of environmental policy in the company
Source: Own processing.

Based on the above results, we can conclude that enterprises with an approved document show higher values in all activities than enterprises without an approved document. Eco-innovations elevate the importance of environmental responsibility not only in a way that leads to the minimization of negative environmental impacts and the protection of the environment, but also by bringing economic effects in the form of increased efficiency and effectiveness of product production, growth in the competitiveness of the enterprise, employment, productivity and, ultimately, the financial performance of the enterprise. Currently, not only the industrial sectors in Slovakia have the potential to use eco-innovation in the whole structure of economic activities, to develop new technologies and knowledge as well as to create and develop socially responsible business. In our survey, 61% of enterprises have introduced some kind of eco-innovation. 8 enterprises have introduced product or service eco-innovation, 5 enterprises have introduced service eco-innovation, 14 enterprises have introduced process eco-innovation, 3 enterprises have introduced organisational eco-innovation. More than half of the enterprises (67 %) have introduced eco-innovation within a timeframe of one to two years, 20 % of enterprises within one year, 13 % of enterprises less than half a year.

Up to 5% of annual turnover, 63% of enterprises invested in more efficient use of resources, 7% of enterprises invested 6-10% of annual enterprise turnover and 30% of enterprises could not say. Only 3% of enterprises had the highest possible share of green products and services in their annual turnover (21% or more), only 3% of enterprises had 11-20% of their annual turnover, only 3% of enterprises also had 11-20% of their annual turnover, up to 60% of enterprises had 1-5% of their annual turnover, and 34% of enterprises could not be identified. The above survey results correspond with the increasing interest in eco-friendly products and services and with some research that confirms the positive dependence between the amount of invested funds for moreefficient use of resources and the share of eco-friendly products and services in the annual turnover of the enterprise[27], and at the same time refutes the opinion, who considers the biggest problem of the application of corporate social responsibility to be the phenomenon of the stowaway, i.e. the high costs with low efficiency of the activities. A key factor in the issue of the effectiveness of corporate environmental responsibility is the benefits entailed by the implementation of the concept. Changes after the introduction of eco-packaging in the enterprises studied can be of different nature and often in the form of economic benefits. In the graph (Chart 3) we can see the changes in the improvement of the company's reputation, which 23% of the enterprises identified as a benefit that they have received from the application of the principles of environmental responsibility. In 10% of enterprises, the market demand for products in eco-packages has increased and the current market share has also increased (20% of enterprises). The highest number of enterprises report a reduction in material costs (43%), a reduction in total costs (43%) and an increase in efficiency (27%).

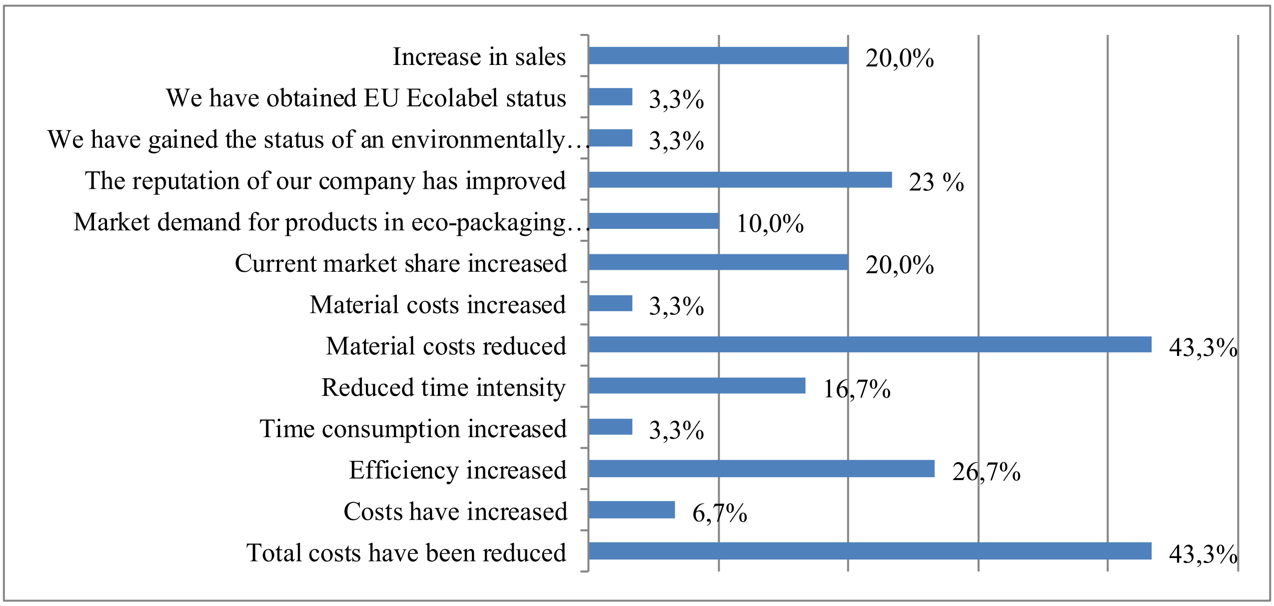

Chart 3: Identified benefits of applying corporate environmental responsibility
Source: Own processing.

Applying environmental responsibility reduces material requirements, uses closed material flows or creates or uses new materials, reduces energy requirements or creates or uses alternative energy sources, reduces overall emissions to the environment or existing environmental burdens and health risks. From the above results, we can conclude that businesses are not only primarily motivated by economic benefits, but that the motivation of businesses in applying environmental responsibility also has a social dimension. In order to develop a sustainable competitive advantage, businesses need to engage in innovative and green initiatives[28]. to achieve a positive link between business performance and environmental concerns in relation to competitiveness.[29]

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Conclusion

Developments in the field of environmental responsibility in recent years have shown that this area of corporate social responsibility is gaining importance and becoming an equal area of the concept, and at the same time an important prerequisite that will not only reverse negative environmental trends, but also stimulate the use of cost-effective tools to address environmental problems. Competitive advantage gives companies a better position vis-à-vis competitors operating in the same sector and on the same market. Achieving it is a matter of combining a number of attributes (resources) at a firm's disposal and making effective use of them. The actual competitive advantage of applying environmental responsibility can take the form of the social capital of the business, the reputation it gains, the reputational enhancement in the local community, or the direct financial savings associated with environmental practices. The results of our survey also confirm that the application of environmental responsibility in its various forms brings several positive effects that have an economic, social and environmental dimension and their value is unquestionable. In the surveyed companies, these were mainly the reduction of material and total costs of the enterprise, increase in sales, increase in efficiency, or improvement of the company's reputation. Environmental behaviour of enterprises can thus be seen as a rational step that is not only directed towards environmental protection but also towards the economic use of resources such as energy savings, raw materials, renewable resources, substitution of materials or products and recycling. An enterprise with a competitive advantage thanks to the application of environmental responsibility can have a high degree of employee or customer loyalty, respond more flexibly to customer demands and needs, provide products and services of high quality, have built superior relationships within the supply chain and these factors can outperform its competitors, which will provide it with better economic results and competitiveness in the long term.

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EUROPEAN UNION THROUGH THE STUDENTS' LENS: COMPARATIVE STUDY CASE CZECH REPUBLIC X SLOVAKIA

Ondřej Hynek – Markéta Mackuľaková

Abstract
It is more than fifteen years since the last major enlargement of the European Union. This enlargement aimed at the states of the former Eastern bloc, including the Czech Republic and Slovakia. Thus, about two generations have been living in the free world and have spent much of it in the European Union. However, what is the perception of the European Union among young students? Does the perception of the European Union differ between students according to different types of schools? Is the perception different between the capital and the periphery and between those two countries? The presented empirical research answers all the questions mentioned above, which were examined by the first generation of voters at secondary schools in the Czech Republic and Slovakia. The main research tool used was semi-structured questionnaires with subsequent identification of narratives. The results show no critical differences between the countries or regions, but the main conflict line is the schools' types.

Key words:
Czech Republic. Education. European Union. Slovakia. Students.

Introduction

The collapse of the USSR nearly 30 years ago meant that the countries behind the iron curtain occurred in the new political environment. The new environment signified particular challenges, mostly regarded to the economic and political set-up.[1,2,3,4,5] Compared to other countries as in Central Asia or in the Caucasus, European countries sought shelter under international and regional organizations like the European Union and NATO.[6,7] The year 2004 brought the much-coveted membership in the European Union for many Central and East European countries that were previously Warsaw Pact members under the control of the Soviet Union. The Czech Republic and Slovakia joined the European Union on 1 May 2004. Although there is a broad existence of research dealing with the people's perceptions of the European Union, there is only a limited number of pieces focusing on young people, especially students.[8,9] Moreover, there is a lack of information about young people's

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perception, students in the Czech Republic and Slovakia. Despite the existence and constantly undergoing polls about the perception of the European Union, the polls aim primarily at the participants above 18 years old. Therefore, this article aims to examine the generation's opinion between the 17 and 18 years old. It is essential to focus on young people as the scientific revolution has brought a significant scale of opportunities that the young generation can utilize and often takes for granted.[10] The velocity of information spreading and sharing is tremendous. Nonetheless, it constitutes several challenges and threats too. The young generation is growing up during the period of fake news. The bombardement of informaton can significantly influence dominantly the youngsters.[11,12] Also, the European Union is aware of this rapidly emerging jeopardy that likely often attack against the European Union.[13,14] The main goal of inquiry is to find out the generation's opinion that has been living the entire life or its significant period under the EU patronage in the Czech Republic and Slovakia. With this in mind, we researched and subsequently compared two conflict lines:

- Capital X Periphery,
- different types of secondary schools.

Both lines may show signs of similarities or differences, based on which we could compare the results in both countries. For the research, we formulated four hypotheses, which we aimed to verified:

1. there is a conflict line of the periphery versus the capital cities,
2. the vocational schools' students are more negative than their counterparts at grammar schools,
3. the combination of schools located in the periphery has a more negative attitude towards the European Union,
4. most of the students are happy and satisfied with life within a "common Europe".

The following chapter exposes the methodology, includes the utilized method for the sampling and the applied method for primary data collection. The methodology chapter is fragmented into sub-chapters according to each method, sampling method and primary data collection method. Subsequently, the paper illustrates the results per country. The chapters dedicated to country results show the findings according to the types of schools and regions. Analogically, the analysis shows the comparative results. Therefore, the article structures the results into two levels. Firstly, the results obtained from sampling. Secondly, it compares the results of the conflict lines and the states. The last chapter summarizes the findings with answers to verify the hypotheses and formulates the set of recommendations for policymakers and teachers regarding the educational content related to the European Union and the fake

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news. Besides that, the conclusion comprises the work's limitations. The research was funded by the University of Ss. Cyril and Methodius in Trnava, Slovakia.

1 Methodology

Methodology itself is divided into two components, as envisaged in the introduction. The first component exposes the sampling method. The second one depicts the particular method of approach for conducting the semi-structured questionnaires. The sub-chapters are therefore divided accordingly. The data collected and used for the research are data of a primary nature.

1.1 Sampling approach

The research used a combination of two types of sampling. The first approach is Quota Sampling. Quota sampling is practical when time is restricted, and a sampling frame is not available, as well as when the research budget is limited. This sampling method is a non-probabilistic type of stratified sampling.[15] We divide the population into mutually exclusive sub-groups in quota sampling, as in stratified sampling. The consequent judgment is made to select the subjects or units from each segment. Therefore, a sample is formed on particular attributes.[16,17] Herein, the research aimed at the students in the third year of secondary schools between 17 and 18 years old. The participants were selected to represent the periphery (one of the two most impoverished regions) and in the capital city. The same approach was applied in both countries; thus, it ensures the validity and credibility of the comparison—the criteria for the selection match with the purpose and goals of the study. Convenience sampling represents the second type of sampling method utilized in combination with another technique. Typically, convenience sampling tends to be a favoured sampling technique among students as it is inexpensive and an easy option compared to other sampling techniques.[18,19,20] Convenience sampling selects the participants because they are often readily and easily available; moreover, they are reachable for the research. Usually, convenience sampling tends to be a popular technique between students as it eliminates possibly emerging obstacles. This sampling method is inexpensive and an easy option compared to other sampling techniques.[21,22] For the purpose of convenience sampling, we used our networks in order to collect data quickly, promptly, and also, it secures validity as we can rely on our counterparts. Specifically, we contacted our former university classmates who are currently teaching at vocational schools and grammar schools. These schools are from the region. For the capital city, we reached out to our former or current colleagues, who were/are responsible for education in the municipality of Prague and in Bratislava, to help us distributing the questionnaires between the schools.

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1.2 Method: Semi-structured questionnaires

We applied the questionnaire method, which is defined as a way of giving the written questions and obtaining written data. It is one of the most frequent methods for mass data collection. The main advantage is getting an answer from a large number of respondents in a relatively short time, which is a significant difference from the interview. Semi-structured questionnaires are more flexible and looser than structured questionnaires. On the other hand, they are more organized and systematic than unstructured ones. It is vital that the researcher determines the nature of the questions, and these correspond with the objectives of the study and covers the fundamental themes. Therefore, the picture below shows the questionnaire structure that was provided to the students to fill out. We considered the combination of open questions and closed questions as the most appropriate approach. Also, we utilized the approach of scaling. First, this approach enables us to collect the key data regarding their beliefs, which we can easily code. Secondly, it enables us to understand their motivations and the logic behind their decision-making more profoundly. Lastly, the scaling questions serve as holistic enrichment. This nexus of combination provides us with the unique tool to receive data from all angles. The questionnaire has been provided as a Google Questionnaire template. It represented the most suitable tool due to the COVID-19 pandemic, as the classes have been conducted remotely. Below, we depict the questionnaire form.

Dear participants, as part of a 3rd degree university study cycle, we are conducting research aiming at examining the opinion of the generation that has lived its life, or most of it, under the heading of membership im the European Union. We will be happy to fill in the following questionnaire, which will take about five minutes.

What school d o you attend?

Grammar X

Vocational X

In which region do you study?

Capital City X

Other X

How do you perceive the European Union?

Positive 1-2-3-4-5 Negative

Does the European Union bring you the benefits, or do you think that the EU will bring you the benefits?

Yes 1-2-3-4-5 No

What do you consider as advantage of the EU? (up to 3 topics)

What do you consider as disadvantage of the EU? (up to 3 topics)

Choose the statement you agree the most with:

Deep integration within the EU

I do not know

Keep the current situation

Give back the competencies to the nation-states

When does the Czech Republic join the EU?

2003

2004

2005

Where would you preferably live?

Within the EU

Outside the EU

Picture 1: Questionnarie
Source: Own processing.

1.3 Limits

Research also has its limits. The central limit is the sample number, which cannot be considered entirely representative. Nevertheless, it does not mean that the research is invalid. Considering this fact, it might be taken as the pilot testing on which we can build further on. The questionnaire is limitative in the number of questions, which are not really profoundly designed as they served for swift research carried out in one year. Moreover, we had to consider the COVID-19 situation that represented a specific burden in the collection. The questionnaire did not reflect disaggregated data according to gender. Therefore, the data are classified as not-disaggregated. Although it does not necessarily mean the limit, it should be considered to disaggregate the data collection according to the gender as it might provide interesting insight into the students' thinking, and we could further, and more in-detail distinguish the findings. However, the time did not enable us to conduct this classification. As has been slightly outlined, the period was a limit. The research was funded by a university grant, which defined the research period of one year. Despite the limits, the research has its validity and credibility and must be considered as the pilot inquiry, which provides the fundamental basis for further research.

2 Results and discussion

The results are illustrated according to the countries. Within each sub-chapter, we subsequently divide the parts into smaller pieces. The results are shown in two analytical levels. The first analytical level epitomizes the obtained results from questionnaires per region and per school. This will represent the statistical information solely and identified narratives from the questionnaires. The second analytical level will compare the extracted findings between the conflict lines; thus, types of schools and the capital x periphery.

2.1 Czech republic

2.1.1 Not-disaggregated questionnaires results and Identified narratives

The unadjusted results from the questionnaire survey show different results. In general, however, an upbeat assessment of the European Union prevails, with 74% of respondents stating that they perceive the European Union positively, or rather positively. Only 3% said they perceived the European Union neutrally. The remaining 23% stated that they perceive the European Union negatively or rather negatively. Whether respondents think that the EU brings them benefits or will bring benefits, a total of 65% opted for positive points on the scale (1-2), 5% chose the neutral option (3), and the remaining 30% opted for the negative options (4-5). A particular problem arose at the moment of the choice of European integration and its path. The total number of 54% of respondents marked the variant, “I do not know”. Another 11% opted for closer integration, and 15% would leave the status quo. The remaining 19% would return competencies to the level of nation-states. Almost 75% of respondents also stated the correct year of the Czech Republic’s accession to the European Union, precisely 73% of respondents. The last point of the questionnaire is interesting. Although 23% said they perceived the European Union negatively, or rather negatively, as many as 93% said they would rather live within one of the Member States. In the narrative part of the research, respondents were asked to state two to three points for each component. The first component was for respondents to indicate what they considered to be the benefits of the European Union if they considered something to be an advantage. The main identified categorizations of narratives include the following:

1. Travel,
2. study,
3. working abroad.

The following narratives can be included in the first category:

1. The EU allows us to travel more easily,
2. we can only travel with an identity card,
3. there are no border controls,
4. thanks to the European Union, it is easier to cross borders,
5. travel is easier than before,
6. fast border crossing.

The category "study" includes narratives:
1. You can travel abroad as part of the study, Erasmus + program (declension of the Erasmus + program in all possibilities),
2. opportunity to gain internship abroad,
3. I can continue to study abroad,
4. I spent my internship in Germany thanks to EU-funded school partnerships college.

The work category contains the following identified narratives:
1. The EU makes it easier to get a job abroad,
2. during my practice, I found out how to work abroad within the EU,
3. as EU members, we have no problem working anywhere in the Union; I can work due to the lack of restrictions.

Even for negative narratives, statements can be classified according to categories. The classification of categories is most likely shown by recent topics that resonate strongly in general discourse. The first category is the failure of the SARS-Cov-2 pandemic. The second category is the poor management of the refugee wave and the "refugees" category in general. The last category is the European Union interference in national affairs. This topic also resonates strongly in the political and general discourse in the Czech Republic. I list the selected narratives belonging to the categories above-mentioned below. The European Union is failing to address important issues such as COVID. The EU is unable to deal effectively and quickly with issues such as the refugee crisis or the pandemic. The EU is not able to address today's great challenges such as refugees, geopolitics or COVID. The EU has taken away the rights of nation-states, which is why policy solutions are slow and ineffective. The Union interferes too much with national events and dictates conditions. The decision-making competence of each of the states is lost. The European Union has failed to resolve the pandemic. It has previously failed to deal with the influx of refugees. However, statements such as the insufficient defence of human rights outside the EU or insufficient defence and foreign policy also appeared among the narratives. Unfortunately, there was no deeper description of the narratives mentioned.

2.1.2 Comparison of the conflict lines

The first line of conflict: the periphery X of the capital does not show significant differences. The differences are only minimal. In other words, the overall results of the grammar school and vocational schools from the periphery have the same results as the capital. Although the difference arises in the second line of conflict representing the typology of schools included in the research. Therefore, we can typify the types of schools as the main conflicting line, regardless of their geographical location. In general, vocational schools have a more negative perception of the European Union than grammar schools. Negative perceptions manifested themselves mainly within the framework of narratives; however, even according to the questionnaire survey results, we can observe greater negativity in selected answers of vocational schools. The perception of the European Union by vocational school students is without minor deviations around 50 to 50, while in grammar schools, positive perceptions prevail with more than 88%. A common problem for both types of schools is knowledge about the European Union. It is important to emphasize that the research has been designed that way, so possible shortcomings emerge from narratives rather than fixed questions. However, the year of accession to the EU has been a problem. Herein, grammar schools showed better knowledge, but not significantly—about 10%. Incorrect knowledge of the EU's competencies, just poor wording or insufficient explanation, however, points to the possibility of limited knowledge of the EU's functions and competencies. For example, the narrative *Thanks to the European Union, it is easier to cross borders* can be misleading because it is the Schengen area, which includes countries outside the EU and at the same time, some EU countries are/were not members of the Schengen area. However, this can be lousy wording or description. With negative narratives, we can observe that grammar school students often mention human rights, foreign policy and security and similar topics, which are undoubtedly relevant to EU policies and EU competencies. However, the main narratives identified in both types of schools are Sars-COV-2 and the migration crisis. There is a space for a deeper examination of whether students understand the competencies of the European Union and the role of nation-states.

2.2 Slovakia

2.2.1 Not-disaggregated questionnaires results and Identified narratives

Likewise, in the case of the Czech Republic, the results from the questionnaire survey show the positive perception of the European Union. The majority of respondents perceive the European Union positively, concretely 77% have chosen the option positively or eventually rather positively. Through the neutral lens, see the European Union more students than in the Czech Republic. The percentage accumulated to 6%. The remaining 17% opted for the choice of negatively or rather negatively. More than 65% of students think that the EU brings or will bring benefits in their lives. Totally, 8% of respondents expressed that their position is neutral, and the rest of 27% chose the negative option. Similarly, as in the Czech case, the choice of European integration and its further direction occurred. Most students marked “I do not know”; 60% of respondents marked that variant. Compared to the Czech case, only 6% voted for closer integration among the states, and 15% would keep the current situation. 19% of students would return competencies to the nation-states. In total, 75% of students correctly marked the year of the Slovak accession to the European Union, which is slightly more than in the Czech case. The last point of the questionnaire indicates similar outcomes as in the Czech Republic. Even though 17% expressed that they perceived the European Union negatively, or rather negatively, 90% of students voted for the option to live within one of the Member States. In the narrative part of the research, respondents were asked to state two to three points for each component, analogically as for the Czech students. The first component aimed to indicate what they perceived as the benefits of the European Union and whether they considered something to be an advantage. Based on the answers, we can categorize the answers into four particular groups:

1. Travel,
2. euro currency,
3. working abroad.

The following narratives can be included in the first category:

1. We do not need a visa or passport to travel within European countries,
2. no borders control enables faster crossing the borders,
3. it is easier to enter another country.

The category “Euro currency” includes the following narratives:

1. Our economic situation improved thanks to the Euro,
2. we do not have to transfer money from one currency to the another,
3. we are more competitive in the European market,
4. we do not have to convert the currency.

The “working abroad” category contains narratives as:

1. We can easily find a job abroad without further restrictions,
2. my parents are working abroad while going to a job every day,

3. there is no problem working anywhere in the Union; my relatives are working in Austria,
4. no administration bureaucracy regarding the working permit.

Even for negative narratives, statements can be classified according to categories. The findings show identical outcomes as in the Czech case; therefore, we can see that migration and the latest pandemic significantly influence opinions and perceptions. The first category is the failure of the SARS-Cov-2 pandemic as well as in the Czech case. Migration represents the second negative narrative regarding the EU. According to the students, the EU failed to manage the refugee crisis.
Only the last category is different as the Slovak students think that the EU interferes too much with national affairs. As in the Czech case, we provide the selected narratives belonging to the categories above-mentioned below:
1. The European Union did not manage to mitigate the COVID19 pandemic,
2. the EU has been failing to manage significant challenges as COVID or refugees,
3. the EU was ineffectively combating the pandemic,
4. the EU underestimated the migration crisis,
5. the Union interferes in the national matters more than they should do,
6. the European Union should not substitute the national governments.

Another narrative was related to international affairs and geopolitics as the students find the EU as a weak international and geopolitical player. This matches with the narrative by the Czech students; however, in the Slovak case, the narrative does not belong between three pivots identified narratives.

2.2.2 Comparison of the conflict lines
Also, in Slovakia, we can observe only minor differences between the first conflict line; capital X periphery. Therefore, the grammar and vocational schools in the periphery are showing highly similar outcomes as the capital city. Same as in the Czech Republic. Nevertheless, vocational schools students perceive the EU more negatively than grammar schools students. Thus, it proves that the types of schools represent the main conflicting line as in the Czech Republic, regardless of their geographical location. The students expressed their negative attitudes primarily through the open questions and scaling questions. Notwithstanding, other questionnaire questions show more significant negativity at vocational schools. The perception of the European Union by vocational school students is without minor deviations around 50 to 50, while in grammar schools, positive perceptions prevail with more than 90%. Also in Slovakia, the grammar schools showed better knowledge about the EU – about 13%. Incorrect knowledge of the EU's competencies can be repeatedly poor wording or insufficient expression. We could observe similar discrepancies between Slovak students as among the Czech students. Regarding negative narratives, the students from both types of schools mentioned the same topics.

3 States synthesis

The comparison of the states indicates the slight differences only. The Czech students assessed the European Union less positively than Slovak students. Nevertheless, the difference is less than 10% for positive as well as negative perception. The Slovak students, however opted more often for the neutral option, by 3%. We can observe the same perception results of the EU benefits when the final figure accumulated at 65%. Similarly, Slovak students voted more for the neutral option than Czech students, and Czech students marked for the often negative option than Slovak counterparts. The next question was related to the European integration when the Czech students see a more beneficial approach in closer integration than Slovaks. The main issue was that in both groups, we can observe a significant percentage of the "I do not know" answer; 56% of the Czech respondents and 60% of Slovak respondents have chosen this variant. The last two questions did not prove any vast differences when the highest difference was in 3%. Notably, both groups have almost the same success rate of the correct answers regarding the accession date in the EU, and both groups reached at least 90% of the option "Within the EU" regarding where they would prefer to live.

Conclusion

The main goal of inquiry was to find out the generation's opinion that has been living the entire life or its significant period under the EU patronage in the Czech Republic and Slovakia. During the research, we examined and subsequently compared two conflict lines:
1. Capital X Periphery,
2. different types of secondary schools.

For the research, we formulated four hypotheses, which we aimed to verified:
1. There is a conflict line of the periphery versus the capital cities.
2. The vocational schools' students are more negative than their counterparts at grammar schools.
3. The combination of schools located in the periphery has a more negative attitude towards the European Union.
4. Most of the students are happy and satisfied with life within a "common Europe."

The research did not confirm the conflict line of the periphery versus the capital in the perception of the European Union. In this research, the main conflicting lines turned out to be the types of grammar schools, vocational schools and grammar schools. Based on the research results, it can be argued that the region does not play a primary role, but the type of education does. The vocational school students rated the European Union worse than the grammar school students, which was valid for studying geographical units. An important finding is that there is a possibility, based on narratives, that students in both types of schools do not sufficiently understand the competencies of the European Union, its functioning, and the role of nation-states. Students often made mainstream false claims, for example, that the European Union had failed to cope with the Sars-COV-2 pandemic. However, the competencies of health care are shared between the nation-states and the European Union.[23] The research did not confirm the third hypothesis as the schools in the periphery combined did not show different attitudes than the schools combined in the capital city. Therefore, we cannot assert that the periphery has a more negative attitude towards the European Union. Based on the all data collected, we claim that the fourth hypothesis was confirmed. Although the data collected shows positive and negative perceptions, the main determinant was the last questions within the questionnaire when most of the students opted for "Within the EU". The table 1 below demonstrates the final conclusions regarding all four hypotheses:

[23] *Areas of EU action.* [online]. [2021-10-10]. Available at: <https://ec.europa.eu/info/about-european-commission/what-european-commission-does/law/areas-eu-action_en>.

Table 1: Overview of results

Hypotheses	Conclusion
There is a conflict line of the periphery versus the capital cities	Not confirmed
The vocational schools' students are more negative than their counterparts at grammar schools	Confirmed
The combination of schools located in the periphery has a more negative attitude towards the European Union	Not Confirmed
Most of the students are happy and satisfied with life within a "common Europe"	Confirmed

Source: Own processing.

The last step of the research was to compare the results of the Czech Republic and Slovakia. The research showed slight differences only with a more positive perception of the EU by students in Slovakia. As the synthesis chapter depicted, the results do not vary significantly. However, the results determine that Slovaks are slightly more optimistic about the EU; they also opted for the neutral or "I do not know" answers more often. Interestingly, the Czech students ultimately opted more often to live within the EU than Slovak students. We should however note that both groups rates were high; 90% and 93%. Therefore, we can conclude that the groups do not typify any particular differences.

We should also point out the limits. One of the limits was the questionnaire itself when it was impossible to find out in-depth the pupils' knowledge of the European Union. At the same time, the research avoided the purely closed questions that are common to similar research. The Sars-COV-2 pandemic was also a limit. Due to distance learning, it was problematic to distribute questionnaires and have feedback. In addition, the question remains, what negative aspects of the European Union would students have mentioned if it were not for Sars-COV-2. However, research also has its positives. It acted as a pilot input for further research, which will be more specifically focused, supplemented by the method of observation and discussion groups, so that the mentioned narratives are understood in more depth. Lastly, the results can serve as an idea for teachers to discuss during class so that knowledge about the European Union is developed and pupils can critically evaluate the European Union without the influence of fake news and misinformation.

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NEW IN COVID: VARIATIONS OF NEWNESS IN MEDIA RECEPTION OF CZECH CULTURAL EVENTS

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Abstract
Czech culture was, as well as other areas, forced to cope with the effects of the Covid-19 pandemic. The aim of our study is to define and interpret key attributes of mass media acceptance of new, innovative cultural events in times of pandemic crisis and a potential transformation of the media discourse. We illustrate it on specific examples of cultural events, and due to the importance of mass media in the time of the pandemic, we rely methodologically on media and discourse analysis. The research is based on a qualitative content analysis which investigates the ways art and culture are presented in the media. Based on our findings, the dominant changes in the discursive perception and depiction of the newness of the cultural productions lie in the ways the media think about the presentation of form and content of art, in a heterogeneous reception of online forms of culture and in a significant concentration of positive motives associated with cultural events.

Key words:
Art. Covid-19. Communication. Culture. Digital. Discourse Analysis. Innovation. Media.

Introduction

In the period of restrictions related to the Covid-19 pandemic, institutions, entities and individuals involved in the sphere of culture and art were forced, as well as all other organisations, to react quickly to the situation and adapt as appropriately as possible to the fluid conditions under which it was impossible to practice live culture. This brought several different consequences: the limitation of possibilities to realise cultural and artistic activities in their traditional forms, the impossibility of personal interaction between artists and audiences, or the economic losses caused by the loss of income from admission fees, but at the same time the possibility to develop either previously unrealized artistic and/or communicative forms, or at least innovate them compared to the pre-pandemic period. During the restrictions that accompanied Czech culture from March 2020 (except for the summer months of that year) until May 2021, it was possible to observe a spectrum of approaches and activities by which cultural actors attempted to compensate, with different motivations, for the deficit of live culture and art. Musicians, theatre and dance companies shared their work through online broadcasts without an audience, museums and galleries made closed exhibitions and displays accessible to visitors through virtual or online guided tours.[1] Artists spoke to their audiences through social networks, and cultural institutions in turn asked their supporters to interact and share their own content in response to various challenges. It was clear from many public statements that culture did not figure as a redundant area of human activity in this dramatic situation, although political management often treated it as such (as the Minister of Culture repeatedly confirmed in his statements)[2], and the media, which played an important informational role during the pandemic, generally emphasized political, economic or health topics. On the other hand, studies confirm that the culture and the arts play an important social role in crisis situations and can have a positive impact on mental health, even to the extent that people who were more likely to engage in cultural activities in the period before the onset of Covid-19 were happier during the

[1] *Česká kultura v on-line prostředí.* [online]. [2021-08-27]. Available at: <https://www.mzv.cz/jnp/cz/zahranicni_vztahy/verejna_diplomacie/ceska_kultura_v_on_line_prostredi/index.html>.
[2] ADAMIČKOVÁ, N., ZUNOVÁ, A.: Zaorálek: Kopu za kulturu, lidé z MeSES mi nepomohli. In *Právo*, Released on 22nd May 2021, p. 1.

pandemic.[3] Cultural and creative industries are important economically as well, contributing to innovation and education.[4]

1 Theoretical discussion

"There really is no such thing as Art. There are only artists," writes Ernst Gombrich.[5] During the Covid-19 pandemic, the famous statement gained unintended currency as many cultural products became inaccessible due to restrictions and measures - and thus ceased to exist in the physical world of viewers and visitors. In many ways, the transformations that had already begun in the past were accelerated. The creation of cultural products and communication tools covering diverse interests and target groups is not new in cultural marketing;[6] however, the freezing of live-physical culture in the pandemic era has brought entirely new needs and demands to the field of making cultural experiences accessible beyond established audiences and traditional formats. The following table presents an overview of the possible yet common changes and impacts that the pandemic had on the marketing mix in the cultural sphere.

Table 1: Changes to the marketing mix

Product	Price	Place	Promotion
Inability or limited ability to work with the product The need to create new products	Limited or no income from product sales	Closure of physical distribution points The need to find new distribution routes	The need to set new targets in the light of changes in the other 3Ps Reduction of budgets

Source: Own processing.

During the pandemic, online communication has logically gained the upper hand, as well as that conducted through traditional mass media. In some cultural areas, processes already underway have been intensified - typically in the audio-visual and music streaming platforms,[7] while in others - live culture and museums - the digitalised user experience has fundamentally transformed the paradigm of the relationship between the cultural institution and its target audience.[8] Digital technologies, virtual and augmented reality and the use of internet and smartphone tools, user generated content and content marketing in general have come to the fore and the role of marketing and communications departments has become more crucial in

[3] TUBADJI, A.: Culture and mental health resilience in times of COVID-19. In *Journal of Population Economics*, 2021, Vol. 34, No. 4, p. 1219-1259. [online]. [2021-08-17]. Available at: <https://doi.org/10.1007/s00148-021-00840-7>.

[4] TRAVKINA, E., SACCO, P.: *OECD Policy Responses to Coronavirus (COVID-19). Culture shock: COVID-19 and the cultural and creative sectors*. [online]. [2021-09-02]. Available at: <https://www.oecd.org/coronavirus/policy-responses/culture-shock-covid-19-and-the-cultural-and-creative-sectors-08da9e0e/>.

[5] GOMBRICH, E. H.: *The story of art*. 16th ed. London : Phaidon, 1995, p. 15.

[6] KOTLER, N. G., KOTLER, P., KOTLER, W. I.: *Museum marketing and strategy : designing missions, building audiences, generating revenue and resources*. San Francisco : Jossey-Bass, 2008, p. 461-463.

[7] VLASSIS, A.: Global online platforms, COVID-19, and culture: the global pandemic, an accelerator towards which direction? In *Media, Culture & Society*, 2021, Vol. 43, No. 5, p. 957-969. [online]. [2021-08-17]. Available at: <https://journals.sagepub.com/doi/10.1177/0163443721994537>.

[8] CHOI, B., KIM, J.: Changes and Challenges in Museum Management after the COVID-19 Pandemic. In *Journal of Open Innovation: Technology, Market, and Complexity*, 2021, Vol. 7, No. 2, p. 148. [online]. [2021-08-17]. Available at: <https://doi.org/10.3390/joitmc7020148>.

culture even where it may not have been sufficiently appreciated in the pre-pandemic era.[9] The need to engage with audiences and visitors has deepened, despite the impossibility of physical dialogue with the artwork.

During the pandemic, not only the time spent on the Internet has increased, but also the time spent consuming traditional mass media as a tool of societal communication. The growing importance of traditional news broadcasts was confirmed by data published continuously by research agencies - there was a significant increase in the interest to watch live TV news and TV channels, and electronic media in general confirmed its position in the media market during the pandemic.[10] In addition to being an important tool for obtaining up-to-date information, traditional media also grew in importance as a leisure activity and as a mediator of cultural experiences absent outside the home.

The effects of Covid-19 on Czech culture have been continuously mapped not only by the media themselves, but also by some researches[11] - considering the role of mass media in the pandemic, the necessary changes in the ways of artistic expression and the absence of an academic text of this type, we decided to treat our study as an analysis of media discourse on the communication of new, innovative cultural experiences in the pandemic crisis - we present a pilot exploration of the behaviour, practices and, last but not least, the communication of Czech cultural institutions in this context. On the basis of specific examples of cultural events, we aim to define key attributes of their mass media reception and media discourse.

2 Research design

The results based on a qualitative content analysis present how selected events are publicly/medially presented, especially if there is a certain shift in discursive perception. From the pre-research conducted on a wide range of cultural events performed in different forms and performances, we selected representatives of three artistic types that have been fundamentally prevented from operating and working with audiences in a standard way in the given situation:
(A) Theatre,
(B) museum/gallery,
(C) music.

In terms of mediating the artistic experience, we identify these three art segments as more affected than others (e.g. literature). Within these categories, based on secondary research, we further searched for specific event prototypes that meet the following characteristics:
1. The emergence of a completely new type of project as a creative response to the situation,
2. innovative way of interaction with the target group,
3. the use of new technologies for non-traditional delivery of the artistic experience,
4. the ability to disseminate content to new audiences.

[9] JEŽKOVÁ, T.: Nové výzvy a staré otázky. In *Art Antiques*, 2020, Vol. 12/2020, 1/2021, p. 105-107.
[10] *Mediální výzkumy*. [online]. [2021-09-03]. Available at: <https://www.median.eu/cs/?cat=8/>.
[11] *Mapování dopadů koronaviru na kulturní sector.* [online]. [2021-09-03]. Available at: <https://www.idu.cz/covid>.
Dopady nákazy covid-19 na sektor kultury. [online]. [2021-09-03]. Available at: <https://www.czmuseums.cz/news/amg/titulni/55952-dopady-nakazy-covid-19-na-sektor-kultury>.

Table 2: Cultural events analysed

	1.	2.	3.	4.
(A) Brejlando	✓	✓	✓	✓
(B) DIVOCe!	✓	✓	✓	
(C) Prague Spring 2020		✓	✓	✓

Source: Own processing.

(A) Brejlando
The Brejlando project responded to the closure of theatres and the impossibility to attend performances in person by using the technology of virtual reality. Selected productions of Prague theatres became available for individual viewing using VR glasses, which can be picked up in person or ordered by courier service directly to homes.[12]

(B) DIVOCe!
In response to the stagnation of culture, the NoD Gallery realized a group art project DIVOCe!, which thematized the state of emergency and the period of quarantine. Every day since the gallery closed, a new artwork was added to the exhibition space, and the exhibiting artist also nominated an artist for the following day. Alongside the physical realisation of the exhibition, there was a continuous online presentation.[13]

(C) Prague Spring 2020
The organisers of the Prague Spring Festival were forced to stage its 75th anniversary edition without an audience. Moving it to the online environment made the musical experience more accessible to wider public, enabled the inclusion of guest musicians from abroad in the programme, and the festival gained attention thanks to broadcasts from non-traditional locations.[14]

We excerpted media outputs from the Newton Media database using the following keywords:
(A) Brejlando (1. 2.-1. 6. 2021),
(B) DIVOCe! AND NOD (1. 3.-1. 7. 2020),
(C) "Prague Spring" AND festival AND online (1. 2-1. 9. 2020),
and then cleared irrelevant data (texts unrelated to the topic or without evaluations, mere lists of events, etc.).

The discursive analysis[15] of the texts was supported by the tools of speech linguistics, argumentation analysis or thematic structuring of the texts in order to describe the utterances,

[12] *Brejlando: Divadlo v nové dimenzi.* [online]. [2021-09-10]. Available at: <https://brejlando.cz/>.
[13] *DIVOCe! – Umění v karanténě.* [online]. [2021-09-10]. Available at: <https://nod.roxy.cz/events/detail/589/divoce-umeni-v-karantene>.
[14] *Pražské jaro 2020 se uskuteční v alternativní podobě.* [online]. [2021-09-10]. Available at: <https://festival.cz/alternativne/>.
[15] KLABÍKOVÁ, T., SCHNEIDEROVÁ, S., JANOVEC, L.: Czech Corporate Website Discourse at the Beginning of the 21st Century: Methodological Perspective. In OUKHVANOVA, I., SENDERSKA, J. (eds.): *D-Art, Discourse and Linguistics beyond*, 2019, Kielce : Jan Kochanowski University Press, p. 19-44; CHARAUDEAU, P., MAINGENEAU, D.: *Dictionnaire d'analyse du discours*. Paris : Seuil, 2002, p. 42-43.

their contexts[16]and constitutive elements of the speech frame.[17] The quoted statements are given as illustrations of the utterances; the specific source is not relevant for our purposes.

3 Findings

From the open, axial and then selective coding of the texts[18], and with the help of linguistically oriented discourse analysis, three distinct synthetic categories emerged from the analysed data to which discursive voices[19] pay their attention, which they evaluate and comment on, and which therefore also reflect a change in thinking about cultural phenomena under pandemic conditions in the incriminated period.

3.1 Significant concentration of publication of positive themes related to cultural events

The media in this period particularly multiply the presentation of positive moments and the usefulness of the impact of culture as a means of escapism, consolation and spiritual upliftment, fighting against stagnation and passivity. The motif of optimism and solidarity is also reinforced across media genres, confirming the findings of Tubadji's (2021) research. The whole discourse legitimises the presented artistic endeavours and the negative moments, e.g. in reviews, are thus suppressed and ignored. In this case, the discourse is characterised by the unspoken critical motives. What is emphasized is the effort to cope well with the situation, experimentation, novelty of artistic forms and promise for the future. Another added value presented is the attraction of new audiences that would normally miss the cultural event. Themes of belonging, support, harmonisation and framing of cultural events as an important public social link, opportunity and promise for the future emerge.

- Czech culture is not breathing well at the moment, yet it is fighting for its life like a lion and looking for ways to reach its audience.
- Music brings hope.
- The diversity of genres and the willingness of Prague's theatres to take a step towards new forms is promising.
- Quarantine as a challenge, quarantine as a source of artistic inspiration.

3.2 Transforming the way media think about the presentation of content and art form

The new form of performance has become a standalone and frequently represented media topic when evaluating a cultural event. In the case of Prague Spring, form and content were evaluated separately, in two other cases, considerations whether the relationship between form and content is appropriate were intertwined (Brejlando), or the close relationship between the two was emphasized (DIVOCe!), in each case the form was rather superior to the content itself in the reflection. The necessary formal innovativeness is mirrored by emotionally powerful expressions of unusualness, as well as the strong implications of the chosen design for the future. At the same time, a reserved reception is evident in some cases, e.g. in reviews that accentuate the novelty of the format and the unusualness.

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[16] KRAUS, J.: *Jazyk v proměnách komunikačních médií.* Edition 1. Prague : Charles University, 2008, p. 52.

[17] KERBRAT-ORECCHIONI, C.: *L'énonciation. De la subjectivité dans le langage*. Paris : A. Colin, 1980, p. 290.

[18] HENDL, J.: *Kvalitativní výzkum: základní metody a aplikace*. Prague : Portal, 2005, p. 247-255.

[19] Conf. *locuteur* in DUCROT, O.: Quelques raisons de distinguer "locuteurs" et "énonciateurs", In *Polyphonie – Linguistique et littéraire*, 2001, No. 3, p. 19-41.

- Brejlando is an intense experience and a powerful form whose possibilities are clearly yet to be discovered and tamed by the authors.
- Prague Spring's Journey to the World of Science Fiction Fantasy and Back Again
- (...) a medium that puts theatre into a new context much more radically than when it started to be shot for film or television.

3.3 Ambivalent representation of the possibilities and limits of online space

The thematization of online space as a tool for the transmission of the cultural events under study is ambivalent in all cases and across texts. It ranges from techno-optimistic evaluations verbalized in terms of *accelerator* ("a test of ingenuity"), *opportunity* (those who have taken refuge in online space are held up as role models), *future* or *alternative* or *complement to* the status quo, to the perceived *saturation, crisis* and *negation of* the functioning of artistic experiences in the online environment; sometimes in combinations of each other. On the other hand, however, a cautious and reserved approach toward online mediation of a cultural event of a traditional type (e.g. concert, performance, exhibition) remains the typical motive. In some cases, the media talk about the inappropriateness of such ways of transmitting art and culture and even use terms like *science fiction*. Despite the positive features mentioned above, a rather conservative approach is still evident in referring to all cultural events studied. Diverse technological forms are still perceived as rather abnormal and temporary solutions before the long-awaited return to the "normal", conventional, i.e. offline way of consuming cultural experiences.

- A number of institutions adapted a similar strategy, and the online environment was becoming relatively saturated with virtual tours.
- However, the virtual form of the festival also brings some positives.
- There are a lot of questions surrounding streams (...) A hundred or two hundred years from now, will people still want to listen to music in concert halls?

Conclusion

The cultural environment as well as many others has been affected by the Covid-19 pandemic and only after a longer time period will pass will we be able to evaluate the irreversibility of changes that the crisis situation has brought. The study of media texts shows that the topic of changes in both the consumption of cultural content and the transformation of the cultural events has been very current and present in the media space and that the pandemic caused at least some temporary changes in the news values and the journalistic routines while reporting on art and culture. This study has limitations as it only analyzes the Czech examples and therefore we suggest that future research studies might explore the topic in other countries as well as explore the topic from other perspectives, such as the perspective of the media professionals or/and the audiences.

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THE RELATION BETWEEN THE GENERATIONAL PREFERENCE AND THE CHOICE OF THE TYPE OF RETAIL

Tomáš Fašiang

Abstract
Marketing activities through which companies create strategies to satisfy customers' needs on the market and through which they reach their targets are no longer oriented towards the society as a whole. On the contrary, a company increasingly seeks segments, or even sub-segments in which they could apply their marketing and communication strategies towards the consumer in a targeted manner. However, this concrete fact is directly influenced by the other fact, the one that it is possible to approach individual key or specific segments only if the marketing has appropriate theoretical and subsequently also practical base of information and knowledge available. Such attitude is applied for generations as an effective market stratification approach. The aim of the paper is to point out the relation between the generational preference and the choice of the type of retail shop. The paper describes key parameters in connection with the consumer behaviour of generations X, Y , Z and basic typology of retail shops depending on the main purchase.

Key words:
Consumer Behaviour. Generation marketing. Generations of consumers. Promotion. Retail.

Introduction

Marketing communication of companies or brands is being adjusted to the consumer behaviour and the buyer decision process in terms of their target markets and often times uses the generational approach to consumers. Investigating buyer decision process is not easy because of many variables and their tendency to interact and influence one another. The individual determinants of consumer behaviour, their nature and the relative intensity of the impact cannot always be directly observed. Human mind is so complex that understanding buyer decision process requires constant research and application of various theories and concepts. The dynamic character of the consumer behaviour characterises dual attitude from the scientific research point of view and from the comprehensiveness of the phenomena which influence the issue. From the theoretical point of view we can observe always new surfacing issues related mainly to the measuring of the aspects of human mind and its processes. Moreover, consumer behaviour is constantly under the changing trends influenced by the economic crisis and by the influence of global and demographic changes. An ongoing formation of new micro-segments crates pressure on brands and marketers and changes common patterns of efficiency, marketing and business success. Therefore the experts in the study of consumer behaviour use borderline methods of consumer observation. Of course, research directions in consumer behaviour should respect the ethical principles and principles of sustainable economic development[1]. Marketing a marketing communication is adjusted to the requests of individual generations for which it is used in typical offline and online form. The changes in consumer behaviour require changes in marketing communication. This interactivity is currently inevitable.

1 Theoretical basis

The changes in consumer behaviour require changes in marketing communication. This interactivity is currently inevitable. The contemporary professional literature, as a result of the

[1] KUSÁ, A., HRABAČKOVÁ, V.: *Ženy spotrebiteľky (Predikčné modely nákupného správania)*. Trnava : UCM FMK, 2012, p. 11.

development in society and connected development of markets, currently mentions mainly the notion of integrated marketing communication. The American marketing association defines the integrated marketing communication as “a planning process to ensure that all customer contact with a brand, or viewing of a product, service, or company, is relevant and consistent to the individual at any given time."[2] The Authors Pelsmacker, Geuens and Van Den Bergh describe integrated marketing communication as a new way to look on the marketing communication which in the traditional way of understanding was understood as the autonomous parts like personal sale, direct marketing, advertising, sales support, public relations and similar, but this new attitude looks at it from the consumer’s point of view, i.e. the comprehensive flow of information.[3] This is not a new notion, on the contrary, we could call it a kind of necessity of current marketing and in marketing-conscious companies a common, used approach to marketing communication. The history of the idea of integrated marketing communication comes from the United States and dates back to the late 1980s and early 1990s, when the chairman of the American Association of Advertising Agencies, Keith Reinhard, first worded the need to integrate individual marketing communication tools. He then contacted Don Edward Schultz, a professor at the Medilla School of Northwestern University in the United States, and in 1989 established a research program on integrated marketing communication, which resulted in the study program of integrated marketing communication at the university.[4] We mention history of the creation of this attitude on purpose, because it is important to realise that its creation happened in time when the Internet was not a standard in a household, and there was not so many possibilities of electronic communication as today, so the integrated marketing communication was realised practically only through traditional tools of marketing communication, which was through advertisements, public relations and similar. Today, this attitude is done in much larger range; the dynamic technological development created conditions for the rise of totally new possibilities for the realisation of company communication with outer environment. It is the integrated attitude to the individual communication activities mainly which is fully used specifically for generational cohorts that can still be broken down into sub-segments in terms of different specifics or typological division. In order to fulfil the aim of this paper is an important focus on the specifics of marketing communication in retail. Retail do not only serve the market but also create it, marketing communication function is one of its key functions.[5] Retail marketing communication can be carried out from the initiative of the producer, the retailer or by joint efforts.[6] Further to our observation, it is necessary to define marketing communication inside the point of sale and outside of the point of sale. When respecting the definition of marketing communication, Kita et al. say that the main role of marketing communication in the point of sale is to inform, get acquainted with products, explain their features, highlight their benefits, quality, value, contribution and use and what is more, to listens, to accept customers’ stimuli and requirements as well as to provide appropriate feedback.[7] The main aim of the marketing communication in the point of sale is to influence

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[2] *Dictionary*. [online]. [2021-10-14]. Available online: <https://www.ama.org/resources/Pages/Dictionary.aspx?dLetter=I/>.

[3] PELSMACKER, D. P., GEUENS, M., VAN DEN BERGH, J.: *Marketing Communications*: *A European Perspective.* Harlow : Pearson Education Limited, 2013, p. 307

[4] MIMOUN, A.: *Integrated Marketing Communications*. [online]. [2021-10-15]. Available at: <https://alexandramimoun.wordpress.com/thesis-integrated-marketing-communications/#Part%20I%20-%20IMC%20as%20theory/>.

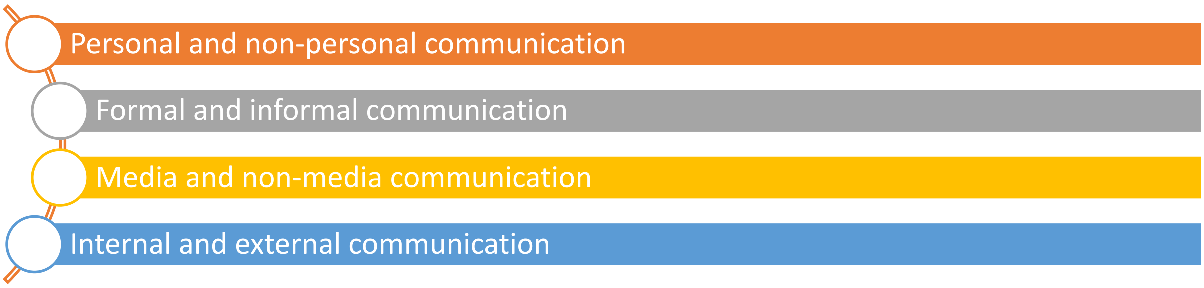
[5] KOTLER, P., KELLER, K. L.: *Marketing management*. 14 vydání. Praha : Grada Publishing, 2013, p. 454.

[6] PELSMACKER, D. P., GEUENS, M., VAN DEN BERGH, J.: *Marketing Communications*: *A European Perspective.* Harlow : Pearson Education Limited, 2013, p. 360.

[7] KITA, J. et al.: *Marketing*. Bratislava : Iura Edition, 2010, p. 308.

consumers' buying decisions for the purpose of selling company products and brands, i.e. promote sale in the particular point of sale.[8]

Marketing communication can be classified from various aspects, e.g. according to the environment where it takes place, its form or the type of the message it communicates:



Picture 1: Marketing communication categorization
Source: Own processing.

Personal communication. It is a direct form of communication requiring the physical presence of participants. It is performed via verbal and non-verbal communication tools, it enables instant evaluation of the feedback and underlines a communication effect. Non-personal communication. It is a form of communication that does not require the physical presence of participants. It is carried out mainly by means of mass information tools (TV, radio, Internet, newspapers, magazines), which enables us to target a large circle of geographically spread participants at low operational costs. Formal communication. The communication activity initiated and controlled by the undertaking. It is subject to strict rules, i.e. communication can be described, planned, managed and assessed. Informal communication. The communication activity initiated by the customer or media as an expression of social interests and needs. It is controlled by the undertaking but is not subject to any official rules and regulations.[9] Media communication. Communication is carried out by means of mass media. Non-media communication. Communication is carried out without mass media.[10] Internal communication. It is an internal company communication with employees, shareholders and their family members about company strategic priorities, their role in their implementation and reinforcing of their motivations. Internal media are used. External communication. It is communication between various external target groups, e.g. media, municipality, financial institutions for the purpose of creating and maintaining a positive company image and goodwill.[11]

- Above-The-Line Communication. Known as ATL and described as non-personal communication as it is mainly carried out through mass media, i.e. TV, radio, Internet, external carriers, newspapers, magazines or cinema.
- Below-The-Line Communication. In other words, BTL refers to non-mass forms of marketing communication. It is known for more precise targeting. The key part of communication is channelled through direct marketing, sales promotion and PR.
- Through-The-Line Communication. Nowadays, differences between the ATL and BTL communication gradually disappears with the invention of the new term Through-The-Line (TTL). This refers to the use of such tools and techniques of marketing communication

[8] KOLLÁROVÁ, D.: *Podpora predaja pri komunikácii s vybranými cieľovými skupinami*. Trnava : UCM v Trnave, 2014, p. 90.
[9] MATÚŠ, J.: *Vplyv externej a internej komunikácie na rozvoj podniku*. Bratislava : Procom, 2008, p. 95-97.
[10] VOPÁLENSKÝ, J. et al.: *Stručný slovník masmediálnej a marketingovej komunikácie*. Trnava : UCM v Trnave, 2006, p. 71-72.
[11] PELSMACKER, D. P., GEUENS, M., VAN DEN BERGH, J.: *Marketing Communications*: *A European Perspective.* Harlow : Pearson Education Limited, 2013, p. 306-307.

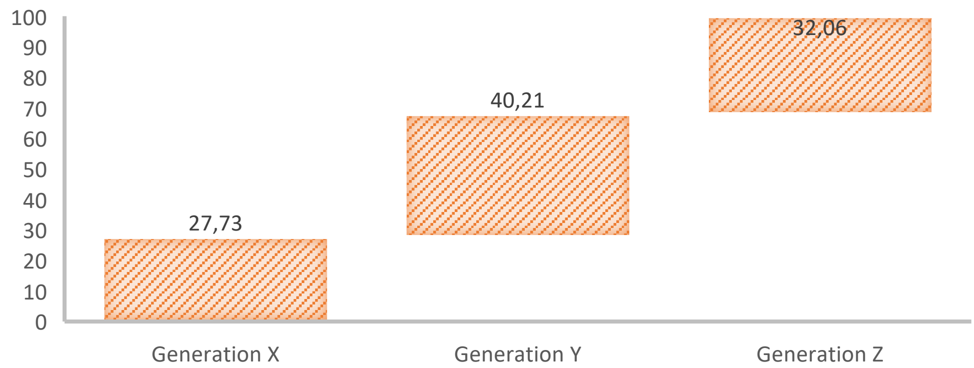
(company websites, e-commerce, social media, Internet) which help the company to reach its goals.[12]

2 Methodology

In order to fulfil the aim of this paper consumer research was carried out, focused on the knowledge of buyer decision process with regard to the choice of retail. From the point of view of the evaluation of consumer research and the focus of this paper, it is crucial to identify the basic target groups of consumers as well as to define the basic types of retail shops. The identification of target groups is based on a multi-attribute comparison of the evaluated research indicators through cross-analysis. The basic indicators are demographic data of the interviewed respondents compared with respect to the attribute of the choice of the type of retail shop from in which the main purchase was done. In terms of the focus of the paper, only the data in question will be evaluated in the following section, regardless of the range of carried research. Using a mathematical-statistical method of determining the size of the sample, the sample consists of 3,000 respondents.

3 Research outputs

In order to identify the target groups, it is necessary to know the demographic structure of the sample respondents in terms of indicators of gender, age, residence, education and gross monthly income. The gender of respondents was represented relatively proportionally. In numerical representation, the ratio of women is 51.3% of respondents, while the ratio of men is 48.7%. As of the age distribution of respondents and their categorisation into the three most important generational cohorts, we can identify the biggest group of respondents – the Generation Y (40.2%) in the Graph. Next follows the Generation Z (32.1%) and the Generation X (27.7%). In terms of age, the biggest part of respondents to this research can be identified in the age range from 31 to 60 years. This is influenced mainly by the fact that the very group was the priority in the whole demand. The results are thus influenced by this age distribution.

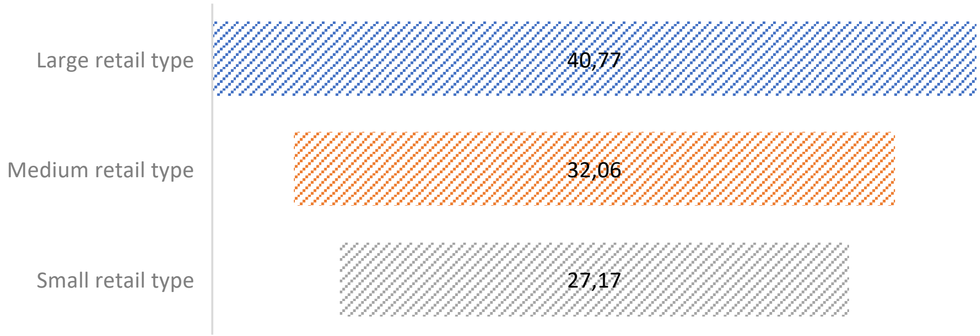


Picture 2: Age distribution of respondents from the point of view of generational cohorts
Source: Own processing.

The biggest percentage of respondents stated that their monthly income is above €995 (29.2%), followed by the second option from €665.1 to €830 (20.1%) and the third most represented was the option between €830.1 and €995 (15.6%). In the groups of retail shops which were the most

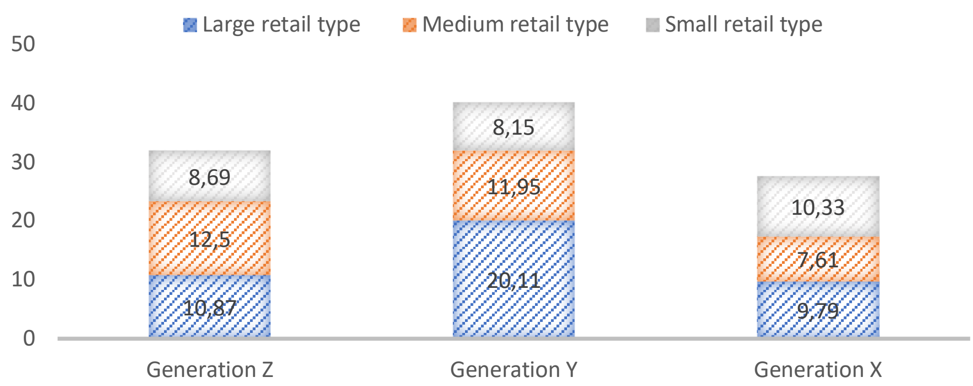
[12] BÁRTA, V., PÁTÍK, L., POSTLER, M.: *Retail marketing*. Praha : Management Press, 2009, p. 146.

visited by the respondents, the big (40.8%) and the middle type (32.1%) dominated. The small type of the retail reached a slightly lower distribution, i.e. 27.2%. Picture 3 illustrates the preferred choice of the retail shop by the consumer in their main purchase. The main purchase can be understood as the bigger shopping of the daily consumer goods meant for the supply and the satisfying of the biological needs of the whole household. From the point of view of the sample, the main purchase is almost evenly oriented to all types of retail shops. These demographic data, together with the preferential data for the selection of the type of retail shops, represent the basic attributes that will be used in the identification of target groups through cross-analysis.



Picture 3: Type of the retail
Source: Own processing.

When identifying the target group, was chosen the consumer's preferable choice of the retail type for the basic segmentation parameter, which was cross-analysed by the gender data and the age structure of the selected file. The task of this part of research is to identify the target group individually for each type of the retail shop from the point of view of the main purchase. In order to exclude smaller target groups, a selective parameter was chosen, which will allow the identification of the target group depending on the frequency of the preferential feature of the choice of retail shop. In case that more target groups are identified for the same parameter (nature of purchase - retail type selection preference), the target group will be determined by the higher frequency of occurrence of the consumer preferential selection feature. To identify the target group, a value of 10% was empirically chosen as the selective parameter. The stated value of the frequency of occurrence of the observed trait will allow the results to be selected and key target groups identified.



Picture 4: Results of the analysis of the main purchase
Source: Own processing.

Picture 4 shows the results of the cross-analysis for the respondents of Generations X, Y and Z in the area of where the main purchase is done. From the above stated it is clear that based on the selection for the main purchase, the target group of a large type of retail shop the Generation Y can be considered, the target group of a medium type of retail operation it is the Generation Z and the target group of a small type of retail operation the generation X.

Conclusion

In the recent decades of this century a company marketing specialised mainly in the young generation of productive age which is potentially strong considered mainly by its demographic representation, purchase power as well as by the perspective of rapid acceptation of new technologies that are fully adjusted to its needs. The young and middle generation hold a dominant place in a society because they are active, dynamic and mainly promising for creating long-term ties to brands and companies, which make them an important subject for company marketing activities. The result of dynamic changes in purchase behaviour is that the opposing and stable part of the market gains the momentum, i.e. part of the Baby boomers generation, which is incomparable to companies' interest in the younger segment, but is still becoming increasingly popular and important in terms of marketing activities.

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BRAND SEMIOTICS AND MEDIA PEDAGOGY

Dinko Jukić

Abstract
The paper uses the application of semiological analysis to consider the idea of the role of parents in three different media. Since the brand encompasses the concept of idea and symbol, it is analysed from the aspect of marketing semiotics. The paper is based on Barthes' myth theory which we compare with Kapferer's theory of the brand. The significance of the identity construct in the digital game *Life is Strange 2*, the drama *A Doll's House* and the graphic novel *A Distant Neighbourhood* are discussed. The paper compares and interprets marketing with sociology, and semiotics with media pedagogy in an interdisciplinary way. The brand was analysed at the message and sign level. The paper discusses the meaning of the consumer and the meaning of the brand and shows the hidden meaning of the search for identity. All three media will serve as proof that in their discourse they have built brand recognition precisely on the existential and psychological development of the protagonists. It is concluded that marketing communication indirectly influences the formation of consumer perception.

Key words:
Brand. Customer. Identity. Image. Marketing. Myth. Semiotics.

Introduction

We live in a society that is oversaturated with information. We are surrounded by marketing stimuli in the form of ads, stores and brands that are present all the time. In such a society of brand hyperproduction,[1] the consumer has learned to selectively receive, process, and reject information.[2] In such a postmodern, information and media society, the consumer is forced to receive messages and turn on *autopilot*[3] to filter messages. Consumers buy brands because of what they mean, [4] not because of what they do. This means that the symbols and hidden meanings of the brand are more important, and the consumer will always choose between two products or services, a brand that has a positive image. This paper raises the question of what brand semiotics is and what purpose it can have. More precisely, the cultural phenomenon of identity and messages that are transmitted to users are explored. The subject of the paper is not the question of whether Nora Torvald,[5] Karen Reynolds[6] or Hiroshia Nakahara[7] is a brand, although, in the broadest marketing and cultural sense it is, but: is media discourse culturally, anthropologically and marketing justified? The topic is the decoding of codes that are unmotivated,[8] i.e., the deconstruction of the meaning of a cultural object[9] and a brand as symbols[10] and ideas. The theme that remains open for further analysis and reflection is: do we want to decode all cultural phenomena and brands? This is not a deconstruction of known

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[7] TANIGUCHI, J.: *Daleko susjedstvo.* Zagreb : Fibra, 2012, p. 15.
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phenomena but an interdisciplinary approach that shows and interprets familiar constructs such as identity, existence, and parenthood from the aspect of media literacy and pedagogy, semiotics, and integrated marketing communication. The aim of this paper is to present, explain and interpret the semiotics of the brand on cultural objects.

1 Postmodern consumer and identity

Postmodern society turns its members into consumers, not producers. Although the very notion of postmodernism is one of the most discussed concepts in contemporary marketing, the theory of modern marketing[11] has not yet offered a universal answer to the question of whose side is power on: the side of consumption or production? In part, the answer can be read from contemporary sociology. According to Bauman, there are three fundamental ideal-typical elements of a consuming life:[12] consumerism, the society of consumers, and consumerist culture. In the postmodern period,[13] there have been consumer transformations in which consumers are at the same time, promoters of the goods and brands they promote. In such a society, the consumer is dehumanized, turned into a commodity that requires constant updating, finding, confirming, and everything is constantly being compared. It is in this context that we view the search for identity found in three different media and three different time epochs. The term liquid modern[14] can be understood here as the disintegration, disintegration, and alienation of the individual from others in consumer society. If freedom implies responsibility for one's own life, then does the search for one's own identity justify the act of abandonment? Can we view from a pedagogical point of view[15] the search for identity as the loss of an individual's identity? Or, if we reverse that phrase, can we analyse the codes of growing up and existence as connotative messages in the digital game *Life is Strange 2*? Ultimately, can we decode Nora's abandonment of the family from the Norwegian drama *A Doll's House* as an act of self-actualization? Postmodern time, liquid modern time is when we are both brand and consumer. No matter how hard we try, we cannot always be hunters,[16] but sooner or later, we become prey. We understand the metaphor of hunting as an escape from thinking about our own unhappy state. In this *runaway world,*[17] the individual survives only as an individual. Consumers and consumption objects are two extremes in times of uncertainty. It is in this context that we analyse the phenomenon of consumer society. It is a society that rests on the promise of satisfying desires in a way that no other society in the past could have done.[18] Consumption, unlike collaborative production, is a solitary activity, and as such fits into the world of an emptied cockpit.[19] Consumption is also filled through insecurities and fears due to the crisis of interpersonal trust. And it is precisely in such a crisis of mistrust that the idea of consumer identity, of the individual and of his existence is questioned in the hidden metaphor of travel and adventure. Nora, despite pressure from society, family, and herself, decides to go and find her identity. The same is done by Karen Reynolds in the digital game *Life is Strange 2*, when we learn that she, as a mother, doubted her role and thus set out in search of life. The same idea occurs in the graphic novel *A Distant*

[11] SOLOMON, R. M., BAMOSSY, G., ASKEGAARD, S., HOGG, M.: *Consumer behaviour, a European perspective.* Edinburgh : Prentice Hall, 2009, p. 38.
[12] BAUMAN, Z.: *Consuming Life.* Cambridge : Polity Press, 2007, p. 6.
[13] BEST, S., KELLNER, D.: *Postmodern Theory*. New York : Guilford Press, 1991, p. 4.
[14] BAUMAN, Z.: *Liquid Life.* Cambridge : Polity Press, 2005, p. 10.
[15] BAACKE, D.: *Medienpädagogik*. Berlin : De Gruyter, 1997, p. 41.
[16] BAUMAN, Z.: *Liquid time.* Cambridge : Polity Press, 2007, p. 100.
[17] GIDDENS, A.: *Odbjegli svijet*. Zagreb : Diskrepancija & Jesenski i Turk, 2005, p. 26.
[18] BAUMAN, Z.: *Liquid Life.* Cambridge : Polity Press, 2005, p. 80.
[19] BAUMAN, Z.: *Liquid Modernity.* Cambridge : Polity Press, 2007, p. 59.

Neighbourhood when Hiroshia Nakahara's father leaves the family in search of his identity and search for meaning. According to Bauman, this is not about losing trust in social relationships with people as Giddens[20] states. He believes that in the conditions of modern society, an increasing number of people live in circumstances in which institutions organize fundamental aspects of everyday life.[21] Contrary to him, Bauman believes that such individualization reflects globalization, that is, in a semiotic sense it is a message. One way to make the dissatisfied permanently dissatisfied is through the devaluation of consumer products after they have been placed in the universe of consumer desires. However, the second way is a bit absurd because it starts from the assumption of satisfying every need and desire. And once the consumer's desire is satisfied, the consumer remains dissatisfied. What begins as a need must end as an addiction. The transformation of human identity faces the split of any identity between freedom of choice. In this context, Bauman speaks of living on credit within consumer culture as a pattern of *carpe diem*[22] strategy. The very notion of identity is very complex, as it can be explored from a psychological, sociological, cultural, economic, anthropological, or philosophical aspect. Identity, simply put, can be defined as a subject that determines itself in relation to an object. However, if we divide identity into individual and social, then we make a difference between our own perception of ourselves and the perception of how others see us. Identity can be viewed as personal and collective.[23] Personal identity refers to the notion of one's own experiences, and group identity encompasses the shared knowledge, attitudes, and ideology of the group. For the purposes of this paper, identity can be viewed as a group of values that shapes a particular worldview. The postmodern consumer strongly depends on the symbolic meaning of the brand. The concept of symbolic buying was already known in the 1950s.[24] What is new and belongs to the postmodern consumer period is marketing communication, metaphor, and brand personification. Consumers give brands human characteristics[25] and develop[26] a special relationship[27] with brands that takes on the characteristics of a cult[28] and a myth. Product symbolism refers to what the product or brand means to the consumer and what the consumer experiences in purchasing and using it.[29] Consumer behaviour is influenced by the social determinants of its behaviour and its intrinsic determinants. With good reason, the term has been called a black box.[30] It is in this metaphor that the beauty of marketing research lies. In this Promethean struggle, we explore consumer impressions of brands, even if they were hidden and subconscious. Consumer motives can be identified, his behaviour can be influenced, but at the same time, consumer behaviour is a dynamic process.

[20] GIDDENS, A.: *Sociology.* Oxford : Blackwell Publishers, 2001, p. 22.
[21] GIDDENS, A.: *The Consequences of Modernity*. Cambridge : Polity Press, 1992, p. 79.
[22] BAUMAN, Z.: *Identity: Conversations with Benedetto Vecchi*. Cambridge : Polity Press, 2004, p. 53.
[23] VAN DIJK, T.: *Ideologija, multidisciplinaran pristup*. Zagreb : Golden marketing – Tehnička knjiga, 2006, p. 162
[24] LEVY, S. J.: Symbols for sale. In *Harvard Business Review*, 1959, Vol. 37, No. 4, p. 119.
[25] AAKER, J. L.: Dimensions of Brand Personality, In *Journal of Marketing Research*, 1997, Vol. 34, No. 3, p. 352.
[26] PARK, W. C, MACLNNIS, J. D, PRIESTER, J.: *Brand Atachment: Construct, Consequences and Causes*. Hanover : Now Publishers, 2008, p. 4.
[27] MOISCESCU, O. I., ALLEN, B.: The Relationship Between The Dimensions Of Brand Loyalty. An Empirical Investigation Amoung Romanian Urban Consumers. In *Management & Marketing*, 2010, Vol. 5, No. 4, p. 85.
[28] ACOSTA, P. M., DEVASAGAYAM, R.: Brand Cult: Extending the notion of brand communities, In *Marketing Management Journal*, 2010, Vol. 20, No. 1, p. 167.
[29] EVANS, M., JAMAL, A., FOXALL, G.: *Consumer Behaviour.* Chichester : John Wily & Sons, 2006, p. 246.
[30] KOTLER, P., ARMSTRONG, G.: *Principles of Marketing*. New Jersey : Pearson, 2008, p. 130.

The symbolic meaning of a brand can be presented in two directions:[31] as external or social-symbolic and internal or self-symbolic. The social symbolic meanings of brands can be used to communicate to other people the kind of person we wish to be seen as. The self-symbolic meanings of brands are what their usage communicates to us about who we are or want to be. Thus, shopping plays a central role in creating the meaning and value of the postmodern consumer. Such symbolic meanings have been moved to brands so that brands become a means not only of branding products and services but of communication codes of society. In such communication, the brand label suggests cultural worldviews, attitudes, ideas, and beliefs. Through brand semiotics, we read consumer relationships with others and ourselves.

2 Brand semiotics and myth

Consumer culture today is globalized, and brands are signs of a global ideology with cultural value.[32] Brands reflect consumer impressions. A large part of the meaning that consumers give to brands is influenced by symbols that are perceived by consumers.[33] The marketing images projected by the brand have nothing to do with the actual product or, as the French structuralist would say, are not motivated[34]. Semiotics studies all cultural phenomena as sign systems. As Eco argues,[35] semiotics applies to the whole culture, so the potential application of semiotics to consumer behaviour is shown through the anthropological aspect. Consumer culture includes not only the artificial signs created by advertiser and designers but also the lived environments, social rituals, and ideological tensions structuring daily life.[36] Culture and signification are interdependent systems of knowledge.[37] Cultural objects are understood as symbolic elements of cultural tradition, and buying a brand is an extension of the consumer's self-image. It is also a critique of postmodern culture because there is a commodification of culture that involves turning products into brands.[38] We define a cultural object as common social expressions[39] that are visible, tangible, and audible and can be pronounced. A cultural object has a specific meaning, and its meaning of identity can be manifested in any form, as auditory, visual, olfactory, tactile, or gustatory. There is an obvious coincidence with the elements of brand identity, [40] which also have all the above meanings and form common consumer beliefs, attitudes,[41] impressions, and image.[42] The difference is in the complex and

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[31] ROSENBAUM-ELLIOTT, R., PERCY, L., PERVAN, S.: *Strategic Brand Management.* Oxford : Oxford University Press, 2007, p. 48.

[32] ASKEGAARD, S.: Brands as a Global Ideoscape. In SCHROEDER, J., SALZER-MORLING, M. (eds): *Brand Culture*. London : Routledge, 2006, p. 91.

[33] SOLOMON, R. M., BAMOSSY, G., ASKEGAARD, S., HOGG, M.: *Consumer behaviour, a European perspective.* Edinburgh : Prentice Hall, 2009, p. 134.

[34] SAUSSURE, F.: *Tečaj opće lingvistike.* Zagreb : ArTresor, 2000, p. 99.

[35] ECO, U.: *Kultura informacija komunikacija.* Beograd : Nolit, 1973, p. 21; ECO, U.: *Semiotics and the Philosophy of Language.* Bloomington : Indiana University Press, 1986, p. 18.

[36] OSWALD, L.R.: *Marketing Semiotics: Signs, Strategies, and Brand Value.* Oxford : Oxford University Press, 2012, p. 7.

[37] ECO, U.: *The Theory of Signs.* Bloomington : Indiana University Press, 1979, p. 26.

[38] JUKIĆ, D.: Dreams and Reality in Culture Marketing: Theatre Sphere. In SOLIK, M., RYBANSKY, R. (eds.): *Megatrends and Media: Reality and Media Bubbles*. Trnava : Faculty of Mass Media Communication, University of Ss. Cyril and Methodius in Trnava, 2018, p. 430.

[39] GRISWOLD, W.: *Cultures and Societies in a Changing World*. London : Sage Publications, 2013, p.11.

[40] KELLER, K. L., APÉRIA, T., GEORGSON, M.: *Strategic Brand Management*. London : Pearson, 2008, p. 43.

[41] SOLOMON, R. M., BAMOSSY, G., ASKEGAARD, S., HOGG, M.: *Consumer behaviour, a European perspective.* Edinburgh : Prentice Hall, 2009, p. 144; EVANS, M., JAMAL, A., FOXALL, G.: *Consumer Behaviour.* Chichester : John Wily & Sons, 2006, p. 140; BLYTHE, J.: *Consumer Behaviour.* London : Thomson, 2008, p. 84.

multidimensional construct of the brand because it becomes a symbol, an object and takes on a personality[43] in its metaphor. The status of a cultural object results in an analytical point of view. It is not built into the object itself. It's the same with the brand. Brand image is a consumer projection.[44] One of the most important ways to create meaning in a consumer society comes from brands. Because brand meaning lies in consumer impressions, brand image becomes an important factor in analysing, managing, and understanding the very essence of a brand. Brand identity is interwoven with consumer identity.[45] A cultural object is part of a connected, large system of culture. A cultural object is created by people, they are the ones who add meaning to it. All the others in this communication process are participants and users who, through experience, build a relationship with the cultural object. The brand is, holistically speaking, a means of communication. In this context, we do not mean only the brand as a living organism, but the concept of the message. The meanings of consumer goods are grounded in their social context. Such products are significantly more than products and services. Brands communicate with consumers on a semiotic level. The self is conceptualized in each product of a social system nor as a fixed entity which we create, partially through consumption.[46] In this way, consumers form an image of what they are and what they want to be. According to Thompson,[47] the self is a symbolic projection that the consumer constructs through brands. The individual visualizes his self-according to their imagined possibilities of the self. The self-concept is complex: the consumer can have different variants of actual selves or roles and a variety of possible or ideal selves. Consumers live in a symbolic-rich environment and the meaning added to these brands, ideas and situations is determined by the interpretation of the symbols. Consumers use these symbols to build and express their multiple identities. Symbols are idiosyncratic and their meaning can often be hidden and unconscious for consumers. Because consumers display through branding their perceptions of themselves and the desire for others to see them, it is very important to understand the meaning of brands. The symbolic meaning of brands can reveal the consumer's longings, individuality, or reflect a desire to connect.[48] Brand identity implies[49] constructs of personality, self-image and relationship that are, at their core, like the semiotics of the digital game. Consumers develop brand attachment, cult brands affirm the above,[50] and brand loyalty[51] also represents the denotational level of the brand sign. According to brand building

[42] AAKER, D. A.: *Managing Brand Equity.* New York : Free Press, 1991, p. 61; AAKER, D. A.: *Building Strong Brands.* New York : Free Press, 1996, p. 84; CHERNATONY, de L., MCDONALD, M.: *Creating Powerful Brands.* Oxford : Elsevier, Butterworth-Heinemann, 2003, p. 99; KELLER, K. L., APÉRIA, T., GEORGSON, M.: *Strategic Brand Management*. London : Pearson, 2008, p. 58.

[43] AAKER, J. L.: Dimensions of Brand Personality. In *Journal of Marketing Research*, Vol. 34, No. 3, 1997, p. 352; EVANS, M., JAMAL, A., FOXALL, G.: *Consumer Behaviour.* Chichester : John Wily & Sons, 2006, p. 138; BLYTHE, J.: *Consumer Behaviour.* London : Thomson, 2008, p. 83.

[44] SOLOMON, R. M., BAMOSSY, G., ASKEGAARD, S., HOGG, M.: *Consumer behaviour, a European perspective.* Edinburgh : Prentice Hall, 2009, p. 37.

[45] CSABA, F. F., BENGTSSON, A.: Rethinking Identity in Brand Management. In SCHROEDER, J., SALZER-MÖRLING, M. (eds): *Brand Culture*. London : Routledge, 2006, p. 122.

[46] ROSENBAUM-ELLIOTT, R., PERCY, L., PERVAN, S.: *Strategic Brand Management.* Oxford : Oxford University Press, 2007, p. 49.

[47] THOMPSON, J. B.: *The Media and Modernity: A Social Theory of the Media.* Cambridge : Polity Press, 1995, p. 210.

[48] KLEINE, S. S., KLEINE, R. E., ALLEN, C. T.: How is a possesion "Me" or "Not Me"? Characterizing types and antecedent of material possession attachment. In *Journal of Consumer Research*, 1995, Vol. 22, No. 3, p. 340.

[49] KAPFERER, J. N.: *The New Strategic Brand Management*. London : Kogan Page, 2008, p. 188.

[50] ACOSTA, P. M., DEVASAGAYAM, R.: Brand Cult: Extending the notion of brand communities. In *Marketing Management Journal*, 2010, Vol. 20, No. 1, p. 168.

[51] AAKER, J. L.: Dimensions of Brand Personality. In *Journal of Marketing Research*, 1997, Vol. 34, No. 3, p. 352.

theory, identity is key to achieving an image. As an example, let's mention the hexagonal identity of the digital game *Life is Strange 2* and the drama *A Doll's House* according to which elements of the brand can be shaped. The elements of identity here are adapted to the cult object of digital play and drama. Specifically, the sender of the message itself becomes the publisher of the play, that is, if we mean drama, then it can be the theatre, and the user represents the recipient of the message. Thus, the structure of the brand, according to Kapferer,[52] but also Keller,[53] remains unchanged. The characteristic features of a digital play or drama are realized through the symbolism of the graphic presentation or, from the aspect of drama, we mean the theatrical interior, that is, any specific features of the theatre itself that differ from others. Brand personality is presented in the form of user associations that we can imagine here as an emotional story, empathy for the main characters that users get from the literary work itself. We present the central elements of brand identity, consumer relationship, and culture in general as a culture of reading and an artistic culture. The same goes for comics and digital games, only then we're talking about popular culture. The construct of media literacy is viewed here in a holistic sense, as a comprehensive integration of the user's relationship with theatre and cultural objects. And finally, the reflection on the environment and self-image, from the aspect of the user, represent two elements of the brand identity. For further understanding, we will analyse the meaning of the brand according to semiotic theory.

Semiotics plays a central role in much of the newer challenging theory of consumer behaviour.[54] Barthes developed his semiotic analysis of the sign systems of culture precisely according to de Saussure's theory. However, according to Barthes' theory of sign analysis, the possibility of hypothetical levels of meaning enters both "above" and "below" the sign. The function of a sign is to communicate ideas through a message. In the semiotic sense, the medium implies the substance of the sign. A sign is a stimulus whose mental image we connect to the image of another stimulus that needs to be revived.[55] The notion of image is one of the key concepts in contemporary culture because everyone has their own image. The myth of that image we build is largely supported by brands because they structure our meaning. Consumers do not react to the product but to the brand, to the sign that brand represents.[56] These can be archaic, unconscious, and irrational, but also emotional, aesthetic and status signs. The concept of sign is observed here in accordance with de Saussure's theory.[57] The sign combines the term and the acoustic image into one.[58] The sign denotes the whole, while the word signifier denotes the term, and the word signified denotes the acoustic image. According to Barthes' theory,[59] the myth is produced on a connotative level. The connotation depends on the aspect of the vision, the culture of the user and the location. The relationship is actually very similar to creating a brand image and depends on the elements of brand identity. Building the elements of brand identity is the beginning of creating an image.

[52] KAPFERER, J. N.: *The New Strategic Brand Management*. London : Kogan Page, 2008, p. 183.
[53] KELLER, K. L.: Brand Synthesis: The Multidimensionality of Brand Knowledge. In *Journal of Consumer Research*, 2003, Vol. 29, No. 4, p. 596; KELLER, K. L.: Understanding brands, branding and brand equity. In *Interactive Marketing* 2003, Vol. 5, No. 1, p. 12.
[54] SOLOMON, R. M., BAMOSSY, G., ASKEGAARD, S., HOGG, M.: *Consumer behaviour, a European perspective.* Edinburgh : Prentice Hall, 2009, p. 136.
[55] GUIRAUD, P.: *Semiologija.* Beograd : Bigz, 1975, p. 26; ECO, U.: *Semiotics and the Philosophy of Language.* Bloomington : Indiana University Press, 1986, p. 45.
[56] JUKIĆ, D.: Digital Game as an Artistic Mimesis and a Cult Brand. In PROSTINÁKOVÁ-HOSSOVÁ, M., RADOŠINSKÁ, J., SOLÍK, M. (eds): *Megatrends and Media: Home Officetainment*. Trnava : Faculty of Mass Media Communication University of Ss. Cyril and Methodius in Trnava, 2021, p. 538.
[57] SAUSSURE, F.: *Tečaj opće lingvistike.* Zagreb : ArTresor, 2000, p. 98.
[58] KELLER, K. L.: Memory Factors in Advertising: The Effects of Advertising Retrieval Clues on Brand Evolutions. In *Journal of Consumer Research*, 1987, Vol. 14, No. 3, p. 329.
[59] BARTHES, R.: *Mitologije.* Zagreb : Pelago, 2009, p. 147.

Image is the result of a communication process, and communication itself has a positive effect on brand preference. The image of an object is formed only by thought processing. A brand image can be viewed as an image, perception, or complex experience, i.e., the structure of attitudes, experiences and beliefs towards a product or service. For a cultural object,[60] such as digital game, graphic novel, or drama, to become a myth, certain conditions are required. First, it is necessary to accept the theory according to which the myth is a communication system, i.e., a message.[61] From this it is clear how a myth cannot be an object, a myth is a way of signifying, a myth is a form. Thus, this means that the myth has no substantive boundaries, but formal ones. In this sense, digital games, graphic novels, and literary works can be a myth because they are suggestive. Every object can move from a closed, silent existence to an oral state that opens the possibility for society to adopt it.[62] Table 1 shows the analysis of the identity search construct myth in the digital game *Life is Strange 2*.

Table 1: Mother's identity in *Life is Strange 2*

Signifier	Signified
Mother as a term	Real mother
Denotation	
Anger at mother	
Connotative signifier	**Connotative signifier**
Mother protector	Frightened mother
Connotative sign	
Identity search	

Source: Own processing.

As can be seen, the signifier is the mother as a concept. She appears in the digital game later. Signified is a real mother with all her characteristics, appearance, voice, and attitudes. The mother's denotation was marked by anger as the children were disappointed that she had left them. The connotative signifier represents the mother as a protector. Children recognize that the mother was frightened (connotatively marked) and unprepared for the role of mother, and ultimately understand the connotative sign of the mother's existential issues. The mythical structure in the digital games *Life is Strange 2* is presented on the pedagogical construct of parenting and guardianship from the aspect of deconstructive analysis of myth. We find the same connotative meaning in the drama *A Doll's House*, where Nora eventually decides on a desperate move and leaves her husband and children in search for identity. The difference is that Nora does not leave her family during the drama, she is not scared or selfish, but in the end she decides to leave everything, just like her mother from *Life is Strange 2*. Of course, the reasons are different. In *Life is Strange 2*, a mythical structure is crucial in which the search for identity transcends all other, family, social and cultural values. In the graphic novel *A Distant Neighbourhood*, the search is experienced by a father who remembers his mother's death. At that moment, when he is the same age as she was at the time of her death, he realizes his existential problem. What is common in the context of brand theory and semiotic analysis of myth is certainly that these symbols encompass the entire cultural field: the search for identity, the search for meaning, and the search for the mother. The symbol makes the code extremely structured and coherent[63]. The archetype of the search for one's own identity makes up bundles of associations, ideas, and changeable sets that differ from signs. These sets contain many learned associations that are easy to express in a digital game and a graphic novel because they are close to everyone who belongs to one common culture. By the

[60] GRISWOLD, W.: *Cultures and Societies in a Changing World*. London : Sage Publications, 2013, p. 16.
[61] BARTHES, R.: *Mitologije.* Zagreb : Pelago, 2009, p. 143.
[62] Ibidem, p. 143.
[63] JOHANSEN, D. J., LARSEN, E. S.: *Uvod u semiotiku.* Zagreb : Croatialiber, 2000, p. 229.

archetype of the search for one's own identity (mother, father) we mean other real archetypes that spread in play and comics, such as brotherly love (older brother who takes care of the younger), sacrificial father (father takes on both roles), rebellion (children defy because are angry at the mother), reminiscences (butterfly as an archetype of going backwards), traveling by train (romantic adventure), going back to school days (remorse) and the like. From a pedagogical point of view[64], all three media are useful because they deepen the meaning and learning. Some archetypes are so deeply connected to culture that they always represent the same association, like being left without one eye, as we see in the example of the digital *game Life is Strange 2*. Therefore, the application of Barthes' method of analysis and interpretation of myth, according to which the discourse itself is given the possibility of reading, is based on set of codes that are layered. These same codes make elements of brand identity that are presented in the form of the idea of existence and growing up.

Conclusion

After analysing the related scenes contained in the digital game, drama, and graphic novel, using presentation theory, we conclude that the game show's family tragedy through dialogue, gestures, shooting angle, visual and auditory character painting and game content. From the aspect of drama, a devoted mother and woman are revealed who, after disappointment, also leave the family in search of their own identity. In this paper, we present two research results: a directly implicit meaning about the value of the role of parenting and a search for identity. Connotative meaning is that which is implied in all three media and encompasses the inability of parents to change the situation. The mythical structure show's characters that are contained in the digital game, drama and graphic novel that should be analysed in accordance with the culture of the user. This act reveals the root that is the cause of all misunderstandings. We viewed the brand as an idea that was portrayed in all three media. The idea of the search for identity is stated and presented as a specific, intellectual, individual, and existential adventure that is presented in a very specific way. We associated this act of representation with elements of brand identity, specifically on the example of the digital game *Life is Strange 2* in which Karen Reynolds' mother is marked by gestures, facial expressions, voice, appearance, graphic representation, and behaviour. The same goes for father Hiroshi Nakahar who is showen in black and white with a distinctive Japanese drawing style. Also, the same goes for Nora Torvald who is artistically portrayed in drama through dialogue with other characters and characterized as a firm, independent and confident woman, and before that as a puppet who obediently listens.

According to brand theory, brand identity must contain certain elements, such as a specific way of expression (drama), a way of drawing (a graphic novel) or a way of presenting an action (digital game). All three media show and confirm elements of brand identity that coincide with the model of the cultural object according to which the examples given reflect consumer impressions, emotions and ultimately, the brand image. The brand can also be the digital game itself, drama, and graphic novel as well as their authors, but here we put the emphasis on the idea of the brand, the idea of emancipation, existence, and the search for one's own image. That idea sometimes provokes anger, sometimes adventure, but it certainly creates a consumer image, an image that will be talked about for a long time.

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[64] MARCI-BOEHNCKE, G.: Von der integrierten zur inklusiven Medienbildung. In HUG, T. (ed): *Medienpädagogik: Herausforderungen für Lernen und Bildung im Medienzeitalter*. Innsbruck : Universität Innsbruck, 2018, p. 58; TULODZIECKI, G., HERZIG, B., GRAFE, S.: *Medienbildung in Schule und Unterricht: Grundlagen und Beispiele*. Bad Heilbrunn : Julius Klinkhardt, 2010, p. 37.

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PLANET PILLAR OF CSR IN FOOD ENTERPRISES AND ITS MARKETING COMMUNICATION

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Abstract
Paper points at the planet pillar of the corporate social responsibility, its activities used in the food enterprises in Slovakia as well as the way the food enterprises communicate these activities with the public. The research was conducted in 125 food businesses based in Slovakia and divided by Slovak and foreign participation. For statistical evaluation were used Likert scale, Two-sample Kolmogorov-Smirnov Z test, Exact tests, Pearson Chi-square test, Contingency coefficient C and Monte Carlo method. The results of our research proved that activities within the planet pillar represent the voluntary integration of environmental aspects into the daily life of the company and interaction with its surrounding to a greater extent in the food businesses with foreign participation. They mainly use recycling, pay attention to the impact on the environment, meet national and international standards, and educate the public in the field of food waste. Almost 65 % of food businesses with foreign participation do have a PR department for applying the CSR activities within PR to build the image of the company. To achieve this goal, they mainly use the company's website, press releases and communiques.

Key words:
CSR Activities. Environmental Protection. Food Enterprises. Food Waste. Foreign and Slovak Marketing Communication. Participation. Planet Pillar. PR.

Introduction

The idea of corporate social responsibility dates back to the early 1950s, and its foundations were laid in a book entitled "Social Responsibilities of the Businessman".[1] Today, there is no standard definition of corporate social responsibility (CSR), but a number of international and national organizations and movements have sought to define this concept. In Europe, the development of CSR is supported by the European Union, according to which CSR is defined as the responsibility of enterprises for their impacts on society.[2] The main feature of a socially responsible corporation is that it has adopted the concept voluntarily, beyond its legislative obligations. Along with that, such corporations recognize the three main pillars of corporate responsibility: economic, environmental and social, which are often referred to as the "triple bottom line"- People, Planet and Profit, on which the overall strategy of a business is developed, thus moving from the basic level of "profit only".[3,4] From this point of view is necessary to pay attention to the problems of nowadays, when the society is facing many environmental threats, including the depletion of natural resources, food waste, pollution, climate change, threats to biodiversity, and the collapse of entire ecosystems. Companies' decisions and activities have a clear and significant impact on the environment, regardless of where the company is based or in which line of business it operates. Those companies that change their viewpoint about environmental and social pressures and integrate sustainability issues into their business strategy will have a competitive advantage over their rivals and will enjoy the benefits that

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sustainability offers them. It has thus become crucial for any entity to adhere to the principles of sustainable development, which will preserve living conditions for future generations as well.[5] In the environmental area (planet pillar within CSR) companies support preventive approaches to environmental protection. This includes activities to assess the level of risk of non-compliance with environmental, health and safety standards. Companies inform employees about preventive approaches. If companies are environmentally responsible, they create environmentally friendly strategies to ensure that their activities do not harm the environment. Companies in this area also support the development and dissemination of technologies that are environmentally friendly and thus protect the environment. [6] Relatively important areas within the Planet pillar is the need to point at recycling and preventing food waste. [7]The area of the company's social involvement and its communication with the public depends on the industry in which it operates.[8,9] Businesses in the service sector appeal more to the dimensions of volunteering, economic and social responsibility. On the other hand, primary sector enterprises such as agriculture, extractive industries and industrial enterprises are more oriented towards environmental and environmental responsibility.[10] Regarding the communication of CSR activities is clear that corporate responsibility requires giving up the intention of "profit only" and shift to the overall view to the establishment of a wider system of social relations. The fact if the company is socially responsible, affecting customer opinions for the company and also their buying decisions. It is important that enterprises inform customers about their CSR activities through appropriate communication tools. Communication with the public in this way has become a matter of good reputation, prestige, demonstration of efficient and aware management.[11] Communicating about CSR activities is the ability to present, explain and give their ideas to various stakeholders in an appropriate form. When a company reports to customers what conduct in the social responsibility area, provides information about the values of the company and about the products or services that it launches.[12] It is highly important to communicate the CSR activities with the public. 59 % of Slovaks know the CSR concept. These people learnt about the concept mainly from TV, radio and print campaigns further from company campaigns and CSR reports.[13]

The enterprises should inform about applying CSR activities and use this potential to build the company's reputation, to increase the brand value, to create a love mark, to improve human capital, to increase employee productivity by increasing their satisfaction and skills, reducing costs related to environmental practices, building more trustworthy relationships with the

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customers as well as suppliers and, last but not least, the conservation of natural resources for society as a whole. In today's challenging times and competitive environment, the connection of CSR and PR is becoming a highly topical and important task for companies in all areas not only in Slovakia but also worldwide.[14]

1 Material and Methods of Research

The paper aims to point at CSR activities within the Planet pillar and their marketing communication to build a positive image in food enterprises with foreign participation and Slovak participation based in Slovakia. We deliberately chose food companies as the object of research, as it is food companies that should apply socially responsible business. This is extremely important, especially because they produce food for society as a whole, and thus directly affect the health and life of all of us without exception. They can also influence consumer behaviour and educate them. Our research was based on the questionnaire. 358 food enterprises from Slovakia with foreign and Slovak participation were asked to be involved in the research, however, we have received 125 questionnaires from food enterprises that created the final database for statistical evaluation by using the Likert scale, Two-sample Kolmogorov-Smirnov Z test, Exact tests, Pearson Chi-square test, Contingency coefficient C and Monte Carlo method. Total 58 %, of the analyzed subjects, were food enterprises without foreign participation, and 42 % of food enterprises were with foreign participation.

The representativeness of the sample number of food enterprises was tested by χ^2 test of good agreement (Table 1).

Table 1: χ^2 test of good agreement

Number of Food Enterprises	**358**
Result of the test	
Calculated value	16.05909
Table value	16.81298

Source: SOSR, Authors calculations, output XLSTAT.

2 Planet Pillar of CSR in Food Enterprises and its Marketing Communication

Table 2 lists the frequency of CSR activities in the field of Planet pillar, namely in the field of environmental protection, for both analysed groups of food businesses divided based on foreign participation. The most frequently implemented CSR activities in the field of environmental protection include mainly recycling, taking into consideration the impact on the environment in production, compliance with national and international standards, reducing the impact of the company's activities on the environment, controlling of energy and water consumption or educating of the customer to avoid the food waste. From Table 2 seen, that the percentages of individual CSR activities in the field of environmental protection are almost the same in the food businesses with foreign and without foreign participation.

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Table 2: CSR Activities – Planet Pillar

CSR Activities - Field of Environmental Protection	Foreign Participation	
	No	Yes
Recycling	13.0%	12.4%
Impact on the environment in production	11.9%	10.2%
Compliance with national and international standards	10.5%	11.8%
Reducing the impact of the company's activities on the environment	10.5%	10.8%
Controlling of energy and water consumption	9.8%	9.1%
Educating of customer to avoid the food waste	10.5%	8.1%
Using the materials that can be reused or recycled	7.4%	9.7%
Having a waste management policy	6.7%	7.5%
Communicating the environmental policy with the employees and public	6.7%	7.0%
Having an environmental management system	6.7%	6.5%
Having a policy of reducing fuel consumption	3.5%	3.2%
Providing the environmental training to employees	2.8%	3.8%

Source: Authors research and calculations, output IBM SPSS Statistics.

Based on the results from Table 3, we do not reject the null hypothesis about the independence between the frequency of implementation of CSR activities within the Planet pillar - in the field of environmental protection, that are understood and communicated as part of the company's PR and foreign participation. This is based on the fact that the asymptotic significance value of the Pearson's Chi-square test and the significance value estimated based on Monte Carlo igher than the determined alpha significance level of 0.05. This means that both groups of food companies have approximately the same frequency of implementation of CSR activities in the field of environmental protection, understood and communicated as part of the company's PR.

Table 3: Results of Pearson's Chi-Square Test of CSR Activity within Planet Pillar Understood and Communicated as Part of the Company's PR

	Value	df	Asymptotic Significance (2-sided)	Monte Carlo Sig. (2-sided)		
					99% Confidence Interval	
				Significance	Lower Bound	Upper Bound
Pearson Chi-Square	2.963[a]	3	0.397	0.449	0.436	0.462
Likelihood Ratio	4.024	3	0.259	0.418	0.405	0.430
Linear-by-Linear Association	2.616[c]	1	0.106	0.145	0.135	0.154

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is 1.09.

c. The standardized statistic is -1.618.

Source: Authors research and calculations, output IBM SPSS Statistics

From the results of our research can be stated, that more than half of surveyed companies with foreign participation have a PR department which is an essential part of their company. In the case of enterprises without foreign participation, it is only 9.52%. As many as 64.29% of companies without foreign participation stated that they do not have a PR department, but its function is performed by another department. In the case of enterprises with a foreign area, which do not have a PR department, but its function is performed by another department as indicated 43.48% of food enterprises. Only 7.14% of companies without foreign participation do not have a PR department, but they are aware of its importance and plan to open it in the future. In the case of enterprises with foreign participation, it was 4.35% of enterprises. As many as 19.05% of companies without foreign participation do not have a PR department and do not even realize its importance.

Table 4: Results of Pearson's Chi-Square Test for the Existence of PR Department and Foreign Participation

	Value	df	Asymptotic Significance (2-sided)	Monte Carlo Sig. (2-sided)		
				Significance	99% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	16.682[a]	3	0.001	0.001	0.000	0.001
Likelihood Ratio	18.799	3	0.000	0.001	0.000	0.002
Linear-by-Linear Association	12.826[c]	1	0.000	0.001	0.000	0.001

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.42.

c. The standardized statistic is -3.581.

Source: Authors research and calculations, output IBM SPSS Statistics

Based on the results from Table 4, we reject the null hypothesis of independence between the existence of the PR department and foreign participation. This is because both the asymptotic significance value of the Pearson's Chi-square test and the significance value estimated from Monte Carlo are lower than the determined alpha significance level of 0.05. Enterprises divided based on foreign participation have a different level of using the PR department and its importance in the practice. The value of the contingency coefficient from Table 5 as a measure of the tightness of the dependence between the analysed categorical ones is 0.452 which represents a slight tightness between the analysed categorical variables.

Table 5: Results of the Symmetric Measures

		Value	Approximate Significance	Monte Carlo Significance		
				Significance	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Contingency Coefficient	0.452	0.001	0.001[c]	0.000	0.001

c. Based on 10000 sampled tables with starting seed 1850221416.

Source: Authors research and calculations, output IBM SPSS Statistics

Table 6 shows marketing communication activities and tools used in the practice of food enterprises to promote their CSR activities within the Planet pillar to communicate them with the public and build a positive image of the company, divided by foreign participation. We asked the managers to mark all activities and tools which they use in the practice to promote CSR activities within the Planet pillar to build the positive image of the company. Results proved that the most used are the company's website and social networks, identified by 43.5% of companies without foreign participation and 65.8% of companies with foreign participation.

The press releases and communiqués were marked by 15.2% of companies without foreign participation and 20.5% of companies with foreign participation. Furthermore, companies with foreign participation in comparison to companies without foreign participation, prefer more following activities: sponsorship (15.4%), events and philanthropic activities (both with a share of 17.9%) as well as publicity (10.6%), annual reports (7.2%) as well as public speeches (6.8%). Important in creating a positive image and PR of the company is to spread the information about the education of customers and employees in the field of environmental protection (4.3% of enterprises without foreign participation and 12.6% with foreign participation), including minimizing and preventing food waste. This is done by blogs, PR articles, interviews with managers and campaigns.

Table 6: Marketing Communication Activities and Tools Used in Practice of Food Enterprises to Promote the Used CSR activities within Planet Pillar to Communicate them with the Public and Build the Positive Image of the Company

Marketing Communication Tools and Activities- Planet Pillar and PR	Foreign Participation	
	No	Yes
Website and Social Networks	43.5%	65.8%
Press Releases and Communiqués	15.2%	20.5%
Sponsorship	6.5%	15.4%
Philantrophic Activities	2.2%	17.9%
Events	6.5%	17.9%
Education of Customers and Employees	4.3%	12.6%
Publicity	2.2%	10.6%
Annual Reports	4.3%	7.2%
Public Speeches	4.3%	6.8%
Business Magazine	1.2%	5.6%

Source: Authors research and calculations, output IBM SPSS Statistics

Conclusion

The submitted paper pointed at CSR activities within the Planet pillar and their marketing communication to build a positive image in food enterprises with foreign participation and Slovak participation based in Slovakia. Based on the result of questionnaire survey including 125 food enterprises in Slovakia divided by foreign participation can be concluded that the most frequently implemented CSR activities in the field of environmental protection are recycling, the impact on the environment in production, compliance with national and international standards, reducing the impact of the company's activities on the environment, controlling of energy and water consumption or educating of the customer to avoid the food waste. More than half of surveyed companies with foreign participation have a PR department which is an essential part of their company. Food enterprises promote their CSR activities within the Planet pillar to communicate them with the public. They use it as a way to build a positive image of the company. The most common marketing communication activity and tool used in practice is the company's website and social networks, which use 43.5% of companies without foreign participation and 65.8% of companies with foreign participation. The press releases and communiqués are the second most frequently used activities. Sponsorship, events, philanthropic activities, as well as publicity, annual reports and public speeches, are preferred more by food enterprises with foreign participation. Important is to spread the information about educating the customers and employees in the field of environmental protection, including minimizing and preventing food waste that is currently becoming a serious problem and this seems to be one of the most powerful ways to improve the current situation and improve the positive image of the food enterprises in Slovakia.

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NEW MEDIA IN THE CONTEXT OF RISKY BEHAVIOR OF HIGH SCHOOL STUDENTS: HOW TO CHEAT ONLINE

Martin Kaliba – Petra Ambrožová

Abstract
The paper deals with current issues of the new media misuse in order to cheat online in school. The issue of online cheating in schools has become a new topic also during the COVID-19 pandemic, when a number of frauds has increased significantly during distance learning. The study brings a view into a Czech education reality and presents research results implement among 1542 students of upper secondary schools all over the Czech Republic at the average age M=16,99, SD=4,28. The sample is made of 647 boys and 895 girls. The research survey was implemented with the aim to map the current situation in terms of online school dishonesty with the help of new media in the population of Czech students of upper secondary schools. The results point to the gender differences in online school cheating and the role of social networks in this field. The research results show, whether we can really classify Czech upper secondary school students as members of so-called Cheating culture.

Key words:
Education. High School Students. New Media. Online Cheating.

Introduction

So-called school e-cheating is a relatively new fields, which has brought a massive use of new media in the field of education. Although, social media was developed primarily for the purpose of communication, they also play an undeniable role in the education process. "Social media is a platform, where users can explore the content of the network together, share their experiences and build relationships for various purposes – e.g. social or educational ".[1] According to Lovett[2] school cheating is currently considered as pandemic. This is partly because, students feel more experienced, that students feel to be more experienced in the field of technologies than their educators[3], who sometimes have no clue, what is cheating like in the 21st century. "Some students want to achieve a favourable evaluation without a great effort, trying to deceive the computer system, circumvent teachers. Thus, e-learning also brings new types of problems, which have their predecessors in traditional teaching, but new technical possibilities give them a broader dimension and completely new (previous unfeasible) forms."[4] Arnold[5] says, that school cheating supports the current settings of schools, which focus on students' performance, promote competitiveness and are oriented towards gaining good school results. In addition, online learning environment opens up a whole range of possibilities of school dishonesty, students use banned means, or even have someone else to take a test instead of them. Apart from these factors, Arnold[6] also takes into an account the lack of teachers'

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[1] JIAO, Y., GAO, J., YANG, J.: Social value and content value in social media: two ways to flow. In *Journal of Advanced Management Science*, 2015, Vol. 3, No. 4, p. 300.
[2] LOVETT, B. J.: The Science of Cheating. A Psychologist' Perspective. In *Resiliency*, 2013, Vol. 14. [online]. [2021-09-25]. Available at: <https://www.scribd.com/document/142105519/2013-Newsletter-Vol-14-The-Science-of-Cheating>.
[3] ROWE, N. C.: Cheating in Online Student Assessment: Beyond Plagiarism. In *Online Journal of Distance Learning Administration*, 2004, Vol. 7, No. 2, p. 1556.
[4] MAREŠ, J.: Elektronické učení a zvláštnosti člověka. In SAK, P. et al.: *Člověk a vzdělání v informační společnosti. Vzdělání a život v komputerizovaném světě.* 1. vyd. Praha : Portál, 2007, p. 171.
[5] ARNOLD, I. J. M.: Cheating at online formative tests: Does it pay off? In *Internet and Higher Education*, 2016, Vol. 29, p. 101.
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experience working in online environment, or the lack of accompanying information for testing online. Similarly, this issue is perceived by Stuber-McEwen et al.[7], who state, that cheating often appears in online environment, because, there the students presume, that are in safe and savvy in using various means, as well as they believe, that pedagogues are not able to detect the fraud. Regarding the phenomenon of plagiarism, we assume, that a high percentage of students, who currently use new media in order to study, do homework and cooperative work etc. The issue of plagiarism is based on students view, "that anything, what is on the internet, is free of chargé and for a further use".[8] This issue is particularly relevant in connection with so called "copy-paste" plagiarism, or with the use of buying readymade piece of work by another author.[9]

1 Methodology

The research survey was implemented with the aim to map the current situation in terms of online school dishonesty with the help of new media in the population of Czech students of upper secondary schools, this issue is particularly relevant. "Most studies on school cheating focus on university students and there is a relatively little research that is devoted to upper secondary school students and older pupils who cheat in schools."[10] "Although, there has been a lot of talk about non-standard way of obtaining diplomas at some universities and about plagiarism, dishonesty in primary schools and upper secondary schools, in Czech media in the last years, it seems to be completely out of interest not just of the lay public but also the professionals. This is evidenced by the almost complete absence of original research publications on this issue over the last decades."[10] Our research sample consists of 1542 upper secondary school students at the average age M=16,99, SD=4,28. The sample is made of 647 boys and 895 girls.

2 Results

We have found only a minimum of gender differences in the field of attitudes of contemporary generation of upper secondary students towards the use of social networks as a study tool. To the statement that *"Social networks can be used also for learning,"* 22% of women and 21% men stated, always or almost always YES. At least sometimes the social networks can be used for almost 55 % of male respondents and 57 % women. There is a significantly interesting fact, that more than one quarter of students is convinced, that social networks can be never used at all. Thus, such a large number of social media becomes a learning tool with an enormous potential, both in traditional classrooms, as well as in the field of informal education out of school classroom.[11]

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[7] STUBER-McEWAN, D. et al.: Point, Click, and Cheat: Frequency and Type of Academic Dishonesty in the Virtual Classroom. In *Online Journal of Distance Learning Administration*, 2009, Vol. 12, No. 3, p. 112.

[8] KHAN, Z. R., BALASUBRAMANIAN, S.: Students go click, flick and cheat: E-cheating, technologies and more. In *Journal of Academic and Business Ethics*, 2012, Vol. 1, p. 1.

[9] SISTI, D. A.: How do high school students justify internet plagiarism? In *Ethics and Behavior*, 2007, Vol. 17, No. 3, p. 215.

[10] VRBOVÁ, J., STUCHLÍKOVÁ, I.: Školní podvádění starších žáků – pilotní studie. In *Pedagogika*, 2012, Vol. 3, p. 317.

[11] SUNG, Y. T., CHANG, K. E., LIU, T. CH.: The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis. In *Computers and Education*, 2016, Vol. 94, p. 252.

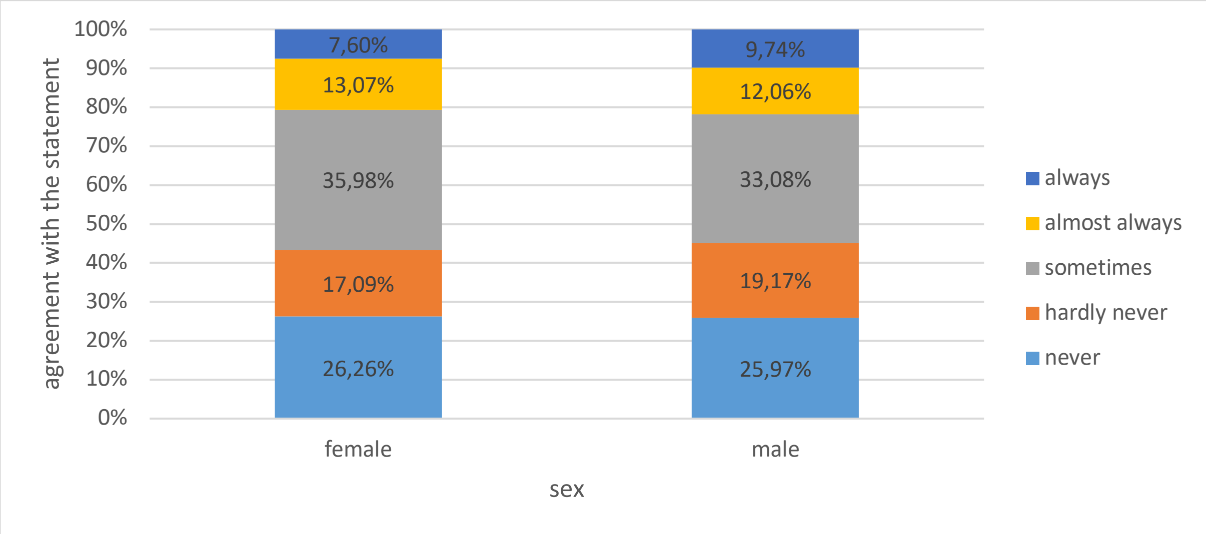

Chart 1: Agreement with the statement *"Social network can be also used for learning."* by gender
Source: Own processing.

Another area of our investigation focused on a thin line between the use and misuse of social networks in education. Then we asked students whether they agreed with the statement *"I cheat in school through information and communication technologies."* This claim is rejected by (choice of never, or hardly ever) 22 % of girls and just only 16 % boys. On the other hand, almost 84 % admit, that they cheat at least sometimes, 26 % almost and almost always and even 16 % always. There were 78% of female respondents who cheat at least some time with the use of social media. This also opens up a risk space so called contract cheating.[12] According to the study of Rigby, Burton, Balcombe and Mulatu[13] more than 50% of students have said that they would contract cheat were the right financial incentives and risk levels in place.

[12] LANCASTER, T.: Social Media Enabled Contract Cheating. In *Canadian Perspectives on Academic Integrity*, 2019, Vol. 2, No. 2, p. 7.
[13] RIGBY, D., BURTON, M., BALCOMBE, K. MULATU, A.: Contract cheating and the market in essays. In *Journal of Economic Behavior and Organization*, 2015, Vol. 111, p. 28.

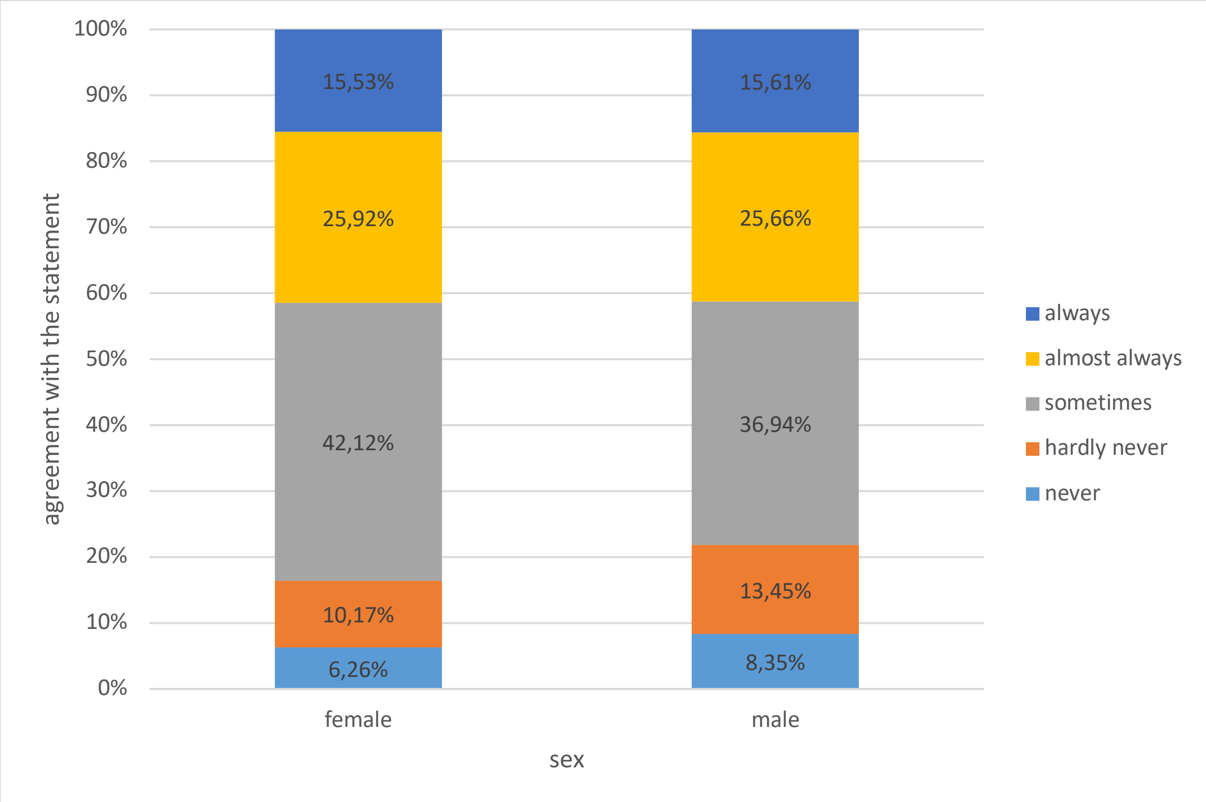

Chart 2: Agreement with the statement *"I cheat in school through information and communication technologies "by gender*
Source: Own processing.

Plagiarism is one of the relatively common ways of cheating in our sample of students. However, we have found interesting gender differences. At least sometimes, when writing a task or an essay, 50% of men and 30% of girls "borrow "a somebody else's ready-made text on the internet. There is 17 % of students, and 10 % of girls admit, that they always or almost always work in that way. On the contrary, 34% of women and 25% of men report this type of cheating in schools.

Chart 3: Agreement with the statement "When writing homework or an essay I "borrow "a ready-made text from the internet and I use it in my work." by gender
Source: Own processing.

This type of cheating is mostly related to students with D marks, who in almost 65 % of cases admit, that they sometimes work with plagiarism sometimes. This fact is also confirmed by Mareš,[14] who states, that there is a relationship between cheating ins school and student´s school results, i.e. particularly weaker students show a higher tendency to cheat. On the other hand, surprisingly, students with mark E from the Czech language, who in 50 % of cases state, that they never cheated when writing a task or an essay "would never use a ready-made text of somebody else´s ". A question thus remains, whether students with the lowest mark only do not admit cheating, or they do not really tend to do so, or whether the absence of cheating is the reason of the worst mark (unlike with students with grade D). However, even among students with excellent marks, this type of behaviour can be seen. In students evaluated with the mark A in the last school report, at least a quarter of respondents is engaged in this type of behaviour, and students with mark B are seen in 28 %.

[14] MAREŠ, J.: Elektronické učení a zvláštnosti člověka. In SAK, P. et al.: *Člověk a vzdělání v informační společnosti. Vzdělání a život v komputerizovaném světě.* 1. vyd. Praha : Portál, 2007, p. 171.

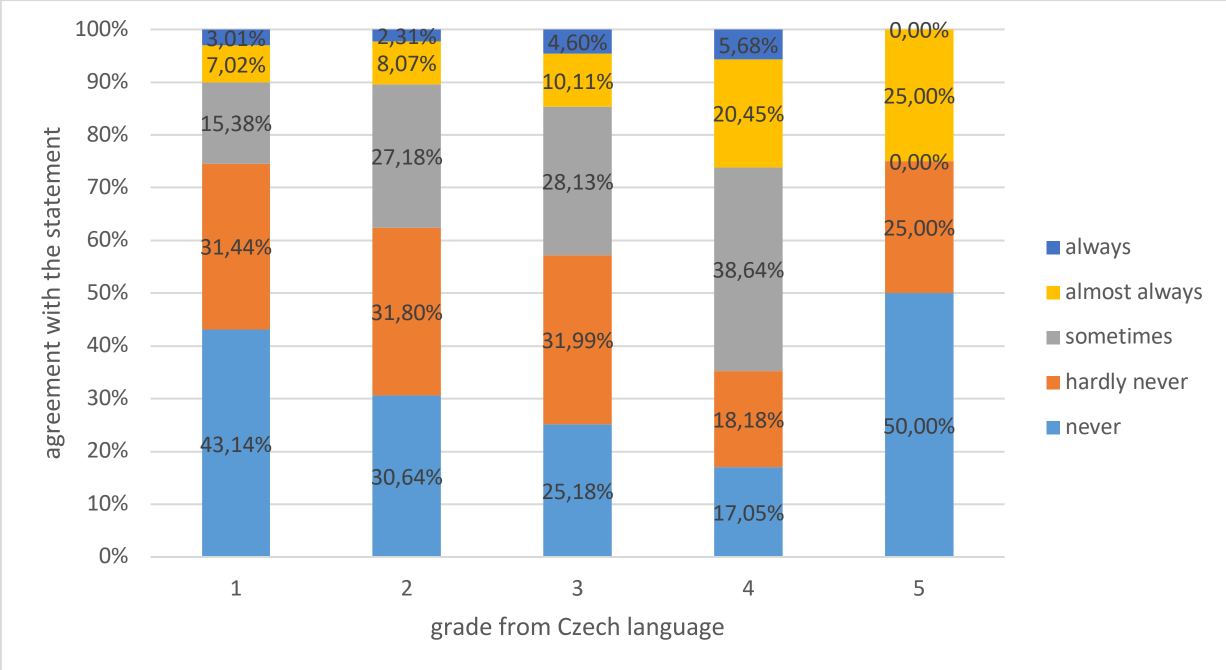

Chart 4: Agreement with the statement "When writing homework or an essay I "borrow "a ready-made text and I use it in my work. "according to grades
Source: Own processing.

In our research sample, communication in social networks during learning is a relatively common way of school disruption. At least 60% of male students and 54% of female students admit. Boys thus communicate through social network during school lessons a little more often than girls, which corresponds with the common trend of a higher level of school teaching and disruption in boys also in other fields of our research. This is confirmed by previous study surveys[15], which suggest, that men are much more likely to disturb during lessons than women. Smith[16] also talks about the incidence of school disruption via the internet – 99% of students, who own a smart phone say, that they used it at least once in the last lesson.

[15] AKBULUT, Y. et al.: In search of a measure to investigace cyberloafing in educational settings. In *Computers in Human Behavior*, 2016, No. 55, p. 616.
[16] SMITH, A.: *US smartphone use in 2015*. [online]. [2021-10-22]. Available at: <http://www.pewinternet.org/files/2015/03/PI_Smartphones_0401151.pdf>.

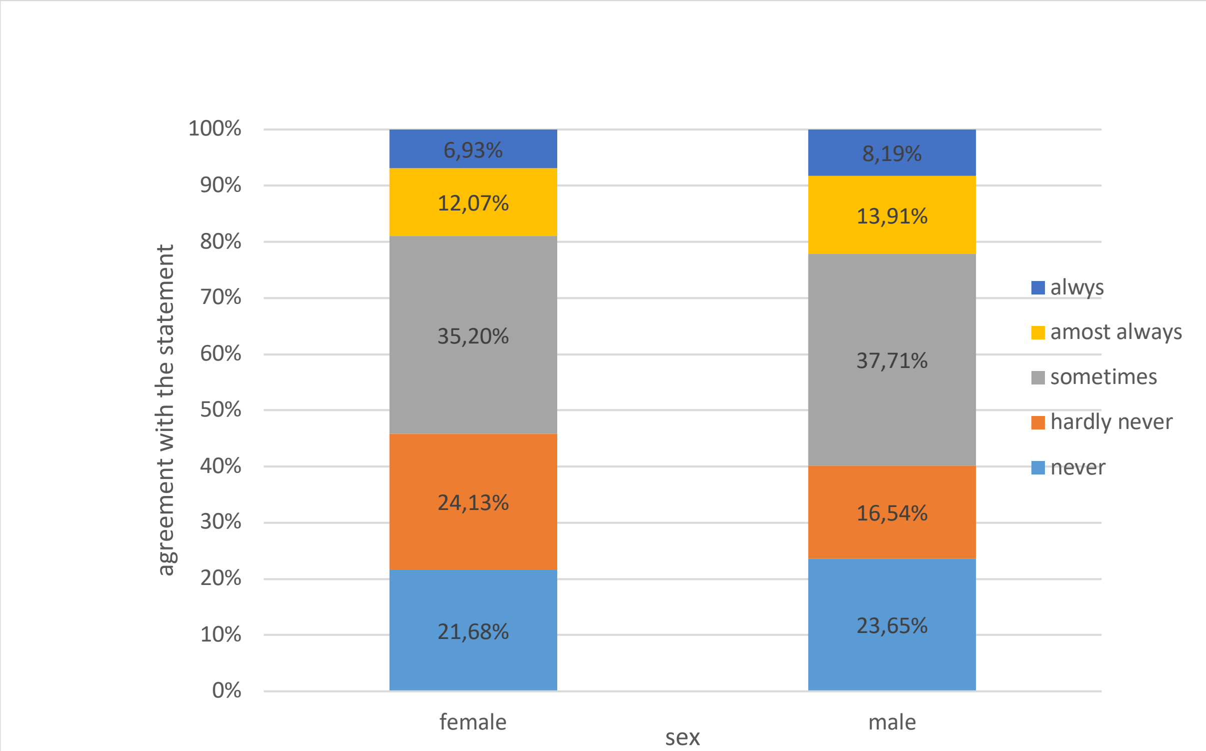

Chart 5: Agreement with the statement "I communicate in social media during lessons. "by gender
Source: Own processing.

There is also an exchange of material (photography, videos) with sexually explicit content for the elaboration of a school assignment in our described research sample of students. At least sometimes 47 % of girls and even 55 % of boys have experienced this phenomenon. This can be related to the relatively high prevalence of sexting-for example among Czech students and students at the age of 11-17 years 7,81 % (47 % of boys and 53 % of girls) where 12,14% (where 60 % of boys and 40 % of girls) placed their "sexy "photo or a video on the internet, where they are partly or completely naked, and sent that material to somebody through the internet or a mobile phone. "[17] This can also represent a described phenomenon of transactional sex aimed at access scarce resources such as good grades, accommodation, and books. This form of so called sexual economy is very often linked in the references in terms of university campuses.[18]

[17] KOPECKÝ, K., SZOTKOWSKI, R.: Cyberbullying and Other Forms of Risky Behaviour on the Internet by Czech Children. In *Adiktologie*, 2015, Vol. 15, No. 3, p. 230.
[18] GUKURUME, S.: Transactional Relationships Within a University Campus in Zimbabwe. In *The Oriental Anthropologist*, 2021, Vol. 2, p. 616.

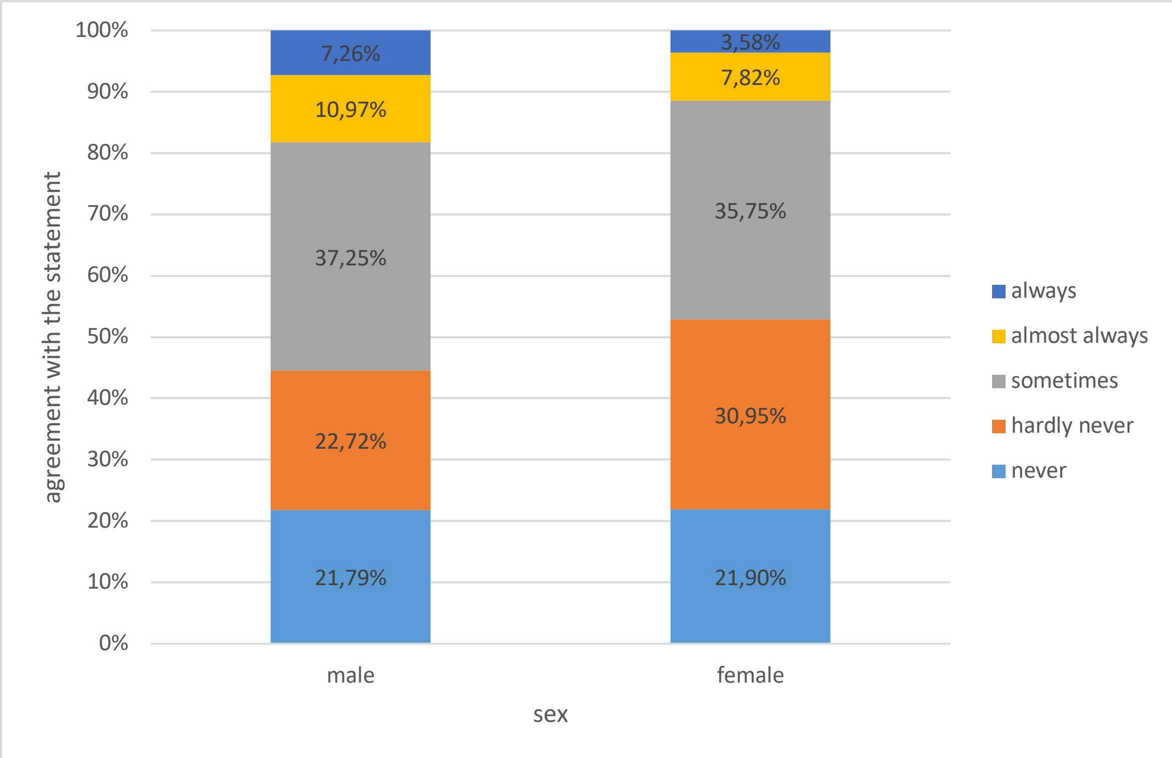

Chart 6: Agreement with the statement "It happened to me, that someone had done a task for me and required a photo or a video with a sexual content. "by gender
Source: Own processing.

According to our expectations, social networks are also used as a place for sharing study material in our research sample. Male students share study material much more often in social networks than female students. Whereas more than 58 % female students state, that they do not share any material with their peers at all, male students represent 19 % less. On the contrary, there are female students who represent 5 % and state that they always or almost always share study material in social networks and 12 % male students. In the comparison with the fact about social networks perception, they can be as possible tools for learning from students' point of view (see above) and therefore we can state, that when students use social networks for learning, then individual learning prevails, not the cooperative one.

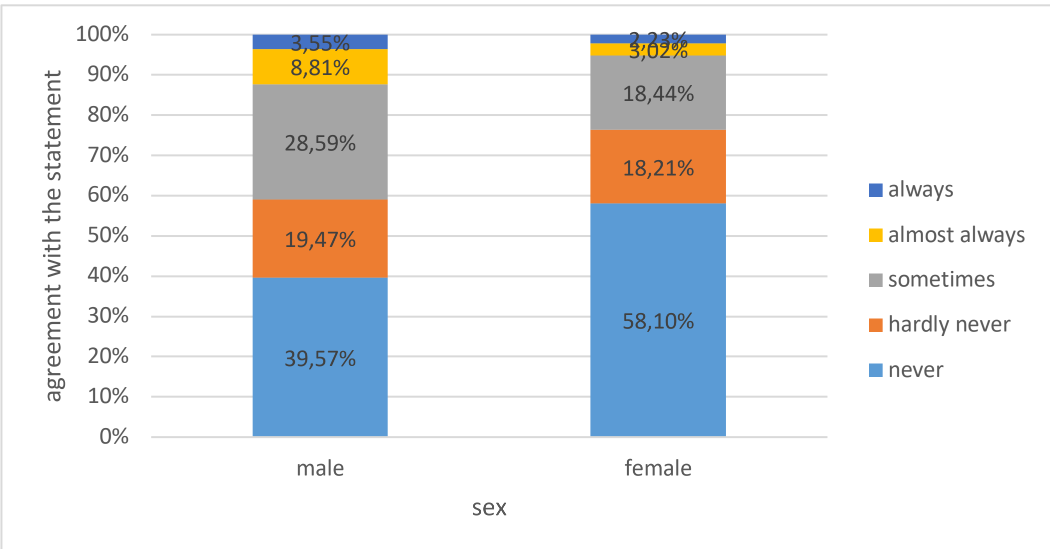

Chart 7: Agreement with the statement "We share study material on social network. "by gender
Source: Own processing.

Conclusion

Our research survey has shown the way how students of upper secondary school misuse media to e-cheating, and at the same time, there were differences seen in terms of genders. The issue of school dishonesty through new media is influenced by a number of variables, such as students gender, age, learning style, motivation to education, a teacher´s role and rules set by school (or more precisely by the teacher) for cheating, ways of fraud solving, punishment, social classroom climate and many others[19]. Trushell and Byrne[20] state, that men cheat in school more than women and younger students tend to incline to dishonesty more than older students. Students, who are more focused on gaining good grades than understanding educational content, and students, who feel dissatisfied at school, there are two groups of students, who cheat more often.[21] A rapid increase of school dishonesty was reported by Galloway[22] mainly in the last 30 years and the up-to-date topic and the use of the term "cheating culture ". Within prevention of plagiarism Christensen[23] suggests eight basic steps:

1. To include the topic of plagiarism in teaching – specifically the risks of copying and using other people´s ideas taken from the internet,
2. to teach students differ between paraphrasing and just a simple downloading information from the internet,
3. to teach students correct reference techniques, mainly in case of internet sources,
4. to teach students distinguish, select and use relevant sources,
5. to teach students to distinguish "direct and indirect citations ",
6. to make such tasks for students, who try to search and interpret data correctly,
7. to help students pay attention in terms of details in tasks, seminary works,
8. to explain students, that plagiarism is a form of fraud.

The issue of online cheating in schools has become a new topic also during the COVID-19 pandemic, when a number of frauds has increased significantly during distance learning. Many universities reported widespread cheating in online examinations that took place in Spring 2020, and the problem became so rampant that even the media addressed it.[24] And from this reason, there shall be necessary to further address this issue in the future and prevent it effectively.

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CONCEPTUALIZING "SPONSORED AUTHENTICITY" IN SUSTAINABLE INFLUENCER MARKETING

David Klimeš

Abstract
The role of social media influencers is growing in the communication mix. Their unique relationship with target groups attracts advertisers. However, this raises many questions that are not so prominent in traditional advertising forms on social networks: How to manage influencers activity? What ethical issues are associated with this type of promotion? The present work suggests moving towards trusted and sustainable influencer marketing. Considerable increases in influencers' numbers require standardized rules for their selection and a possible subsequent commercial relationship. It is also necessary to standardize the approach to parasocial influences of the influencer with its community. The third area is the ethical use of influencers in commercial communication. This cannot be achieved without creating long-term standardized relationships with influencers. This paper proposes to follow some traditional tools as an auxiliary parameter to measure influencers sustainability.

Keywords:
Advertising value. Brand credibility. Influencer marketing. Relationship marketing. Social media.

Introduction

Influencer marketing typically promotes a brand, product, or service and this type of promotion is on the rise. In addition to significant practical application, is attracting increasing attention from professional research.[1] A specific group of influencers is influencers on social networks. Their uniqueness lies in the fact that they can significantly impact their supporters and the community they create around them. Influencer marketing's specifics are that they incorporate commercial support for third-party products into their network, which monitors influencers' personal lives, opinions, and attitudes. The whole ecosystem of the influencer network is thus inclusive and mixes many genres and media fields that have been significantly more separated so far. All this is done through various platforms and is amplified by texts, images, videos, hashtags, locations, and other means. Cooperation with social media influencers is, in principle, difficult for the advertising business. The impact of their support depends on the inclusion of the brand, product, or service in their image of personal life on the social network.[2] Successful inclusion increases the credibility of support, and the impact on consumers may be more significant than comparable support from celebrities in traditional media. However, this effort is paradoxical because the controlled commercial promotion of third-party brands, products, or services seeks to appear a natural part of social media influencers personal lives. This phenomenon presents, practically and professionally, new problems for marketing in the management of influencer marketing, its evaluation, and answering new ethical questions. After an initial period of influencer marketing, it turns out that the specific mechanism of persuasive communication deserves further investigation. Ki

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and Kim[3] suggest considering social media influencers persuasive ability in the following categories.

Visual factors include:
- Attractiveness and taste leadership,
- prestige and taste leadership,
- expertize and taste leadership.

Verbal factors include:
- Expertize and opinion leadership,
- information and opinion leadership.

The result is the consumer's desire to mimic social media influencers taste and opinions, which results in WOM or purchase intention. Thus, the marketing practitioner needs to understand how the consumer is identified with the influencers attitudes and opinions. This process is also a whole new area for marketing psychology's professional study because transforming an influencer fan into a consumer takes place in an environment with specific ties.

One of the pressing issues for both practitioners and academia is understanding how social media influencers support credible electronic Word of Mouth to their audiences.[4] It is assumed that social media influencers can spread the message through their communities better and more convincingly than would be possible with traditional advertising techniques. The number of followers and their structure thus becomes the most crucial parameter that advertising agencies monitor. Many platforms for social media influencers have a threshold of the number of fans from which commercial cooperation is possible (e. g., 10,000 followers on selected social networks). The number of followers also affects the level of cooperation and payment. The relationship between the number of fans and the ability to be an opinion leader has already been proven,[5] but a simple metric of the total number of fans is no longer suitable for advertising platforms. Social networks are flooded with fake accounts. Research into the social media influencer audience structure, which predicts a potential target group, is gaining in importance. In the environment of conversion media, the algorithm also favors various mutual interactions. A significant question is whether the high numbers of fans correspond to the likeability of social media influencers. For example, more substantial numbers of peer reviews between social media influencers and fans may serve to strengthen this relationship. In the environment of social media marketing, he is already moving away from the idea of one-way practical endorsement of social media influencers to his audience. It turns out that the relationship within the many-to-many media is much more complicated. Marketing can define celebrities, experts, ambassadors, or opinion leaders in communication; however, social media influencers often take on all these forms at different times and dynamically go through and change different roles. Their erratic behavior's anchor is usually only authenticity

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[5] HWANG, H., KIM, K. O.: Social media as a tool for social movements: the effect of social media use and social capital on intention to participate in social movements. In *International Journal of Consumer Studies*, 2015, Vol. 39, No. 5, p. 478.

and credibility.[6] Research into the endorsement of social media influencers is thus much more complicated than, for example, the traditional relationship of celebrity endorsement, where the identification of a celebrity with a brand, product, or service is predictable. Nevertheless, other studies also show that watching fewer fans can emphasize the social media influencer's elite and influence. The ratio between fans and the number of watched fans can contribute to an influencer's impression as an opinion leader.[7] The specifics of endorsement of social media influencers are different between individual genres, for example, between fashion and beauty of social media influencers and video games of social media influencers. For each of these segments, marketing practitioners develop a specific collaboration, which must then be well suited to a particular person to maintain authenticity. Torres et al.[8] discuss social media influencer endorsement into individual processes. The attractiveness of influencer endorsement is given by the congruence between the digital influencer and the brand, attitude toward the endorsement, attitude toward the brand, and purchase intentions. The desired effect is the favorable attitude toward the endorsement, the more favorable attitude toward the brand, and the more excellent purchase intentions.

Most influencer marketing studies are also static: they capture the social media influencers studied over a limited period. However, in marketing communication, social media influencers are the most variable stakeholder and are continually evolving, related to their difficult management. For this reason, practitioners and academia are strongly involved in the development cycle of social media influencers.[9] Nascimento et al.[10] propose to examine endorsement through three phases: experimenting, partnering, and bonding. This division shows well how different social media influencers' endorsement is from celebrities' traditional endorsement that can be better managed. However, social media influencers primarily maintain their authenticity through performing self-promotion practices. They need to maintain positive contact with fans, who should experience participation in social media influencer communication in a many-to-many communication environment. In such an environment, the endorsement of a brand, product, or service must not function as support from a celebrity. But as a natural identification of the social media influencer with the outside world. The financial gain from cooperation with the brand must not disrupt the construction of the influencers virtual parasocial world. Such collaboration is significantly less stable than celebrity support and often goes through several phases. In the experimental phase, social media influencer profiles themselves in a particular genre, field or topic. This phase can attract potential commercial partners. The specificity of social media influencers is that they undertake this experimental phase several times a year. From influencer video games, they can quickly become a fashion influencer and then engage in travel. The anchor of maintained authenticity allows handling these transitions.

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[6] DE VRIES, L., GENSLER, S., LEEFLANG, P. S. H.: Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing. In *Journal of Interactive Marketing*, 2012, Vol. 26, No. 2, p. 83.

[7] VALSESIA, F., PROSERPIO, D., NUNES, J. C.: The Positive Effect of Not Following Others on Social Media. In *Journal of Marketing Research,* 2020, Vol. 57, No. 6, p. 1166.

[8] TORRES, P., AUGUSTO, M., MATOS, M.: Antecedents and outcomes of digital influencer endorsement: An exploratory study. In *Psychology & Marketing*, 2019, Vol. 36, No. 12, p. 1270.

[9] NASCIMENTO, T. C. D., CAMPOS, R. D., SUAREZ, M.: Experimenting, partnering and bonding: a framework for the digital influencer-brand endorsement relationship. In *Journal of Marketing Management*, 2020, Vol. 36, No. 11-12, p. 1015.

[10] NASCIMENTO, T. C. D., CAMPOS, R. D., SUAREZ, M.: Experimenting, partnering and bonding: a framework for the digital influencer-brand endorsement relationship. In *Journal of Marketing Management*, 2020, Vol. 36, No. 11-12, p. 1010.

The next phase of endorsement is partnering, when the social media influencers audience is formed towards a critical person's new interests in the middle of this community. The means can be a variety of interactions that move the community to shared interests. The last phase is bonding, characterized by a partnership with the brand, mostly with a financial reward. At the same time, social media influencer already has an audience ready to identify with the brand, product or service that influencer promotes for a fee. Dynamics shows the difference between the traditional celebrity endorsement and social media influencers endorsement. In this process, the brand acts as a provider, partner, and hirer in the social media influencer's efforts to satisfy its community and commercial interest and not lose its authenticity. Such a process creates new pressures on brand control. Research shows that companies focus on trust in the influencer.[11] Excessive enforcement of influencer control could disrupt his authentic relationship with the fan community. The posts' strong commercial orientation could have a similar effect, so advertising agencies leave influencers significant freedom to incorporate the advertising message into their reliable communication with fans. In return, companies hope that the community's trust in the influencer will be transferred to the brand itself and stimulate shopping behavior or positively affect the brand image. However, practical research suggests that the priority for commercial communication is to ensure the influencers stable credibility before establishing a commercial relationship and ensure the appearance of influencer autonomy in deciding on their contributions.[12] These dynamics create an entirely new decision for influencer marketing management on managing this type of stakeholder in marketing communication. The ever-expanding discipline of influencer marketing is already attracting extensive academic research, no longer easy to structure. Hudders et al.[13] identified 154 research texts published in 2018-2020 and identified primary research clusters in three categories: sources, message, and audience. There is primarily a demand for the very definition of influencer marketing and conceptualization in the area of resources. It is also the identification of social media influencers. Another issue is the sponsor and intermediary perspective. And finally, influencer perspective.

Research focuses on the content analysis of the media contributions themselves on social networks in the message field. There are three bare clusters in the audiences' area: the appealing nature of influencers, the efficiency of influencers posts, and sponsorship transparency. In the next work, these authors also offer a detailed overview of influencer marketing research.[14] A detailed survey of 387 professional texts shows a sharp increase in interest in this discipline and the preferred thematic focus of professional work, which shows the complexity of influencer marketing. The critical topics of academic research are:

- The persuasiveness of influencer marketing,
- stakeholders' perspective on influencer marketing,
- influencer marketing for specific product categories and sectors,
- identification, selection, and activation of influencers,
- ethical issues and discolure effects in influencer marketing.

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[11] MARTÍNEZ-LÓPEZ, F. J. et al.: Influencer marketing: brand control, commercial orientation and post credibility. In *Journal of Marketing Management*, 2020, Vol. 36, No. 17-18, p. 1818.
[12] MARTÍNEZ-LÓPEZ, F. J. et al.: Behind influencer marketing: key marketing decisions and their effects on followers' responses. In *Journal of Marketing Management*, 2020, Vol. 36, No. 17-18, p. 581.
[13] HUDDERS, L., DE JANS, S., DE VEIRMAN, M.: The commercialization of social media stars: a literature review and conceptual framework on the strategic use of social media influencers. In *International Journal of Advertising*, 2020, Vol. 40, No. 3, p. 1.
[14] YE, G. et al.: The Value of Influencer Marketing for Business: A Bibliometric Analysis and Managerial Implications. In *Journal of Advertising*, 2021, Vol. 50, No. 2, p. 11.

The first topic concerning the persuasion process is the most popular and shows little certainty about how persuasive communication in influencer marketing occurs. The stakeholders' perspective concerns other stakeholders, from advertisers to advertising agencies, platforms, and consumers. The third topic focuses on different influencer marketing genres because they create subcategories with special procedures in many-to-many communication. The most significant attention of the academic sphere is focused on fashion, luxury, and beauty influencers. However, research into the travel and tourism sectors is also significant. And then other areas such as food, games, fitness, or toys. The management process demands standardization of how to find, select and activate social media influencers properly. The significant increase in academic literature has been linked to ethical issues, especially how influencers should reveal their commercial relationship with a brand, product, or service without losing its authenticity. The academic work summary also reveals four prominent areas where progress is needed both in the managerial environment and the academic sphere. Considerable increases in influencers numbers require standardized rules for their selection and a possible subsequent commercial relationship. It is also necessary to standardize the approach to parasocial influences of the influencer with its community, which must be fair but also authentic and convincing. The third area is the ethical use of influencers in commercial communication. Furthermore, this cannot be achieved without creating long-term standardized relationships with influencers. There is a demand for sustainable social media marketing from practical and academic sources, which would effectively and ethically include an unstable and new marketing communication channel in the communication mix. This work analyzes the particular key topics of influencer marketing. It proposes the rehabilitation of some marketing measurements, which could be used to measure performance and the stability of social media influencers communication.

1 Management of social media influencers

The professionalization of social media influencers is a positive trend. However, these stakeholders' fundamental contradiction in marketing communication is all the more evident: how to sell brands while staying authentic.[15] For marketing agencies and advertisers, this brings the need to consider all the impacts of collaboration and significantly more control over outputs than traditional Internet marketing. The necessary procedures of brand control in the influencer marketing environment include controlling the conversation about the brand, product, or service, providing a good information base for cooperating influencers, and trying to avoid possible adverse effects (e.g., by managing hashtags, timing, wording). Although social media influencers have become significantly more professional and best practices are being established, campaigns with social media influencers are inevitably still multiplying, often poorly managed, and damaged a brand, product, or service. Social media influencers often have excellent mastery of building their community and parasocial communication with fans. However, they cannot use their media properly for commercial purposes, maintain authenticity, and deal with ethical issues such as labeling sponsorship.

Moreover, it is surprising to show that if an influencer is not sufficiently identified with a brand, product, or service, the contribution's commercial orientation has a strong negative effect on acceptance, reduces confidence in the influencer, and reduces the credibility of the contribution. If, on the other hand, the commercial connection is authentic, the perception of

[15] VAN DRIEL, L., DUMITRICA, D.: Selling brands while staying "Authentic": The professionalization of Instagram influencers. In *Convergence: The International Journal of Research into New Media Technologies,* 2020, Vol. 27, No. 1, p. 66.

marketing communication improves significantly.[16] The control of influencers thus turns primarily to the control of their communication with fans. Many studies show how different the effectiveness of an influencer can be using different communication. Monge-Benito et al.[17] show the case of the Spanish YouTube influencer Verdilles (real name Estefanía Unzu Ripoll). Her story shows the rapid dynamics of influencers, moving from personal videos to videos about raising children and at the same time promoting food, clothing, toys, and other products commercially. However, according to research, cooperation with brands such as Carrefour, Coca-Cola, or Lay's does not have the same impact. According to the research authors, it is necessary to fulfil all the attributes for a successful commercial message: trustworthiness, expertise, attractiveness, fit, and number of followers. The management of cooperation with the influencer thus turns to its communication with the community around it. Parasocial relationships on the social network are vital to the success of commercial communication. Reactions between influencers and fans affect its credibility and affect the perception of the brand being promoted. Positive interactions with the community can positively influence the process of transferring trust in the influencer to trust in the promoted brand and ultimately in the purchase intention.[18] Suppose the advertiser and media agencies try to manage influencers with too detailed a handbook of procedures. In that case, the social media influencer loses its authenticity, and the commercial message in its production does not have the maximum effect. In many cases, brands already understand an utterly new influencer marketing environment characterized by a high degree of risk, because social media influencer needs a certain amount of freedom to maintain the audience's authenticity and credibility. Suppose brands cannot contractually cover most situations in a commercial relationship with an influencer. In that case, they can use other marketing tools that do not measure influencer performance but help stabilize a sustained long-term customer-influencer relationship.

2 Ethical implications of "sponsored authenticity"

Social media is a many-to-many communication space where traditional forms of commercial communication labelling do not work. In this sense, even some forms of Internet advertising are closer to "old media" such as television, radio, or the press than other forms of Internet advertising such as influencer marketing. The clearly defined banner on the website follows the tradition of labelled commercial communication, which is clearly separated from other content. This approach does not apply to social media influencers. At the same time, the perceptual perspective is essential. While the audience knows the factual commercial genre of "old media" or banners on the Internet, in the case of sponsored advertising in influencer marketing, it is a liquid genre that can be understood differently. The trend of native advertising often loses all the rules in influencer marketing. A critical ethical requirement is a clear and unambiguous disclosure of commercial communication to the social media influencer community. However, this can also shake influencers authenticity and lead to the

[16] MARTÍNEZ-LÓPEZ, F. J. et al.: Influencer marketing: brand control, commercial orientation and post credibility. In *Journal of Marketing Management*, 2020, Vol. 36, No. 17-18, p. 1816.
[17] MONGE-BENITO, S., ELORRIAGA-ILLERA, A., OLABARRI-FERNÁNDEZ, E.: YouTube celebrity endorsement: audience evaluation of source attributes and response to sponsored content. A case study of influencer Verdeliss. In *Communication & Society*, 2020, Vol. 33, No. 3, p. 161.
[18] REINIKAINEN, H. et al.: 'You really are a great big sister' – parasocial relationships, credibility, and the moderating role of audience comments in influencer marketing. In *Journal of Marketing Management*, 2020, Vol. 36, No. 3-4, p. 279.

commercial failure of promotion.[19] Marking commercial communication through an application or hashtag #sponzored #ad or #paid is necessary for maintaining open and truthful communication on social networks. The question for practitioners and theorists alike is how to incorporate a clear message of sponsorship into communication. The minimum requirement must be the development of Advertising Literacy concerning social media influencers. The consensus in a given company should lead to self-regulation. Several clearways are established to commercial label communication in influencer marketing: It is unacceptable to obscure the commercial nature of the post with vague labels such as #sp, #partner, or even not labelling. If self-regulation does not occur, process regulation of platforms that provide influencers with the possibility of commercial communication can also be considered. It is necessary to move towards clear standards derived from credible surveys. For example, using the #SP hashtag causes less ability to recognize advertisements than #Paid Ad.[20] However, how to require minimum ethical standards in influencer marketing is still unclear in most advertising agencies. Differentiation also brings diversity to influencer marketing, according to the different focus and size of the audience. Another collaboration is with a mega influencer, which has a million fans on the social network. Another partnership is with a standard influencer, which has 10,000 fans. Many studies show that advertising agencies adapt to influencer marketing but do not yet have established procedures and processes.[21] Interviews with marketers reveal essential topics addressed in influencer marketing management: perceived high cost, legal considerations, new creative tool or new media, influencer creative process, content development, measuring success. However, the most urgent task seems to be to stop ignoring unmarked commercial content on social networks: "everyone knows it's paid."[22] Ethical issues with "sponsored authenticity" will become a characteristic contradiction of the rapidly evolving influencer marketing. However, the development of ethical standards, best practices, and self-regulation of social media influencers can be balanced by more detailed measurement and use of some traditional marketing tools to lead to sustainable social media influencer marketing.

3 Searching social media influencers metrics

Measuring the effectiveness of cooperation with social media influencers has become one of the most pressing problems of the entire discipline. Many traditional key performance indicators (KPIs) and metrics in this specific many-to-many communication do not work or are not stable and verifiable.[23] The most straightforward measurement is the number of fans or the number of interactions. However, this approach is not optimal and does not correctly evaluate advertising effectiveness. To find suitable metrics, it is essential to realize how

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[19] DE CICCO, R., IACOBUCCI, S., PAGLIARO, S.: The effect of influencer–product fit on advertising recognition and the role of an enhanced disclosure in increasing sponsorship transparency. In *International Journal of Advertising*, 2020, Vol. 40, No. 5, p. 1.

[20] EVANS, N. J., PHUA, J., JUN, H.: Disclosing Instagram Influencer Advertising: The Effects of Disclosure Language on Advertising Recognition, Attitudes, and Behavioral Intent. In *Journal of Interactive Advertising*, 2017, Vol. 17, No. 2, p. 138.

[21] CHILDERS, C. C., LEMON, L. L., HOY, M. G.: #Sponsored #Ad: Agency Perspective on Influencer Marketing Campaigns. In *Journal of Current Issues & Research in Advertising*, 2018, Vol. 39, No. 3, p. 264.

[22] CHILDERS, C. C., LEMON, L. L., HOY, M. G.: #Sponsored #Ad: Agency Perspective on Influencer Marketing Campaigns. In *Journal of Current Issues & Research in Advertising*, 2018, Vol. 39, No. 3, p. 270.

[23] FAY, B., LARKIN, R.: Why Online Word-of-Mouth Measures Cannot Predict Brand Outcomes Offline. In *Journal of Advertising Research*, 2017, Vol. 57, No. 2, p. 140; PETERS, K. et al.: Social Media Metrics – A Framework and Guidelines for Managing Social Media. In *Journal of Interactive Marketing*, 2013, Vol. 4, p. 290.

different cooperation can be: commercial promotion of one product by several posts or a long-term brand ambassador. Instagram has many followers, visuals, and the inability to add a link directly to the post. Interactions are essential with Facebook, the ability to engage with the algorithm and efficiently track the click-through rate in front of the links. In the case of a video on YouTube, there is a need to monitor the video's number of views and distribution on other platforms. Nevertheless, the usual metrics such as interaction rate per post, number of likes per post, number of comments per post, and net sentiment can be observed on most social media. For example, the KPI for the interaction rate can be set: low (3%), standard (5%), high (8%). Gräve[24] gives a classification of possible most common KPIs:

1. Quantitative KPIs**:** Number of interactions/interaction rate; reach; the number of views/clicks; the number of followers; sales/turnover; click-through rate; conversion rate; social media impact; brand awareness; cost; customer acquisition; return on investment.
2. Qualitative KPIs: sentiment of comments; influencer quality; target group fit; post quality; brand image.

Common goals for social media influencers are audience building and KPIs, the number of social media fans, or subscribers. Another area is brand awareness, where KPIs are page views, impressions, followers, and mentions. Another goal may be engagement, where KPIs are shares, likes, comments, engagement rate. Alternatively, the goal can be sales, where KPIs are sales conversion rate or the number of sales. Despite all these described goals and KPIs, influencer marketing does not seem to be moving towards its stable form. Two trends can be described as disruptive. One is the large increase in relevant influencers, making it difficult to select suitable ones and arise as intermediaries for the whole new platform. This phenomenon also pushes influencer marketing to be more useful to communicate commercial communications through several well-selected smaller specialized influencers than partnering with a mega influencer. The second trend is the search for metrics that would include the overall communication of the social media influencer and assess whether it helps the goals of the brand, product, or service.[25] The high number of increases in social media influencers and the specifics of "sponsored authenticity" in influencer marketing requires a holistic approach to this field. The goal must include the entire communication of the social media influencer and its image in the sponsored brand, product, or service performance. The influencer's positive authenticity and credibility are transferred to the brand, while the loss of authenticity and credibility damages the brand. This process is clearly seen in influencers who have adopted brand ambassadorships. It turns out that the essential thing in influencer marketing is the transmission of sentiment in the broadest possible communication field of a brand, product, or service.[26] Thus, sustainable influencer marketing not only monitors a social media influencers performance in a specific campaign but also assesses its entire presence in the field of communication and whether it has a positive long-term effect on a brand, product, or service. The narrow focus on social media influencers effectiveness excluded traditional marketing methods such as converting publicity to the price of comparable advertising space: Advertising Value Equivalent (AVE) or Earned Media Value (EMV). These are suitable for traditional media measurement but cannot well affect brand performance in influencer marketing. However, influencer marketing's broader focus can rehabilitate these metrics as a

[24] GRÄVE, J. F.: What KPIs Are Key? Evaluating Performance Metrics for Social Media Influencers. In *Social Media + Society*, 2019, Vol. 5, No. 3, p. 6.

[25] LOU, C., YUAN, S.: Influencer Marketing: How Message Value and Credibility Affect Consumer Trust of Branded Content on Social Media. In *Journal of Interactive Advertising*, 2019, No. 1, p. 70; NOGUEIRA, E., TSUNODA, D. F.: A Proposed Model for Consumer-Based Brand Equity Analysis on Social Media Using Data Mining and Social Network Analysis. In *Journal of Relationship Marketing*, 2018, Vol. 2, p. 95-117.

[26] SHAY, R., VAN DER HORST, M.: Using Brand Equity to Model ROI for Social Media Marketing. In *International Journal on Media Management*, 2019, Vol. 21, No. 1, p. 40.

quality support tool that measures the stability of influencer visibility in public space. Significant changes in metrics and a decline in the mass media's target groups, which intersect with the influencer's fan base, may indicate communication problems. On the contrary, sustainable and relevant social media influencer communication logically shows stable or growing AVE and EMV in traditional media. This process is especially noticeable with mega influencers. The growing popularity of social media mega influencers should correlate with stable or growing AVE in the media as a whole. The growing number of fans and the success of commercial partnerships on social networks should correspond to a stable or growing AVE without significant fluctuations. These could indicate a scandal and damage to the image in the public's eyes, which could also damage the brands, products, and services with which influencer has worked.

The simplest operationalization of sustainable influencer communication should be divided into these four steps:

- The number of followers on the social sites is higher year to year,
- the number of articles in media about influencer is higher year to year,
- the peaks of media publicity have a positive sentiment for the influencer in both years,
- the AVE is the same or higher year to year.

Conclusion: towards sustainable influencer marketing

The new conceptualization of the sustainability of influencer marketing seeks to overcome the fundamental problems of this discipline. On the one hand, influencers want to maintain their authenticity and credibility. On the other hand, they become professionals and become partners of commercial entities. Academic authors point out that this discrepancy requires further research. The fundamental problem is the difficulty of managing influencers, where the effectiveness of using different communication models can vary widely. Concerning consumers, the ethical issues of commercial labeling cooperation in an environment of internally conflicting "sponsored authenticity." The search for the right KPIs and metrics has focused on the narrow goals of influencer marketing. The most common measure is still the number of interactions/interaction rate. However, the many partial failures of advertising agencies' cooperation with influencers indicate the need for a broader approach to sustainable influencer marketing that encompasses influencers' entire public image. Traditional metrics such as AVE are also suitable for assessing the presence of influencers in the media space. Influencers should chosen corresponded to all four sustainable social media influencer communication levels: The growth of fans is steady; the number of articles in the media is growing, so the influencer is present in the broader public sphere; the highlights of the media mentions are not associated with any damaging scandal that could harm partner brands as well; the year-on-year growing AVE proves that influencer can also be present in creditworthy media. These four steps help to select influencers that can be considered communication-sustainable, and suitable for further partnerships with a specific KPIs assignment. Further research should determine whether this method of measuring influencer communication's sustainability is appropriate for culturally different environments or how to change it for the specific environment of individual social networks or different influencer marketing areas.

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CHANGES IN PREFERENCES IN CONSUMER BEHAVIOR OF GENERATION Z DURING THE COVID-19 PANDEMIC

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Abstract
Factors influencing consumer behavior with a focus on habits are the subject of the research. Although customs are primarily rooted in cultural factors, we see their role in terms of social factors and the shopping situation. The main aim of the paper is to find out whether and how the shopping and media habits of consumers of the generation have changed as a result of the measures taken during the pandemic caused by the SARS-CoV-2 virus. First, we focus the theoretical basis on defining consumer behavior, emphasizing the position of habits among the factors influencing consumer behavior. Empirical starting points are based on the results of content analysis of thinking of the Generation Z which they reflected in the assignment named "My Habits". We use the method of content analysis to examine the change in consumer behavior preferences of 67 students aged 19 to 21. Subsequently, we examine the surface structure of the texts to determine the frequency of selected words and phrases. At the end of the paper, we summarize the content analysis results and how companies can react to the findings.

Key words:
Consumer behavior. Culture. Generation Z. Habits. Shopping behavior. Social stratification.

Introduction

The results of consumer behavior research help to understand consumer needs, predict the size and potential of individual markets and identify trends in consumer behavior. In terms of historical development, the nature of consumer behavior research has long been based on the role of customer-buyer relationship and focused on answering questions such as "who, why, how, when and where buys products". With the oversaturation of supply and the increasing number of substitutes, consumer behavior research has begun to focus on the reasons why and how consumers use and consume products. The first theory of consumer behavior appeared in 1950s within the marketing concept the essence of which was based on understanding the customers and efforts of companies to find the right products for customers by correctly estimating their needs and desires and to satisfy them better than the competition. In late 1960s, research on consumer behavior spread to academic circles where it became the subject of education and research. It is obvious from the above that several authors who deal with the issue of consumer behavior comprehensively or its individual partial problems are of domestic and foreign origin. As for domestic authors, consumer behavior has been examined by Kusá et al. in the context of generational cohorts (2016), women (2012) or Internet users (2012); Táborecká-Petrovičová in the context of social classes (2011) or Richterová et al. (2015) with the intention of gathering the most comprehensive knowledge about consumers and consumer behavior. Over the decades, foreign authors have received significant feedback on their works, e.g., Koudelka (1997, 2006, 2018), Vysekalová (2004, 2011), Schiffman and Kanuk (2003, 2014, 2018), Solomon et al. (2012, 2015, 2020), or Szmigin and Piacentini (2018).

1 Consumer behavior and changes in preferences

Koudelka explains consumer behavior as the behavior of end consumers which relates to the acquisition, use and disposal of consumer products.[1] Solomon et al. emphasize in defining consumer behavior that it is a process: *"consumer behavior is the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires."*[2] The definitions indicate that buying can be part of consumer behavior. While Koudelka avoids the term buying and uses the term acquisition instead, Solomon et al. define consumer behavior using this term as well. Consumer behavior therefore covers the behavior of individuals and households who purchase products for personal consumption and whose role in this process we can label as consumers or customers. The term consumer is a broader term and includes any consumption of an individual or household, including the consumption of products that one has not purchased himself. The term customer is narrower in comparison with the term consumer and it only means the individual who orders, buys and pays based on his own will. We can use the terms consumer and customer as synonyms in case the person who buys the products also consumes them.[3] Consumer behavior is influenced by various factors. Some are based on the environment in which consumers live (e.g. culture), others on social affiliation (social and personal factors), or on a specific buying situation (situational factors). The subject of our research is the habits of respondents which have a primary anchor in culture, among the factors influencing consumer behavior which are learned, passed down from generation to generation, shared, locally differentiated and change with society. From a linguistic point of view, habit is a stable way of behaving created by the regular repetition of a certain activity.[4] From a marketing point of view, we can characterize the habits of consumers as a stable way of obtaining, using and keeping of consumer products, e.g. preference for certain products and brands or keeping of reusable packaging. Bártová et al. point out that, in terms of consumer behavior, this is one of the most visible manifestations of cultural factors.[5] Consumer habits typical for a certain culture manifest themselves mainly as:

- Customs associated with the product - for example, what is consumed and when, what are the typical national styles, what is appropriate and inappropriate to wear, what are the popular cuts and colors. Typical and almost unchangeable are the dietary habits in the form of the national cuisine of a particular area.
- Buying habits - summarize how often one buys, who does the buying and when, what sizes and packages are bought, whether the consumers are used to buy in bulk and if so, what.
- Media habits - summarize the habits of watching the media, what is watched, in which media, what topics resonate most often and how accepted the advertising is.[6]

Habits in social factors come second. Financial, material and intellectual resources determine the consumer's affiliation with the social class in which it is customary for products to fulfill a symbolic function, i.e. they must have a certain level of quality, their purchase must evoke some level of respect and they are not accessible to everyone.[7] Belonging to a social class

[1] KOUDELKA, J.: *Spotřební chování a segmentace trhu*. Praha : VSEM, 2006, p. 6.
[2] SOLOMON, M. et al: *Consumer Behaviour*. A European Perspective. Third edition. New Jersey : Prentice Hall, 2006, p. 28.
[3] PETROVIČOVÁ-TÁBORECKÁ, J.: *Modely spotrebiteľského správania sociálnych tried pri tvorbe marketingových stratégií.* Bratislava : IURA Edition, 2011, p. 18.
[4] ANETTOVÁ, A. et al: *Synonymický slovník slovenčiny*. 3. nezm. vyd. Bratislava : Veda 2004, p. 903.
[5] BÁRTOVÁ, H. et al.: *Spotřebitel (chování spotřebitele a jeho výzkum).* Praha : Oeconomica, 2007, p. 22.
[6] RICHTEROVÁ, K. et al.: *Spotrebiteľské správanie*. Bratislava : Sprint 2, 2015, p. 29.
[7] Ibidem, p. 40.

influences the preference of products and brands; the rate of use, the frequency of consumption and the motives for exchanging certain products; attitude towards price / quality ratio and discounts; level of communication and choice of media; attitude towards advertising; requirements for operating personnel; choice of place of purchase, style and atmosphere of the store.[8] We record the tertiary position of habits in the buying situation. In the decision-making process, the consumer moves from knowing the problem to the behavior after the purchase, while the penultimate phase of the process is the purchase decision the result of which, due to the influence of situational factors, may not be the purchase per se. Among the situational factors that can turn a purchase into its postponement or rejection, we include [9] the assortment (in terms of assortment composition); merchandising (a way of arranging a sales area and displaying products); the atmosphere of the store (on the one hand it attracts the consumer to enter the store, on the other hand it is related to the technical arrangement of the store) and the staff (number, professional qualifications, grooming and behavior).[10] According to the results of the TNS Slovakia survey, the habits of Slovaks in choosing a place of purchase are influenced by the quality of products and their freshness, reasonable prices, cleanliness of the place of sale, clear labelling of goods and time spent waiting at cash registers.[11]

2 Changing of preferences of Slovaks during the pandemic

Numerous surveys of various types of institutions (banks, price comparators, delivery companies, universities, research agencies, etc.), whose partial results have been publicized and are available to the public show that Slovak consumers changed their buying and media habits during the pandemic. Some of them were short term changes, mainly due to lockdown. For example, the demand for sanitizers and cleaning products, durable food, fruit or yeast,[12], which consumers bought in stock, increased by 200 to 300%, while the minimum demand was for confectionery.[13] Buying in stock was reflected in equipping households with additional freezers or home bakeries and the need to protect their health reflected in the unusually high interest in air humidifiers and sewing machines. The introduction of remote education and home office increased the sale of laptops and monitors (by more than 100%), office supplies (by 78%), and sports equipment (by more than 200%). [14] Other, new habits persist throughout the whole pandemic period often due to ongoing hygiene measures and event protocol operators or event organizers. Due to the measures taken during the pandemic, Slovak consumers changed the method of choosing the place of purchase and the course of the purchasing process. To minimize contact with potentially ill people, they try to make

[8] PETROVIČOVÁ TÁBORECKÁ, J.: *Modely spotrebiteľského správania sociálnych tried pri tvorbe marketingovej stratégie.* Bratislava : IURA EDITION, 2011, p. 32.
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[10] CIMPLER, P. et al.: Retail management. Praha : Management Press, 2007, p. 228.
[11] *Veľký prieskum obchodov. Slováci prezradili , kde nakupujú najradšej.* [online]. [2021-10-21]. Available at: <https://www.aktuality.sk/clanok/266260/velky-prieskum-obchodov-slovaci-prezradili-kde-nakupuju-najradsej/>.
[12] KOŠŤÁL, D.: *Hrozba šírenia koronavírusu spôsobila vyšší dopyt po viacerých tovaroch*. [online]. [2021-10-20]. Available at: <https://www.retailmagazin.sk/produkt/4574-hrozba-sirenia-koronavirusu-sposobila-vyssi-dopyt-po-viacerych-tovaroch>.
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[14] KOŠŤÁL, D.: *Hrozba šírenia koronavírusu spôsobila vyšší dopyt po viacerých tovaroch*. [online]. [2021-10-20]. Available at: <https://www.retailmagazin.sk/produkt/4574-hrozba-sirenia-koronavirusu-sposobila-vyssi-dopyt-po-viacerych-tovaroch>.

purchases in stores available in their area so that they buy everything in one visit to the store or try to make large supply purchases. Two thirds of Slovaks claim that they are trying to shorten purchases to the necessary time and have given up walking around the store without the intention of buying goods.[15] Consumers' media habits have also been temporarily adjusted. The viewership of the evening news of television channels of all nationwide broadcasters has significantly increased. The highest increase in viewership, compared to the usual measurement, was recorded by the public television channel Jednotka and the news channel TA3. As for the online media, the highest increase in time spent on their website was recorded by the daily papers sme.sk and dennikn.sk.[16] These and, of course, other changes in consumer habits have negatively affected the opportunity to reach consumers either at the point of sale (all activities at the point of sale are still unfeasible due to safety measures) or in electronic media where viewers' attention was focused mainly on news gazettes.

3 Methodology

The main goal of this paper is to identify changes in the buying behavior of Generation Z before and during the ongoing COVID-19 pandemic. To achieve the main goal, we set the following sub-goals:

- To historically describe and define the concept of consumer behavior,
- to point out the differences between the concepts of consumer and customer,
- to identify the concept of habits as one of the manifestations of cultural factors in consumer behavior,
- to characterize the method of obtaining data and sources, the evaluation methods used and interpret the results of the research,
- to find out whether and to what extent buying, media and product use habits have changed for Generation Z as a result of measures taken during the COVID-19 pandemic,
- to summarize the results achieved and outline how companies can respond to the findings.

In addition to scientific monographs, we also used university textbooks, articles from scientific journals, surveys of research agencies available on the Internet, as well as primary data from our own survey as the sources of information. During the processing of primary and secondary data, we worked with standard scientific methods such as: search, description, deduction and analysis. Content analysis was the primary source of data. Content analysis has long been one of the standard research methods which is focused on the evaluation and interpretation of the content of texts. It is a method that has been applied in several studies where it has proven its high functionality. The object of our research was a reflection on the topic "My habits". The authors worked with an available sample which represented 67 students belonging to the Z generation, aged 19 to 21 years. Generation Z is known to be the most technologically proficient. They grew up during the internet boom which makes them very handy in terms of online shopping or online communication. It is a generation that lives with global trends and easily adapts to them.[17] For this reason too, we consider the study of Generation Z consumer habits to be important and beneficial for future research.

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[15] TURZO, J.: *Všimli ste si zmeny v správaní spotrebiteľov?* [online]. [2021-10-20]. Available at: <https://www.retailmagazin.sk/spotrebitel/trendy/5785-vsimli-ste-si-zmeny-v-spravani-spotrebitelov>.

[16] *Prieskum: Koronavírus mení aj mediálne správanie ľudí.* [online]. [2021-10-20]. Available at: <https://strategie.hnonline.sk/media/2114883-prieskum-novy-koronavirus-meni-aj-medialne-spravanie-ludi>.

[17] DOLOT, A.: The characteristic of generation Z. In *E-mentor: New trends in management*. Varšava : Warsaw School of Economics, 2018, p. 44. [online]. [2021-10-22]. Available at: <http://dx.doi.org/10.15219/em74.1351>.

A reflection with relevant content in the scope of one page of A4 format was handed over to us by 58 students. The collection of reflections took place in the period from October 18, 2021 to October 22, 2021 in the form of submitting an electronic document into the school archive of FMK UCM in Trnava. Although the available selection is unsystematic and its representativeness degree is low, it is sufficient to set up a pilot study. The texts examined the surface structure (manifest content) and were focused on determining the frequency of words and phrases (due to the pandemic, I started: shopping / saving more, watching more television, spending more time on social media, spending more time with sports activities, I started more to be interested in world events, the impact on the environment). Due to insufficient knowledge of the issue, we approached the inductive procedure and the use of content analysis, which means that we focused on the interpretation of textual materials to the conclusions as we did not have knowledge gained from the study of relevant literature or discussions with experts. In order to maintain consistency, only one of the co-authors coded the examined texts and created a list of codes for the whole set of texts. If the texts, or parts of them, were coded by each author separately, different results could be obtained which could lead to acquaintance with new aspects but it would not necessarily lead to verification of conformity. The results of the content analysis are interpreted by the author in a descriptive and interpretive summary through graphs and examples of direct speech of the respondents.

4 Interpretation of results

For a better understanding of the issue, we collected the necessary data regarding the habits of the respondents through the chosen research method. We have transformed selected data into graphs for clear interpretation. More than half of the respondents were women (82.8%), the remaining part of the respondents were men (17.2%). We examined whether our respondents felt changes in their leisure time with the onset of the pandemic. 96 % of female respondents stated that their leisure time had changed (Chart 1) as did each of the male respondents (100%).

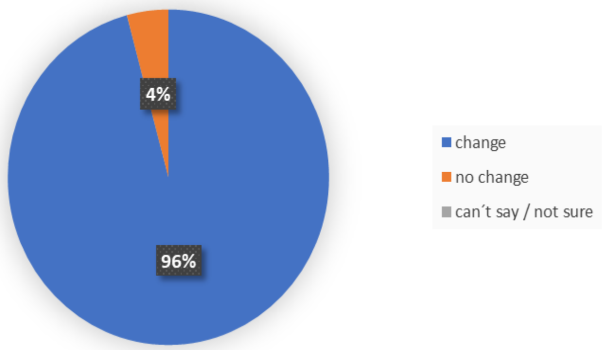

Chart 1: Changes in leisure time - women
Source: Own processing.

Spending free time on social media was popular at the beginning of the pandemic and often the only way to connect with the outside world. Respondents stated that they were able to spend several hours continuously on social media such as: Instagram, TikTok, Pinterest or Youtube (81%). Communication voice programs have also enjoyed high popularity among the generation that enjoys new digital conveniences. *"I communicated with friends through voice communication programs such as TeamSpeak or Discord".*

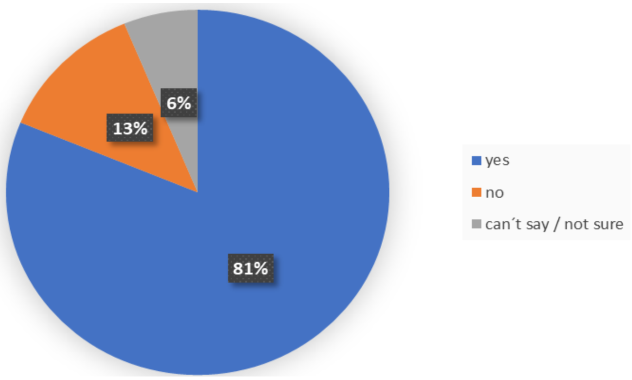

Chart 2: Spending time on social media - women
Source: Own processing.

The curfew during the hard lockdown, which was required due to seriousness of the situation, also resulted in an increase in sports-related activities. 50% of female respondents and 50% of male respondents said that with the onset of the pandemic, they became more interested in their health and became involved in sports. The most common sports activities for men included football and home workout. For women, walks in nature or home workouts using streaming services were most often repeated answers. *"During the pandemic, I realized that I should make changes in my life. I started to take more care of myself, my body and also my mental health."* According to the respondents, the increase in physical activity was also the result of regular and recurring negative news about coronavirus. The respondents themselves said that it was too difficult for them after a few months so they began to focus their attention elsewhere. Some respondents started listening to podcasts (39.7%). *"In terms of watching the media, I started reading more electronic editions of dailies and listening to podcasts. Otherwise, I did not change my media habits too much.*" The most frequently mentioned are news podcasts that deal with events in the world and in Slovakia and podcasts that deal with the topic of marketing and marketing communication as the respondents are students of marketing communication. Surprising findings for us were the habits of watching television. *"I did not watch TV at all before the pandemic. After the onset of the pandemic, I began to watch TV news and various press conferences more regularly. Until then, I obtained information exclusively from the Internet."* As Generation Z is characterized by not watching the mass media, it is even more surprising to find that 20.7% of all respondents started watching television more often than before the pandemic. As the pandemic situation was something new for everyone, we would explain this phenomenon by the fact that the respondents perceived television as one of the means of gathering information about the new situation. Streaming services such as Netflix, HBO GO as well as VOYO appeared most frequently in the respondents' texts. Men (90%) used these streaming services more often than women (43.8%). Furthermore, we also focused on finding out whether our respondents started spending more money or, conversely, saving more and thinking about the future. Chart 3 shows that more than half of women started shopping in smaller quantities and thinking more about their spending.

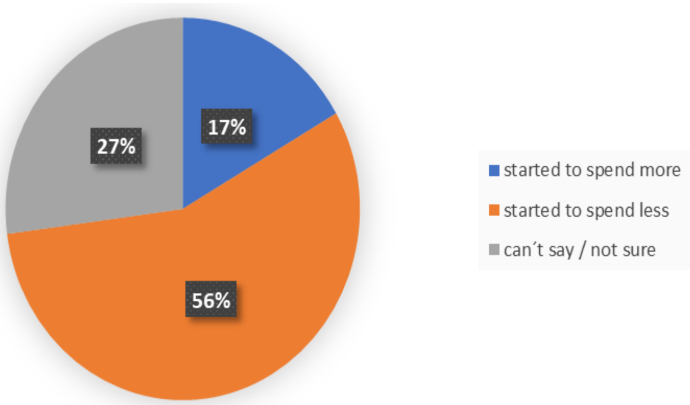

Chart 3: Finance – women
Source: Own processing.

Chart 4 shows the attitude to finance from a men's perspective, 60% of male respondents did not make any changes in their spending. The rest of the male respondents (40%) state that they have gradually started to think about their expenses. *"When shopping, I started thinking more about whether I wanted the product or needed it."*

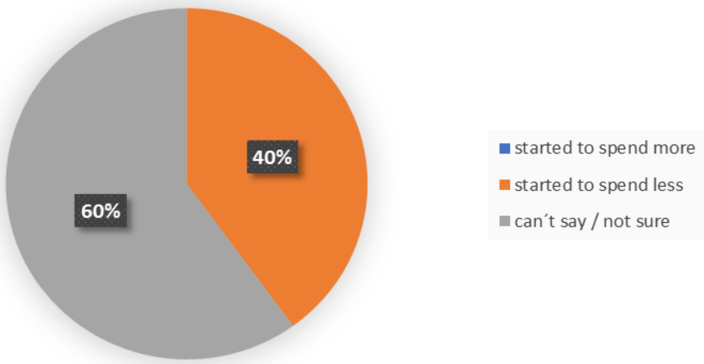

Chart 4: Finance – men
Source: Own processing.

The situation in which we all found ourselves unexpectedly surprised us all. Store shelves began to lack basic groceries and many people scare-swamped the shops to buy groceries and drugstore goods for their families. We found that 56.3% of female and 50% of male respondents stated that they had started stockpiling basic foods in their households. "Before the pandemic, I bought food in smaller quantities and did not think about stockpiling. On the other hand, especially during the first wave of the pandemic, I tried to buy as many products as possible and I started to buy durable food more often."

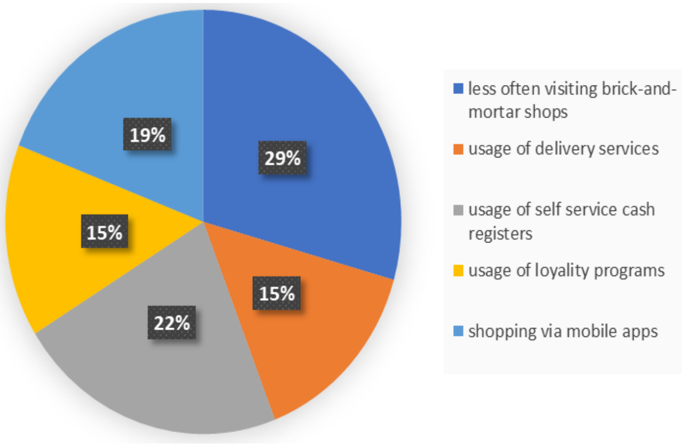

Chart 5: Changes in Generation Z shopping habits (men and women)
Source: Own processing.

We were also interested in what other changes in the shopping behavior of the Z generation had occurred. We found that 29% of men and women concluded that they kept visiting brick-and-mortar shops to a minimum. Purchasing through smartphone applications or the use of self-service cash registers in supermarkets was also on the rise. The recommendation of restricting contact with people has been communicated every day. According to them, in terms of protecting their health and the health of their loved ones, respondents kept contact with shop workers to a minimum. Respondents used the possibility of delivery services, purchases through applications or payments through self-service cash registers in stores. The pandemic also affected the way respondents shopped. It was found that 80% of men and 75% of women have started using online shopping and card payments. *"I started buying most of my clothes through smartphone applications. I downloaded a few new apps of the stores that I just walked around in the mall before. I liked the fact that I could always return to the products and think better about buying them."* They also limited their visits to crowded shopping malls. We found that 43.8% of women and 20% of men prefer to buy from smaller local retailers. Shopping time has also changed. *"I mainly go shopping in the mornings on weekdays when I don't have school because the shops are usually empty at this time."*

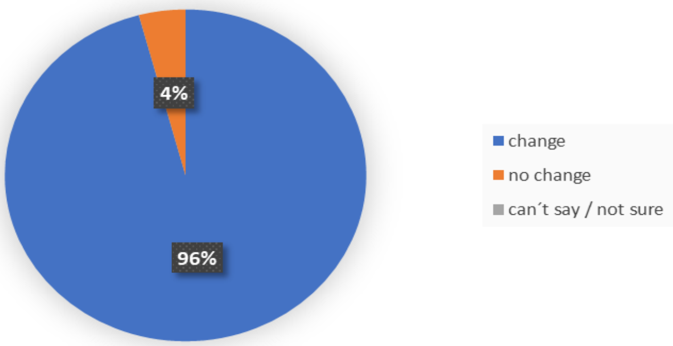

Chart 6: Shopping habits - women
Source: Own processing.

However, the pandemic also had an impact on the human side and an awareness of certain values. The vast majority of respondents mentioned their interest in products from local suppliers as well as sustainability in production and consumption of products. It was found that 33.3% of women 30% of men began to be interested in ecology and sustainability. *"It can be said that during this period I started to think more sustainably and economically when shopping, improved my financial literacy and changed my habits which only unnecessarily* *burdened my budget."* As we also assumed, women believe (96%) that their shopping habits have changed significantly as a result of the pandemic (Chart 5). As for the male respondents, 100% of them have this feeling. *"To sum it up, the pandemic definitely affected my habits."*

Conclusion and discussion

From time immemorial, the consumer has been affected by various influences which often determine and define their purchasing decisions. These are various factors and one of them is culture. Culture is understood as a certain combination of faith, customs, rules of moral codes, knowledge and art, which are characteristic of members of a certain group of people. The main objective of this paper was to identify changes in the habits of Generation Z before and during the ongoing pandemic. In order to achieve the main goal, we set partial goals which we managed to partially meet. We used primary and secondary sources during the research. We used content analysis to determine changes in the purchasing behavior of Generation Z during the pandemic. Almost all respondents stated that the onset of the pandemic greatly affected their shopping behavior. Purchases were made online, cash payments were eliminated to a minimum, and social media began to cover leisure time. Watching the news initially became a popular and common activity of respondents. However, after only a few weeks, the respondents returned to their habits and monitored the information about the pandemic marginally through online newspaper issues or even stopped monitoring them for good. Social media were not only a source of entertainment but also a source of information about coronavirus. The most mentioned platforms were Instagram, WhatsApp, TikTok, Clubhouse and Pinterest. Watching television was initially perceived positively but respondents began to be hampered by the quantity of advertisements and negative information about the pandemic situation. Sport was one of the ways to relax and so the vast majority of respondents started with active movement. It was found that 56.3% of female and 50% of male respondents stated that they had started stockpiling basic foods in their households. The high consumption of protective masks, gloves and disinfectants opened the topic of ecology and sustainability to such an extent that 32.9% of respondents became more actively interested in this issue. We know from publications from domestic and foreign authors that Generation Z grew up in a digital environment and can adapt very quickly. For this reason, it was interesting for us to observe how respondents representing Generation Z perceived changes related to pandemic measures. The results of the paper could serve as current data for businesses whose target group is Generation Z. Businesses can respond to these or similar findings by adjusting selected tools of the marketing mix, e.g. offering recycled products with a second (new) life, expanding distribution channels with their own online store or emphasizing the local origin of the product by visually rendering the product packaging. They can also respond by accelerating the implementation or improvement of technologies directly in the sales (smartphone applications, virtual reality, smart fitting room) or in the communication process (introduction or reinforcement of chatbots, advergaming). Businesses can also use financial and non-financial benefits to grant benefits to customers that are demonstrably supporting a non-profit organization(s) or those who perform environmental activities beyond the prescribed legislative framework. We find the findings regarding spending leisure time, listening to podcasts or watching television particularly beneficial. Some information is a surprise to us and since this is a pilot study, we see room in the preparation of another survey, this time by the method of questionnaire. The questions in the questionnaire will be based on the monitored categories of content analysis but we have room to specify them, according to the latent content. In addition, we can focus the future survey on comparing the results of several generational cohorts.

Acknowledgement: This contribution is a partial result of the project Vega No.1/0606/21 Change in preferences in buying behaviour of consumers in the context of the dynamics of marketing communication tools development.

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IS THE FUTURE OF NON-SKIPPABLE ADS SHINING BRIGHT?

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Abstract
The online environment provides companies with more and more opportunities to attract potential customers with their offer. Companies need to consider which types of online marketing communications are the right tools to use in order to increase their profits. Recently, the format of non-skippable advertising has been quite a controversial topic, which is becoming the core of an increasingly strong debate among marketing experts. There is already plenty of evidence that non-skippable advertising is indeed annoying for users of online platforms, but companies continue to use the format. However, it is of course possible that even if non-skippable advertising is annoying to consumers, it still has a use from a brand perspective that can be seen as beneficial. In order to investigate this, an experiment was conducted using an eye-tracking device, and the results from this experiment are the main output of this study.

Key words:
Brand. Consumer Behaviour. Generation Z. Marketing Communication. Non-skippable Ads.

Introduction

With the increasing prevalence of new types of digital advertising in recent years, advertisers are looking to monetise these different types. There are several forms of advertising. Advertisements can be display, overlay, bumper and centrefold. The last two categories are non-skippable video ads and skippable video ads. This variety of ad formats is a strategy to reach the attention of YouTube users. The hallmark of social media including YouTube is that users are free to surf what they want. This comprises accepting or rejecting what is offered, comprising advertisements.[1] Advertisers are now placing more emphasis on digital video advertising (DVA) as 47% of viewers worldwide are streaming more live video compared to 2017. Recognizing the consumption of mobile devices and the increase in video viewing, advertisers have recently increased their investment in DVA.[2] When the companies and advertisers have more options for video advertising formats and channels, the battle to attract viewers continues. In response to user demands for faster and clearer online features, modern advertising offers more interactive formats than traditional advertising mediums, which ultimately impacts advertising effectiveness. Active viewers are increasingly deciding what and when to watch. Therefore, current research focuses on skippable advertising as a prototype interactive format that is gradually replacing other online video advertising formats[3,4] with the aim of comparing the memorability of skippable and non-skippable advertising. In both cases, these are basic formats that elicit different levels of interactivity and different audience perceptions and behaviours.[5] Therefore, the aim of the paper is to

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[1] TANDYONOMANU, D.: Ads on YouTube: Skip or Watch? In *Advances in Social Science, Education and Humanities Research*, 2018, Vol. 226, p. 326.
[2] SABUNCUOĞLU-İNANÇ, A., GÖKALILER, E., GÜLAY, G.: Do bumper ads bump consumers? An empirical research on YouTube video viewers. In *El profesional de la información*, 2020, Vol. 29, No. 1, p. 1.
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investigate the perceptions of skippable and non-skippable ads in relation to purchase intention in a way of choosing e-shop to purchase.

1 Literature Review

To increase the effectiveness of advertising, some internet platforms have developed innovative interactive features (e.g. for liking, sharing), led mostly by Facebook and YouTube. A basic but prototypical example is the pre-roll skippable video ad format introduced by YouTube in 2010, which allows viewers to skip an ad after 5 s. This format became very popular and gradually replaced other types of DVA because it offers viewers more control and improves their overall video viewing experience.[6] The skip-ad button is perceived positively, because timer shows viewers how long they must wait before the ad can be skipped. In 2 experimental studies, temporal certainty (e.g., the presence of a timer) during short commercials helped reduce irritation from the ad. Conversely, when a skip button appeared, temporal certainty during both short and long ads increased irritation from the ad. This in turn reduced the effectiveness of the ad. At the same time - the higher the irritation from the ad, the higher the rate of ad skipping.[7] Viewers prefer skippable ads over non-skippable ads because they allow them to skip ads they are not interested in and limit involuntary interruptions of streaming video to 5 s versus the full length of a non-skippable ad.[8,9] Literature has examined some aspects of this format like users' preferences for skippable ads,[10] ad length and content (e.g., use of humour).[11] The purpose of another study was to determine how skippable and non-skippable ads on the YouTube affect viewers' memory in relation to a particular brand. As a result of the experiment, it was found that users exposed to skippable ads tend to process the information presented in the introductory part of the ad. Users who view non-skippable ads must find something in the ad arousing in order to remember the key information.[12] Some research examines consumer attitudes and their influence on the intensity and purchase behaviour of DVA. Informativeness, irritation, and entertainment are the determinants of attitude toward DVA,[13,14] with credibility[15] as the fourth influential factor.[16]

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6 BELANCHE, D., FLAVIÁN C., PÉREZ-RUEDA, A.: Understanding interactive online advertising: congruence and product involvement in highly and lowly arousing, skippable video ads. In *Journal of Interactive Marketing*, 2017, Vol. 37, p. 80.

7 JEON, Y. A. et al.: Temporal Certainty and Skippable In-Stream Commercials: Effects of Ad Length, Timer, and Skip-ad Button on Irritation and Skipping Behavior. In *Journal of Interactive Marketing*, 2019, Vol. 47, p. 151.

8 PASHKEVICH, M. et al.: Empowering online advertisements by empowering viewers with the right to choose - the relative effectiveness of skippable video advertisements on YouTube. In *Journal of Advertising Research*, 2012, Vol. 52, No. 4, p. 456.

9 CHAKRABORTY, S. et al.: Advertisement revenue management: Determining the optimal mix of skippable and non-skippable ads for online video sharing platforms. In *European Journal of Operational Research*, 2021, Vol. 292, No. 1, p. 220.

10 PASHKEVICH, M. et al.: Empowering online advertisements by empowering viewers with the right to choose - the relative effectiveness of skippable video advertisements on YouTube. In *Journal of Advertising Research*, 2012, Vol. 52, No. 4, p. 456.

11 CAMPBELL, C. et al.: Understanding why consumers don't skip pre-roll video ads. In *Journal of Advertising*, 2017, Vol. 46, No. 3, p. 416.

12 BELANCHE, D., FLAVIÁN C., PÉREZ-RUEDA, A.: Brand recall of skippable vs non-skippable ads in YouTube: Readapting information and arousal to active audiences. In *Online Information Review*, 2020, Vol. 44, No. 3, p. 554.

13 DUCOFFE, R. H.: Advertising value and advertising on the web. In *Journal of Advertising Research*, 1996, Vol. 36, p. 29.

Skippable ads have a lower return on non-informational content compared to non-skippable ads and explain why digital media ads are perceived within the industry to be of copy quality than traditional ads. Skippable ads are better suited to less ambitious advertising goals, such as brand awareness, when attention spans are shorter.[17] In another study was found that empathy towards the narrator in the commercial influenced video skipping rates. The longer the ad, the higher the empathy, resulting in a lower likelihood of skipping the ad. Further, empathy with the speaker in the ad did not significantly affect video viewing time and click-through rate. The results of the study provide initial evidence that empathy may be effective in reducing the likelihood of skipping a video.[18] From the advertiser's perspective, the effectiveness of skippable ads remains questionable. Previous studies suggest that skippable ads provide users with control over ads and increase their satisfaction.[19] However, if users always skipped skippable ads, advertisers' goals would not be met. Bombarding users with long-lasting non-skippable ads is also not an appropriate choice because it can lead to a negative user experience.[20] As many as half of respondents think that a non-skippable time of 5 seconds is reasonable but will skip an ad as soon as possible. Skippable ads are skipped because of repetition, time constraints, lack of personalization, and users' negative attitude towards the ad. Ads are not skipped if they are captivating and personalized. If users are in a good mood, they will not necessarily skip the ad.[21] The ability of consumers to avoid advertising is a traditional problem for marketers. One reason marketer worry about ad avoidance is that it interferes with the advertiser's ability to communicate with consumers. For example, if the viewer is not interested in the ad, they may avoid behaviours such as leaving the room, interacting with the company, or switching channels.[22]

Brands can effectively foster strong customer relationships. New media not only strengthens the existing relationship between customers and companies, but also represents a new transformation to conventional options, increasing the ability of companies to communicate in dialogue with customers and correspondingly strengthening their communication tool.[23] There were identified 4 dimensions of YouTube advertising that can influence ad value and brand awareness. These were entertainment, awareness, customization and irritation. The results

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[14] KIM, Y. J., HAN, J.: Why smartphone advertising attracts customers: A model of Web advertising, flow, and personalization. In *Computers in Human Behavior*, 2014, Vol. 33, p. 262.

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[20] DEHGHANI, M. et al.: Evaluating the influence of YouTube advertising for attraction of young customers. In *Computers in Human Behavior*, 2016, Vol. 59, p. 169.

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indicated that entertainment, awareness, and customization are the strongest positive factors, while irritation negatively affects YouTube ads. YouTube ads further influence brand awareness and consumer purchase intention.[24] In conclusion, despite the advantages of interactive formats that have been described in previous research[25] there was also found that allowing users to take control of ad performance can also lead to a loss of ad effectiveness. The findings of previous study contribute to a better understanding of the process of user adaptation to the skippable format and the different strategies users adopt to cope with it depending on previous experiences and behavioural patterns. Evidence in support of prior exposure, habituation, and the urgency timer shows that users not only adapt their skipping and viewing behaviour to these conditions, but that they also adapt the time they devote to decision making. These processes affect the commercial effectiveness of skippable ads, but may also challenge the continuation of interactive ads as we know them today.[26]

2 Methods

To reach the purpose of the paper the experiment as the primary research method was used. The experiment was realized in May 2021. The purpose of the experiment was to investigate perceptions of the skippable and non-skippable ads of three brands of travel agencies in relation to purchase intention. The study was focused on members of Generation Z as the emerging generation of consumers, which will be very soon at their productive age. Overall 66 students of Faculty of Business Administration in Karvina were participated at this study. The answers of three participants were eliminated because of their incompleteness. Final number of participants included in the study is therefore 63. The concrete composition of research sample according to gender and age is shown in the Table 1.

Table 1: The structure of research sample

Gender (in %)		**Age (in %)**	
Male	44	20 years old	14
Female	56	21 years old	46
		22 years old	13
		23 years old	17
		24 years old	8
		25 years old	2

Source: Own processing.

2.1 Research design

The first step of the experiment consisted of the ex-ante questionnaire, through which the respondents answered on the questions connected to the brands of three travel agencies operating on Czech market – Invia, Čedok and Blue Style. The awareness, recognition and clarity of these three brands were investigated. The participants also should have chosen the e-shop, where with the highest certainty they would buy their holiday. In the second part the participants were watching the short funny video, whereby the eye-tracking device was used

[24] DEHGHANI, M. et al.: Evaluating the influence of YouTube advertising for attraction of young customers. In *Computers in Human Behavior*, 2016, Vol. 59, p. 169.
[25] KIM, M. et al.: The effects of service interactivity on the satisfaction and the loyalty of smartphone users. In *Telematics and Informatics*, 2015, Vol. 32, No. 4, p. 957.
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in this main part of research. But before the video was played, the participants had to watch the ads of the three investigated brands. While one group (35 %) always have the option of skipping the ads, the second group of participants (48 %) could not skip any of the played ads, the third control group (17 %) watched a mix of skippable and non-skippable ads. Afterwards the participants had to simulate a real purchase and select a specific holiday destination they would like to visit. Their options of choice were not limited to the brands they saw in the ads. Finally, in the last part of research the participants filled in the ex-post questionnaire. The participants should have expressed the level of agreement with the phrases connected to the investigated brands and also, they had to comment from which brand they easily understood the message of their ad.

3 Results

In the ex-ante questionnaire, the participants should have expressed the level of agreement with the statements, which were connected to the investigated features like brand awareness (BA), brand recognition (BR), brand clarity (BC) of three investigated brands. The options of the degrees were graded from 1 (absolutely disagree) to 5 (absolutely agree) and there was also the option I can't assess. Chart 1 shows the results of these answers. Brand awareness was formulated as statement: “I know, how the brand looks like.” Brand recognition was expressed in the statement: “I can distinguish the brand from other competing brands.” Brand clarity was investigated through the statement: “The brand presents itself clearly.”

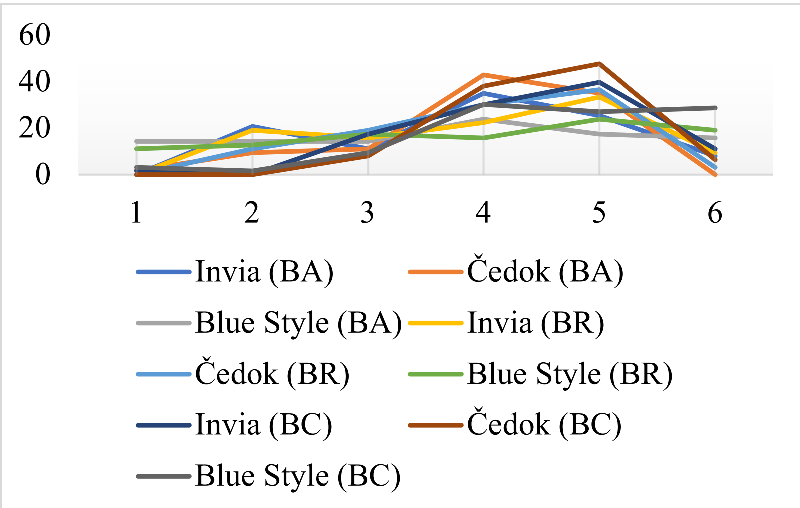

Chart 1: The answers of brand awareness, recognition and clarity
Source: Own processing.

As we can see from the chart the highest brand awareness from the investigated brands was indicated in Čedok brand and on the other hand the lowest one was expressed in Blue Style. Up to 16 % of participants were unable to assess the brand. Also, in the category of brand recognition Čedok was evaluated as the most recognizable from the investigated brand, up to 67 % of participants recognize this brand among other competing brands. And finally, based on the results Čedok presents itself very clearly according to participants, what can't be said about the brand Blue Style. Chart 2 shows another part of ex-ante questionnaire. The participants were asked, where they would buy their holiday. The most frequent answer was Čedok in 29 % of cases, 24 % of participants declared Invia. The third investigated brand Blue Style would be chosen just by 8 % of participants.

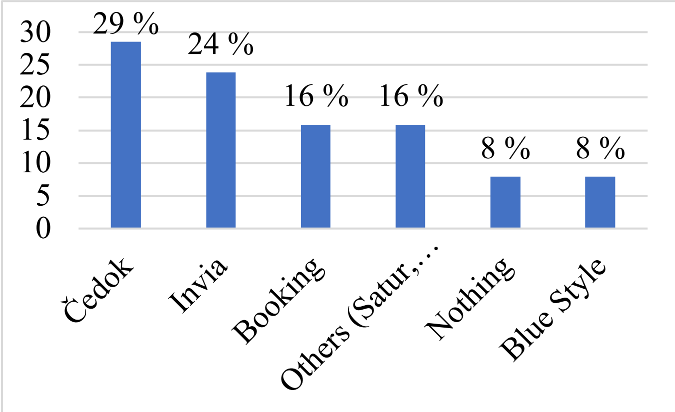

Chart 2: The probable preferability of the brands for buying holiday
Source: Own processing.

As already mentioned Chart 2 shows the probable intention of the participants to choose some of the e-shop to buy a holiday. On the other hand, Chart 3 shows the real intention to purchase from chosen e-shop, because it reflects the answers from the third part of the research, where the participants should have made real purchase. This decision was made after watching a short video preceded by advertisements of the researched brands.

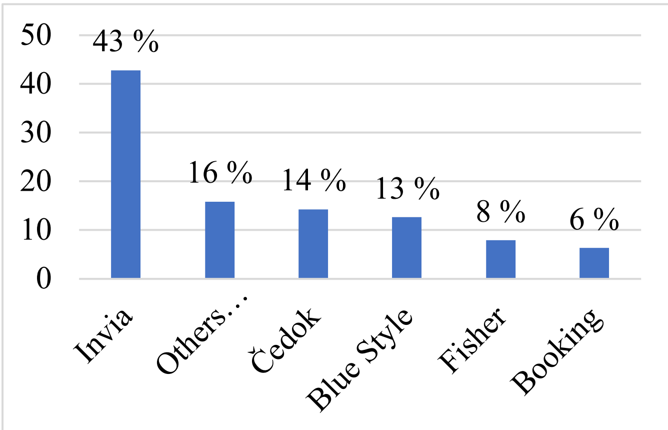

Chart 3: The real preferability of the brand for buying holiday
Source: Own processing.

The biggest difference between the probable and real preferability of researched brands is obvious in the case of Invia. After the watching the ads up to 19 % more of participants have chosen Invia to purchase the holiday. The second one is Čedok, but the difference between probability and reality has a decreasing tendency. Up to 15 % less participants have chosen for buying holiday Čedok in the moment of real purchase than in the moment of probable purchase. And finally, Blue Style was chosen by 5 % more participants in the stage of real purchase than in the probable level.

With this increasing and decreasing tendency of choosing the researched brands the level of understanding the messages of the played ads can be connected. Because just 60 % of participants in the ex-post questionnaire answered that they know, what the message of the Čedok ads was about, what is the lowest number of all three researched brands. The message of Invia's ad was understandable for 65 % of participants. The most understandable message comes from ad of Blue Style, because it was clear for 70 % of participants. Also, the agreement with the claims of the ads of researched brands were investigated. In ex-post questionnaire the participants should have answered, if they agree or not with the statements.

The statements were formulated according to the claims heard at watched ads. The results are shown in Table 2.

Table 2: The agreement with the claims of research brands

The wording of the claims	Yes	No
Invia offers the largest selection of tours.	68 %	32 %
People have been travelling around the world with Čedok for more than 100 years.	75 %	25 %
You will find your perfect seaside holiday at the Blue Style travel agency.	71 %	29 %

Source: Own processing.

Finally, to reach the aim of the study the Kruskal-Wallis test was realized. The influence of format of the DVA (independent variable) on choice of e-shop to purchase a holiday (dependent) was tested. The results of this test are shown in Table 3.

Table 3: The results of testing the format of DVA and choice of the e-shop

Parameter	Value
Kruskal-Wallis H	0.588
Df	2
Asymp. Sig.	0.745

Source: Own processing.

From Table 3 is obvious, there is no relation between the format of DVA and the purchase intention in the way of choice of e-shop to purchase. The null hypothesis declares there is no relations among testing variables. To reject the null hypothesis requires the significance level lower than 0.05. This rule has not been fulfilled, the significance level is 0.745, that is why the null hypothesis can't be rejected. It means there is no significant relation between tested variables.

Conclusion

There are many evidences the both formats of DVA work. It was investigated from several points of view. The skippable ads cause the satisfaction of the users because they can control, when or whether they skip the ad. Non-skippable ads seemed to be effective mainly when the brand is at the beginning of the ad. But now, when the users can apply many ways how to avoid the ads, is more than ever important to indicate the effectiveness of this DVA format. That is why the aim of this study was to investigate the perceptions of skippable and non-skippable ads in relation to purchase intention in a way of choosing e-shop to purchase. There was found any relation between these two variables. It is not possible to said, the non-skippable ads are more persuasive (effective) than skippable ones. At least from the results of the study we can state that the future of non-skippable ads is quite uncertain, not shining bright.

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PROMOTING FEMINIST ISSUES IN THE CONTEMPORARY SLOVAK MUSIC VIDEO: A COMPARATIVE ANALYSIS OF KATARZIA'S "HOŘÍ I VODA" AND ENIESA'S "MELODY"

Juraj Kovalčík

Abstract
Music videos are generally produced as a marketing tool to promote musicians and to help them reach a wider audience through the media with national or potentially global reach (cable television, internet platforms). Utilizing a rich arsenal of audiovisual means of expression together with the lyrical content of songs, the promotion aspect of music videos is occasionally combined with different artistic ambitions. Musicians and video makers may offer a social commentary or critique, advance ideological, even overtly political messages. Two recent videos for Slovak female musicians Katarzia and Eniesa were concerned with arguably very similar social issues included in the contemporary feminist discourse (particularly sexual and reproductive rights). Their comparative analysis based on the social semiotics approach of multimodal critical discourse analysis highlights two different approaches to emphasizing social responsivity and responsibility of the typically promotional – i.e., marketing – medium of music videos.

Key words:
Feminism. Gesture and activity. Multimodal critical discourse analysis. Music video. Norms and values. Space and time. Storyworld and plot. Subjectivity and address.

Introduction

During last three years, my part-time occupation was viewing copious numbers of music videos by Slovak musicians in order to prepare a representative selection for the festival of video, music, and digital culture YouTopia.[1] When one watches short videos as their job routine, interest in the medium can devolve into just that: routine. Fast-emerging patterns of mainstream production make the job simultaneously easier, enabling to fast-forward or skip through much of the repetitive content, and almost mind-numbingly tedious. Among rare exceptions that captivated my attention in this year's selection, were two clips whose protagonists were women. Of course, that is not unique at all. Videos were made for the songs by female singers Katarzia ("Hoří i voda")[2] and Eniesa ("Melody").[3] Yet, there was something quite strange going on. First, although professionally produced and featuring attractive cast members (one video even briefly shows full nudity), it looked like they did not want to be sexy. Dispersed among mostly aesthetically pleasing imagery were sequences where I felt emotionally disturbed. Images of scars, people screaming in agony, (wo)manhunt, defiant and pensive gazes. The lyrics invoked similar feelings with metaphors of swords in one's heart and getting dressed in a storm. The music itself felt heavy. These videos had a very much open agenda that was far from promoting sales of physical records or digital streams. It had also very little to do with artists' image and self-presentation in any conventional sense. The following paper analyses various aspects of their production, form and expression to highlight what they want to say and how they do it.

[1] The festival takes place in Trnava, Slovakia, since 2019. It includes the competition of the best Slovak music videos and other music video-related program sections.
[2] *Katarzia – Hoří i voda.* [online]. [2021-10-10]. Available at: <https://www.youtube.com/watch?v=xVPDZEa0wjU>.
[3] *Eniesa – Melody*. [online]. [2021-10-10]. Available at: <https://www.youtube.com/watch?v=J-3nV3FU7Tw>.

1 The use and form of the music video

Historically, music videos were produced by record companies primarily to promote records and musicians.[4] After the heyday of the 1990s, the record industry invested gradually less money into their production.[5] Still, as a rule "[a]ll music videos have an avowedly commercial agenda: they are first and foremost a *commercial* for an associated but distinct consumer product, the music track itself."[6] Around 2000 MTV shifted its interest and programming away from music videos. It seemed that the medium was on the decline. Instead, production, distribution, and reception models have drastically changed. Internet distribution platforms such as YouTube, Vevo, or Vimeo gave it a new lease on life. Music videos are one of the most popular formats on YouTube, viewed by hundreds of millions of people. The relationship between the music record (the song) and its video clip has been modified as well. Not only is the contemporary music video "a comparatively more diverse phenomenon than the music video used to be in the MTV days,"[7] it has also in many ways "become the primary product".[8] It is an undeniable global cultural force, not merely a tool for promotion, i.e. marketing. Writing in 2017, Matthias Korsgaard recognizes the commercial and entertaining scope of music videos as one of their basic traits. He goes on to say that "some contemporary forms of music video challenge or alter both functions", and cites its "incursion in the institutions of art, its ability to sustain academic interest, the emergence of music video festivals and the increasing canonization of music video *auteurs*" as evidence that "music video is increasingly being recognized as a cultural form of some aesthetic worth."[9] As such, it deserves appropriate critical attention and thorough audiovisual analysis, especially if it clearly betrays other ambitions than just promotion and entertainment.[10] Formally, music video communicates with its recipients in three interconnected channels: music, text, and (moving) images. Music and text (lyrics) are usually prerecorded in the form of a song and the video is produced later.[11] The precedence of the soundtrack does not imply semantic or other hierarchy in the final output (and is reversed occasionally). All channels 'flow' together during perception and production of meaning. The intersection of audio and visual forms in a music video can be described both as intermedial and multimodal. In the field of media narratology, "through *multimodality* different types of signs combine within the same media object—for example, moving image, spoken language, music, and sometimes text in film", while intermediality describes connections between texts in different media, like

[4] VERNALLIS, C.: *Unruly Media: YouTube, Music Video and the New Digital Cinema*. New York : Oxford University Press, 2013, p. 11.

[5] KEAZOR, H., WÜBBENA, T.: *Rewind, Play, Fast Forward: The Past, Present and Future of the Music Video.* Bielefeld : Transcript Verlag, 2010, p. 13. See also VERNALLIS, C.: *Unruly Media: YouTube, Music Video and the New Digital Cinema*. New York : Oxford University Press, 2013, p. 207-209.

[6] RAILTON, D., WATSON, P.: *Music Video and the Politics of Representation*. Edinburgh : Edinburgh University Press, 2011, p. 2.

[7] KORSGAARD, M. B.: Changing Dynamics and Diversity in Music Video Production and Distribution. In BURNS, L. A., HAWKINS, S. (eds.): *The Bloomsbury Handbook of Popular Music Video Analysis*. New York : Bloomsbury Academic, 2019, p. 14.

[8] RAILTON, D., WATSON, P.: *Music Video and the Politics of Representation*. Edinburgh : Edinburgh University Press, 2011, p. 6.

[9] KORSGAARD, M. B.: *Music Video After MTV: Audivisual Studies, New Media, and Popular Music*. New York : Routledge, 2017, p. 28-29.

[10] Cf. OBORNÍK, P.: *Hudobný videoklip – teória a trendy*. Prešov : Filozofická fakulta Prešovskej univerzity, 2013. [online]. [2021-09-29]. Available at: <http://obornik.sk/images/Hud_v.pdf>.

[11] VERNALLIS, C.: *Experiencing Music Video: Aesthetics and Cultural Context*. New York : Columbia University Press, 2004.

cross-medial adaptation, references within the text to other media objects or imitation by a medium of the resources of another medium.[12]

2 First indication: The all-female auteurs

Katarzia (b. 1989| and Eniesa (b. 1993) are Slovak female singer-songwriters. They both debuted in the 2010s and both can be described as working in the indie/alternative pop music genre. Both have performed and published songs in different languages (Slovak, Czech, and English), trying to reach wider than only a Slovak-speaking audience. Musically, Katarzia's recent style is more influenced by electronic pop, while Eniesa is more grounded in folk idiom. In terms of popularity, Katarzia has so far received much more mainstream exposure. In 2015, she moved from Bratislava to Prague in the Czech Republic, all the while managing to retain her fan base in Slovakia. Eniesa, from the east Slovakia city Košice, also collaborated with Czech musicians (e.g. Franta Černý, singer in the popular band Čechomor). Late in 2020, in the span of few weeks Katarzia and Eniesa released music videos for songs "Hoří i voda" and "Melody", respectively, that are subjects of this comparative analysis. Outspoken and candid, Katarzia has for some time affiliated her public persona with feminist issues. For instance, in 2017 she contributed a song for the public campaign aimed at fighting sexual violence[13] and in a 2020 podcast that introduced her as a "singer, musician, feminist" she asserted that the music industry is based on sexism.[14] Various reviewers called her 2018 album Antigona "a feminist record."[15] It was no surprise then, that the press release for the music video "Hoří i voda" stated that its goal is to provoke deeper discussion and reflection on how to improve conditions in which Czech and Slovak women function. Perhaps in an attempt to avoid misinterpretation, the singer added a disclaimer that "the video doesn't say that all men are bad or that women should rule the world."[16] She might identify as a feminist, but clearly not a radical one. And though she never truly crossed over into the music mainstream, it might not be a stretch to refer to Katarzia as a "celebrity feminist". In her study of FKA twigs' music videos Kirsty Fairclough argues that celebrity feminism emerged when a number of female celebrities began to speak out against regressive narratives such as that if a woman wants to be successful, she must also constantly maintain her physical appearance.[17]
The core creative team for the video included Katarzia, the writer and director Jay Walker, an American, who studied Cinema Directing at FAMU in Prague, and now works there as a freelance director, and Anna Smoroňová, Slovak cinematographer, all women. The video producer, production designer, casting director, photographer, colorist, choreographer, and

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[12] RYAN, M., THON, J. (eds.): *Storyworlds across Media: Toward a Media-Conscious Narratology*. Lincoln and London : University of Nebraska Press, 2014, p. 10.

[13] ŽUREKOVÁ, M.: *Aj Katarzia povedala nie. Proti sexuálnemu násiliu vystupujú známe tváre*. Released on 24th July 2017. [online]. [2021-10-09]. Available at: <https://zena.sme.sk/c/20610338/aj-katarzia-povedala-nie-proti-sexualnemu-nasiliu-vystupuju-zname-tvare.html>.

[14] ŘIČICOVÁ, H., SVOBODA, V.: *Hudební průmysl stojí na sexism. Můžeme prot němu bojovat, I když třeba nevyhrajeme*. Broadcast on 28th Sepetember 2020. [online]. [2021-10-09]. Available at: <https://wave.rozhlas.cz/katarzia-hudebni-prumysl-stoji-na-sexismu-muzeme-proti-nemu-bojovat-i-kdyz-treba-8323278>.

[15] KUČOVÁ, M.: *„Nepohodlná osoba" Katarzia na Antigone prináša (veľmi aktuálny) ženský vzdor*. [online]. [2021-10-09]. Available at: <https://hudba.zoznam.sk/recenzie/05-11-2018-katarzia-na-antigone-prinasa-velmi-aktualny-zensky-vzdor/>.

[16] *Katarzia predstavuje videoklip ku skladbe Hoří i voda*. [online]. [2021-10-09]. Available at: <https://www.teraz.sk/kultura/katarzia-predstavuje-videoklip-ku-skladb/503436-clanok.html>.

[17] FAIRCLOUGH, K.: Soundtrack Self: FKA twigs, Music Video, and Celebrity Feminism. In ARNOLD, G., COOKNEY, D, FAIRCLOUGH, K., GODDARD, M.: *Music/Video. Histories, Aesthetics, Media*. New York : Bloomsbury Academic, 2017, p. 125.

others were also female, in an extremely rare example of the set "run by a female majority." As the director recounts, they didn't just want to make a video that "banks on the trendy buzzword of feminism/equality, and yet offers nothing real to the community." So with the assistance of Girls in Film, she launched a shadowing program where three girls aged 18-20 shadowed herself, the cinematographer, and producer in all stages of the production. It brought her great satisfaction.[18] In the case of „Melody", the typical creative process was somewhat modified. Maia Martiniak was making a documentary *Neviditeľná* (Unseen, 2021) about three women suffering trauma after birth-giving and asked Eniesa to compose music for the film. "Melody" was meant as a theme song for the movie. The director decided to make a separate music video for the song.[19] ‚Separate', because the video doesn't reuse any material from the film. The film thus bestows its feminist thematic attributes on the song and the video.

3 Analytical method

The feminist movement in its contemporary incarnations (as in the past) deals with power relations between men and women in society and on the individual level, structure and ideology of patriarchy, female identity, and its media representation. It seems very appropriate, then, to analyze music videos that exhibit women running from men, pregnant women under scrutiny by male bureaucrats, or female bodies scarred from cesarean section in the framework of multimodal critical discourse analysis (MCDA). Discourse in critical discourse analysis means a model of the world. The basic assumption of (M)CDA is that texts use strategies that appear neutral on the surface but may in fact be ideological, shaping the representation of events and persons for particular ends and that all forms of communication both shape and are shaped by society, so it is interested in the way that semiotic choices communicate power relations.[20] Selected audiovisual texts themselves analyze and critique existing power relations. For MCDA, opposing the dominant ideology means shaping a different world, a different society than the one we currently live in. It is both an act of destruction and creation. For the following analysis, I propose to apply a simplified version of the analytic model by Lori Burns.[21] In the interpretive method influenced by genre theory, critical discourse theory, and narrative theory, she suggests using five parameters for interpreting the multimodal content of a music video: norms and values, storyworld and plot, space and time, subjectivity and address, and gesture and activity (see Fig. 1). Although I consider this framework extremely useful and inspirational, I will not discuss every listed category within all three modes of expression, only those that will yield comparatively significant results. In her analysis of the single video, Burns first reviews individual domains of expression (lyrics, music, video image) and then proceeds to analyze their intersections

[18] "I saw Anna's shadow watching her instruct her gaffer, ACs and steadicam operator on what she wanted. The shadow, Karolina, said she had never actually seen it before, that a woman could direct a team like that and was impressed that her team, of almost entirely men, were more than happy to listen and do what she asked." Personal communication with Jay Walker, 4th October 2021. Girls in Film is an international community and video platform promoting equality and representation in film.

[19] Maia Martiniak also directed Eniesa's debut music video, "Vhodení" (2013). Information about the making of the analyzed video comes from the personal communication with M. Martiniak, 4th October 2021.

[20] MACHIN, D., MAYR, A.: *How to Do a Critical Discourse Analysis: A Multimodal Introductio*n. London : SAGE Publications, 2017, p. 9-10.

[21] BURNS, L.: Multimodal Analysis of Popular Music Video: Genre, Discourse, and Narative in Steven Wilson's Going Home. In RODRIGUEZ, C. X. (ed.): *Coming of Age: Teaching and Learning Popular Music in Academia*. [online]. [2021-10-01]. Available at: <https://quod.lib.umich.edu/m/maize/mpub9470277/1:8/--coming-of-age-teaching-and-learning-popular-music?rgn=div1;view=fulltext>.

adhering to the formal song sections (intro, verse 1, chorus, etc.). I will analyze in detail only one individual domain of two videos – the lyrics – to illuminate songs' content and structure. Then I will overlay the formal sections of both songs in order to analyze their multimodal communication comparatively. Besides the critical discourse analysis, Burns also draws heavily from various works in the genre and narrative theory. In order to streamline my comparative analysis, I will largely curtail such considerations. I will follow Diane Railton's and Paul Watson's classification that distinguishes four basic genres of the music video – pseudo-documentary, art music video, narrative video, and staged performance. Both "Melody" and "Hoří i voda" can be described as narrative videos in this framework since they "activate forms of visual narration that (…) illustrate, complement or extend the lyrical content of the song."[22] The ways in which their authors choose to tell stories are nonetheless very distinctive as the following analysis, hopefully, will clarify.

FRAMEWORK	WORDS	MUSIC	IMAGES
Norms and values	• assumptions • "truth"	• genre and style • production	• genre and style • costumes and props
Storyworld and plot	• event sequence • situation ("state of affairs")	• form • structure	• image sequence • visual composition and design
Space and time	• space • time • place	• arrangement • sonic space • temporal features	• setting • lighting • framing, editing
Subjectivity and address	• identities • relations • stance	• quality • dynamics • intensity	• staging • focus • gaze/address
Gesture and activity	• utterances • actions	• musical patterns • interactions	• movement • choreography

Figure 1: Analytic framework for words, music, and images
Source: BURNS, L.: *Multimodal analysis of Popular Music Video: Genre, Discourse, and Narrative in Steven Wilson's "Drive Home"*. [online]. [2021-10-10]. Available at: <https://quod.lib.umich.edu/m/maize/mpub9470277/1:8/--coming-of-age-teaching-and-learning-popular-music?rgn=div1;view=fulltext>.

4 Analysis

4.1 Individual domain - words

The press release accompanying the music video for the song "Hoří i voda" ("Flames on Water") credits the authorship of the lyrics to Katarzia in collaboration with Czech actor Cyril Dobrý. Reportedly the text uses motifs of the classic Oscar Wilde's novel *The Picture of Dorian Gray* (1890), where "physical beauty and fulfillment of carnal desires are the primary

[22] RAILTON, D., WATSON, P.: *Music Video and the Politics of Representation*. Edinburgh : Edinburgh University Press, 2011, p. 55.

meaning and goal of one's life".[23] Young and beautiful Dorian Gray famously wishes that his picture will age in his stead. The wish comes true. Ever youthful-looking Dorian pursues a decadent life full of amoral deeds, while his portrait ages and is corrupted beyond recognition by Dorian's wrongdoings. The intermedial adaptation does not proceed straightforwardly. The lyrics consist of two verses and a chorus. The second verse (in Slovak) describes a man who "hid a portrait", "locked up what he fears to see the most/that face and the anguish written in it/of things he used to do and say". This character clearly corresponds with the titular hero of the novel. His story is framed by the first verse (in Czech) and the last lines of the second, where a first-person narrator refers to a woman, who seems to be suffering. By the end of the second verse, the narrator implies that the woman is harmed by this man ("She won't doubt his motives for a minute/He'll make traces of lightning go away"). In the novel, Dorian's first transgression comes when he cruelly renounces 17 years old actress Sibyl Vane, to whom he previously proposed. Sibyl kills herself shortly after. Dorian doesn't face any consequences. Multiple occurrences of "lightning" together with the line "tenderness has never crossed her path" evoke physical violence. The woman "was burned by lightning", seems to be running from something or someone ("she looked like she chose her dress when furious and raging") and then coming back again. As victims of partner abuse often do, she denies it to others ("she said there was nothing") and falls prey to manipulation ("she won't doubt his motives for a minute"). In terms of *norms and values*, the text works with tropes of patriarchy (oppressing women) and hypocrisy (of men who hide their true face), inability to cope with such suffering either as a victim or witness that results maybe in escapist fantasy, maybe in defiance (for the narrator it is "impossible to bear" and she renounces the human race, literally "I don't want to be human anymore"). The parameter of *storyworld and plot* points to a story of suffering from perpetual partner abuse, where the abusing partner makes excuses for himself, avoids admitting any responsibility (he keeps his wrongdoings strictly private), and can manipulate his victim. The narrator seems to be unable to help. Certainly not in this world. Concerning *space and time* there are striking chorus lines "flames in a distant country even on water", and "in the hole between worlds", signifying some kind of a portal to a different world with alternative physics (and maybe social rules). There is also a spatial trope of a forbidden room, where the male character locks up his cursed portrait. Time in the story moves rather cyclically. It starts with a woman being burned by lightning, then sharing a hug with the narrator and by the end of the second verse she is ready to go back to the source of her suffering because she believes that "he'll make the traces of lightning go away". The first verse is narrated in the past tense and whatever is going on here, it's going on for some time: "All the time she'd seem so uneasy and worried". The "childhood room" and "things he used to do and say" passages corroborate this sentiment. The first-person narrator (*subjectivity and address*) signifies the singer's identification with the story. She seems to empathize with the other woman (they hug and she can't bear the pain). Her relationship with the male character is ambivalent. If anything, she pities him (registering "anguish" in his portrait). Most significantly, in the chorus, the narrator strongly rejects ("I renounce") social conditions that make depicted situation possible. This also happens to be the most distinct utterance. Considering *gesture and activity*, Burns states that "[f]or discourse analysis every gesture is significant for our understanding of social relations."[24] If the woman "won't doubt" man's "motives", it is clear who controls the relationship. The narrator may witness and provide

[23] *Katarzia predstavuje videoklip ku skladbe Hoří i voda*. [online]. [2021-10-09]. Available at: <https://www.teraz.sk/kultura/katarzia-predstavuje-videoklip-ku-skladb/503436-clanok.html>
[24] BURNS, L.: Multimodal Analysis of Popular Music Video: Genre, Discourse, and Narative in Steven Wilson's Going Home. In RODRIGUEZ, C. X. (ed.): *Coming of Age: Teaching and Learning Popular Music in Academia*. [online]. [2021-10-01]. Available at: <https://quod.lib.umich.edu/m/maize/mpub9470277/1:8/--coming-of-age-teaching-and-learning-popular-music?rgn=div1;view=fulltext>.

some relief, but she still feels like an "animal" trapped "between fences". The song and video clip "Melody" relates intermedially to the film *Neviditeľná* (Unseen, 2020) as its theme song (played during the end credits). According to Maia Martiniak, Eniesa improvised the guitar backing and lyrics when they were discussing music for the film at the director's home.[25] The complete text in English consists of three verses and links and takes as its central inspiration the story of Melody Turner (U.S. citizen), one of the three protagonists. In the documentary, Melody speaks about traumatic feelings she was experiencing long after the delivery (like failure and loneliness) and how she used her art (painting) to express and battle these feelings. Eniesa wrote the lyrics from Melody's point of view. The narrator identifies with the subject and recounts recipients in the first person of her inner state of mind, her relation to the outer world. This outer world is represented by various agents. It can be a community ("my friends") or a society ("this whole world") and it can be her partner ("who are you"). The narrator feels hurt ("in my heart swords"), abandoned ("why I feel so lonely"), ostracized ("covered me with stones"), and doubts herself ("my own insanity"). Appropriately, the *storyworld and plot* of "Melody" is almost exclusively internal, it recounts a psychological struggle with past trauma and mental path to recovery. There are no external events in the present, only a traumatic memory of giving birth sometimes in the past. The present is "stuck" in the past. The lyrics don't consider the *spatial* relationship and don't mention any physical places. They are more interested in the progression of *time*. If the past weighs so much on the subject, the central narrative conflict deals with a better future. The narrator hopes to break the cycle ("there's still the chance") and, in terms of *gestures and activity*, gradually replaces the initial passive state ("waiting for a miracle") with active options ("I can walk out", "I can talk through canvas", "I can bear it"). While more introverted and subjective, Eniesa's lyrics concern similar *norms and values* then Katarzia's. Her subject, too, feels oppressed and devalued by the powers to be. She questions their assumption that she can be objectified and defiled at will ("who are you to see me so physical") and cites violations to her body ("scars from knife"). Where Katarzia can't stand the suffering and renounces the human race, Eniesa's effort to conform, to "fit into this reality" leads her to the verge of insanity.

4.2 Individual domains combined

Both songs keep the typical pop-music verse-chorus-verse structure, applying a repetitive form with certain variations and rising dynamic towards the climax. There are no instrumental solos or other sections that would complicate the quite basic form. "Hoří i voda" develops from the instrumental intro through verse 1, chorus, verse 2, chorus with an extended refrain to the outro, "Melody" also starts with instrumental intro and continues with first two verses and links, chorus, verse 3 + link, ending in chorus with extended refrain (see Table 1).

Table 1: Song sections with timestamps

Hoří i voda		Melody	
Section	**Time**	**Section**	**Time**
Intro	00:00 – 00:31	Intro	00:00 – 00:27
Verse 1	00:32 – 01:46	Verse 1 + link	00:28 – 01:07
		Verse 2 + link	01:08 – 01:47
Chorus 1	01:47 – 02:17	Chorus 1	01:48 – 02:14
Verse 2	02:18 – 03:01	Verse 3 + link	02:15 – 02:54
Chorus 2	03:02 – 04:05	Chorus 2	02:55 – 03:59
Outro	04:06 – 04:23		

Source: Own processing.

[25] Personal communication with Maia Martiniak, 4th October 2021.

The most obvious structural differences are that “Hoří i voda” is bookmarked at both ends with intro/outro passages, while “Melody” is introduced instrumentally, but ends with a more streamlined fade-out of the chorus climax, and that the first instance of the chorus in “Melody” comes after the second verse rather than the first one. Incidentally, the first two verses of “Melody” correspond very well with the timeline of Katarzia’s first verse, the same observations hold for Katarzia’s second verse and Eniesa’s third, and both choruses. In Katarzia’s video, the length of the introduction sequence is motivated primarily by narrative audiovisual considerations, not by music. It starts with a muted sustained keyboard note in combination with diegetic sounds of its visual setting, a forest (crows’ cawing, rustling of leaves), and a sound of breathing as a group of six women rests on the ground.[26] After wide establishing shots, one of them, acted by Katarzia, wakes up and as she looks around in the medium shot, the video cuts to the wide shot of a single young man standing among trees. This is accompanied by disturbing electronic sound effect, suggesting danger. Throughout its duration, the video matches its narrative ambitions with the cinematic style going through shot sizes from extreme wide shots to close-ups.[27] Katarzia wakes up others and it is only now that the song proper starts with an ominous reverberated bass and “shuffling” 4/4 electronic pulse. In addition to the visual world, the intro indicates the electronic style of musical production. “Melody” starts with “proper” music right from the bat. Solo guitar picking is joined respectively by plucked cello, violin, trumpet, and bass. All instruments of the acoustic arrangement introduce themselves in the first half-minute before vocals. The initial image shows a woman descending in a body of water. It is followed by a close-up of the singer, en profile, although her face is unlit and almost indistinguishable. It appears that she stands by the lake somewhere in a forest, but it is impossible to tell if she is the drowning woman of the first shot. Then there is another woman ruffling the water with her hand, first seen in a close-up, then in a wide shot from behind, as she is standing waist-deep in, presumably, the same lake. This is the only wide shot of the entire video. The visual narrative of “Hoří i voda” intercuts between three spatially distinct sequences with multiple characters. For the analysis, I identify them as ‘the great escape’ (in external spaces), ‘mad priest’, and ‘the official examination’ (both in internal spaces). Authors use dynamic editing without any transitions or other salient techniques. In ‘Melody’, the narrative takes place at two locations, the lake (external space) and the home (internal space) that feature the same protagonist, ‘the scarred mother’. At the lake, she is alone, at home, she is partnered with her infant son. The clip is edited more fluidly, including several longer takes and reusing certain images (also not featuring transitions, only cross-cuts). *The great escape* sequence incorporates more narrative development than other segments. It starts in the forest in the morning (intro and verse 1), where six women run from three men, follows them crossing a lake on a rowboat (corresponding with the chorus 1 line “in a distant country”, or literally “on the other side of the country”) and concludes as they emerge in an open space, meet other women and celebrate at a bonfire in the evening (chorus 2, outro). *The mad priest* sequence enters along with vocals of verse 1. It depicts a catholic priest who apparently celebrates mass in an empty church. At first solemn and serious, his gestures and actions gradually intensify within following choruses. *The official examination* of a pregnant woman unfolds during the second verse and its final shot appears during chorus 2. I will now analyze all three sequences in more detail and then compare them to the narrative of “Melody”. Since all three visual sequences are parts of the same video, they must be viewed as parts of the same discourse as well. They all depict the conflict between men and women, both on personal and institutional levels. In this respect, the images expand the lyrical discourse of individual oppression. There

[26] In the outro to the song, as the music fades out, diegetic sounds fade back in (chirping crickets, crackling fire).
[27] Director Jay Walker says that they “wanted the images to feel vast.” Personal communication, 4th October 2021.

are six women and only three men, but women are still weaker and have to run. The opposing groups are never staged in one shot together, men are shot mostly from low angles, women from an eye-level or high angles. The cleric and officials from other sequences exemplify institutional authority. The priest initially moves very slowly, even majestically (which is accentuated with the use of slow-motion), striking an imposing figure, shot from a low angle. The women only have their simple clothes, no other props, while the priest in full attire carries an incense burner and the officials wear uniform suits and make busy with their all-important telephones, clipboards, papers, and stamps. Yet they might just be camouflaging weakness, as the text in the second verse describes the male character hiding his portrait, the truth about him. Standing in front of an unseen audience, the cleric preaches authoritatively while a CGI tree-like structure of coat hangers (potent cultural symbol of illegal abortion) grows behind him, obscuring the original church altar. The preacher gestures ever more excessively and, as the second chorus soars in, he is screaming, falling to his knees as if desperately trying to keep his influence. His undressing and throwing the garments wildly away is juxtaposed with images of running women who have escaped their persecutors, crossed the country, and found their female peers. Young and old, black and white, they all are rejoicing, kissing, hugging, dancing around the bonfire with their hands pointing to the sky, supported in the soundtrack by exalted vocals, spiraling keyboard arpeggio, commanding drums and guitar chords on the beat. The image of women dancing around the fire can be associated with historical legends of witches dancing around a fire with demons. They also put their clothes off, but they keep their white underdresses, suggesting purity and innocence. Then they pose in groups and gaze proudly, defiantly into the camera, while the hysterical priest has shamed himself. Nakedness strips him of any vested power. The narrative thrust towards liberation (of women) and decline (of male dominance), coupled with the song's growing momentum and expanding dynamic range, is interrupted by the sequence of *the official examination* during the second verse. The musical material is largely repeated from the first verse, but the sonic palette is now richer and more active (steady drumbeat and chimes instead of just sticks). The young woman in late pregnancy is being wheeled in a medical chair by a female attendant into the conference room full of male officials. The attendant spreads the woman's legs and puts her in the ill-famed lithotomy position for close examination by three senior officials. They look sternly between her legs, the official in the middle files a report and passes it forward for approval. As this is happening, the woman looks confused and frightened, but no one makes eye contact or comforts her, even the female attendant looks past her indifferently. The symmetrical shots of the conference room and the bureaucrats suggest rigidity and strict hierarchy. The image cuts to the screaming priest. Expressive vocals and loud crash cymbal mark the beginning of the second chorus. The last shot of the sequence comes about 15 seconds later when the woman is sitting motionless and alone in the same chair, at the dimmed window, preventing her to look outside. The geometrical structure in the window resembles prison cell bars. This segment closely resonates with the themes of "Melody", as it explicitly concerns problematic aspects of pregnancy, birth-giving and motherhood. The heroine of Eniesa's song already gave birth to a beautiful boy. They are seen together in the home setting of the video, sharing the interior of an urban apartment, in familiar images of motherly love – caressing, feeding, bathing, shot mostly in close-ups, thus emphasizing intimacy. Yet the mother is also strangely distant – there is a repeated shot where the boy looks at her across the room, while she is standing further away looking out of the window, suggesting her inner torment. She has turned her back on the child in a similar pose to the one from the introduction where she stands in the lake. Images from the apartment take up the first verse and link (crosscut with close-ups of Eniesa lip-syncing the lyrics). The second verse moves between the home setting and tracking shots of the mother swimming in the lake. Her physical trauma, a large horizontal scar on the abdomen, is shown twice in extreme close-ups. During the link to the second chorus, the director match cuts between the mother immersing her head in the bathtub water and diving in the lake. While underwater, she takes off her shirt and then resurfaces – born again. The expressivity of all underwater shots throughout the video is heightened by the programmatic use of slow-motion. In her last close-up, the mother is still by the lake, now with dry hair, content, and smiling a bit. Notice that both videos feature lake as an important setting, but with different connotations. Katarzia and her companions have to cross the lake to get to the other side, the mother swims and dives in the lake to emerge anew. Considering lighting and colors as categories of spatial organization in the video imagery, it is notable that both videos use primarily natural lighting and fitting low-saturated colors. Colors in "Melody" look decidedly more monochrome per its narrower focus. "Hoří i voda" is less dark and more vivid in its color tones. Sometimes it uses spectacular light effects – like sunbeams piercing through a smoke haze in the church, or the fire blazing against the sunset sky. In both videos, costumes and undressing carry significant meaning. Celebrating women in the finale of "Hoří i voda" keep white underdresses on after tossing their tops into the fire. This is their new beginning, getting free of societal restraints. For the protagonist in "Melody" new life comes with discarding her white shirt, because it is the shirt that represents prevailing norms and values, particularly impersonality and indifference of hospital maternity care. Such shirts are worn by women giving birth in hospitals. They lack buttons, so the staff sticks Band-Aids on their upper parts to cover women's chests and maintain a semblance of privacy. In the final moments of "Melody", Eniesa, previously identifying with her protagonist through lyrics and performing at the same lake, merges with her visually. It is the only full shot of her figure in the video and also the only time she faces the camera. She wears the same hospital shirt with Band-Aids as the mother and having her eyes shut she dives backward into the water. The same recycled shot from the opening concludes the video. Now the woman descending can be identified safely as the musician. Another way that costumes and props in both videos signify is on a temporal level. The clip for "Melody" is much like the film set in the present. However, based on the style of costumes and props, the narrative in "Hoří i voda" fuses different timelines and historical periods. The male and female characters of the escape sequence wear period costumes, resembling common attire from around 1900. The priest's canonical dress could be of any period. The officials of the third sequence wear suits, the uniform of modern bureaucracy and, rather conspicuously, the clerks in the corridor that the pregnant woman is being wheeled through, use dial phones, specifically models that were obsolete by the 1990s. But the woman herself wears the same kind of dress as do women in the first sequence. Thus the visuals reinforce the cyclical notion of time expressed in the lyrics. Structural violence against women is depicted as a timeless phenomenon, certainly not as a problem that died with our unenlightened ancestors.

Conclusion

Inspired by Lori Burns' analytical framework for music videos, I have tried to show how multimodal critical discourse analysis (MCDA) focusing on parameters of norms and values, storyworld and plot, space and time, subjectivity and address, and gesture and activity can be used to compare two contemporary music videos whose creators ventured far beyond the promotional roots of the medium in their exploration of broadly similar feminist themes. The comparative analysis illuminated various important analogies and differences in how Katarzia's "Hoří i voda" and Eniesa's "Melody" tackled social issues concerning female oppression, inequality, and the lack of sexual and reproductive rights. Made on a much tighter budget and with a skeletal crew, "Melody" emphasizes its single protagonist in intimate, closed, present settings and symbolically identifies her with the performer, corresponding to how the performer identifies with the character of "Melody" in her lyrics. The narrative structure of the video is highly simplified, relying on simple but potent visual gestures such as bathing in the nature. Meanwhile, "Hoří i voda" employs an ensemble cast to narrate a multilinear story of women being subjected to and actively opposing (or, rather successfully running from) patriarchal hegemony in various exterior and interior settings and timelines, using a wide array of shot sizes and dynamic editing. Katarzia doesn't perform in her video, she identifies with the song and story it tells as a member of the cast. The central conflict in "Melody" operates mainly on the internal, psychological level, while "Hoří i voda" focuses on physical action as an expression of the song's lyrical imagery. Promotional benefits of the music video for respective musicians are relegated into the background in favor of using its capacity to advocate for social change with powerful audiovisual means of expression. Both videos deconstruct what they frame as the dominant ideology and offer their own alternative discourse, whether it looks more utopian (in "Hoří i voda") or grounded ("Melody").

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A PARADIGMN SHIFT IN PROFIT-ORIENTED COMPANIES FROM PRODUCT VALUE TO SOCIAL VALUE; DRIVEN BY AGENDA 2030 AND ACCELERATED BY THE COVID-19 PANDEMIC

Bernhard Alexander Krah

Abstract
The adoption of the 2030 Agenda for Sustainable Development in 2015 inaugurated a paradigm shift. More and more states have developed measures to reach the 17 global Sustainable Development Goals (SDGs). Sustainable development in the sense of the 2030 Agenda requires a profound, long-term change in all areas. The pressure on companies to act is increasing, as verifiable sustainability is demanded from all sides now. Whereas the focus of companies used to lay on the product and the profit, nowadays it is much more on the sustainability of the product and makes companies face up to ecological and social responsibility. All companies, whether small or large, are participating in this change to varying degrees. In order to find out to how this change in thinking has already taken place, this paper investigated the extent to which companies are focusing on sustainable development. In the following paper, 30 Dax companies are analysed in terms of how much the topic of sustainability and thus terms such as Agenda 2030, SDG, ESG and others are taken up on the company website and thus the importance is highlighted in comparison to the product. For this purpose, it was examined how many mouse clicks were needed on the website to come across the previously mentioned terms and how many of these terms were listed on the website.

Key words:
Agenda 2030. DAX. Digitalisation. ESG. Fourth sector. Pandemic. Social benefit. Sustainability.

Introduction

In the year 2015[1] all members of the United Nations (UN) voted unanimously for the ratification of the Agenda 2030, the so-called:" Transformation of the world". The defined main goals are the 5P´s: People, Planet, Prosperity, Peace and Partnership[2]. These five main goals again have 17 sustainable sub goals (SDG – Sustainable Development Goals). Referring to this Agenda 2030, the Pope Benedict XVI said: "…the traditionally valid distinction between profit-based companies and non-profit organizations can no longer do full justice to reality or offer practical direction for the future. In recent decades, a broad intermediate area has emerged between the two types of enterprise… It is to be hoped that these new kinds of enterprise will succeed in finding a suitable juridical and fiscal structure in every country."[3] The agenda 2030 is following many aims to create a "better world" and these goals and sub-goals are noble and important for the future of our planet and the essential fundament of living together peacefully. Thus, some of the goals have a direct or indirect impact in the worldwide economy and industry. Others will lead countries and their governments to change or improve their politics, to meet the goals. In the end it will affect the people and the companies. The homo economicus[4] will change to a social homo oecologicus[5]. Generally, it remains to be seen and studied, if this is just a media hype, or if companies and their marketing really have to adjust the values and their communication. Should social and sustainable benefits then rate higher than profit-making?

[1] VEREINTE NATIONEN: *General Assembly*. 21 October 2015, 70. Tagung A/Res/70/1.
[2] TREMBLEY, D. et al: *Sustainable development goal interactions: An analysis based on the five pillars of the 2030 agenda.* In Sustainable Devlopment, 2020, Vol. 28, No. 6, p. 1584-1596.
[3] THE POPE BENEDICT XVI: *Caritas in veritate*. Encyclical of Pope Benedict XVI, 2009.
[4] Homo economicus is a human, who rationally pursues self-interest without regard for the welfare of other people; YAMAGISHI, T. et al: In search of Homo economicus. In *Psychological Science,* 2014, Vol. 25, No. 9, p. 1699-1711.
[5] The image of humanity that is necessary for a society that subscribes to the goal of sustainable development; HÖFLING, S., TRETTER, F.: *Homo Oecologicus*. München : Hanns Seidel Stiftung, 2012.

How important are the SDGs for companies listed in the German DAX30 index? This paper critically examines the current developments and forms a basis for compliant strategies to comply with Agenda 2030. An important side aspect will be the acceleration effect of this current Covid 19 pandemic, referring to the digitalisation and the potential of dematerialisation of products. Even former “real” services are mostly digitalised now, for example a virtual consultation of a doctor or the virtual installation of machineries at customers´ plants.

1 Background of the researched issue

The Agenda 2030 for a sustainable development of the world contains 17 Sustainable Development Goals (SDGs) and 169 targets, that show how comprehensive and ambitious this agenda is. The aim of the Agenda is to enable all people to life in dignity while preserving our natural resources - also for future generations. The Agenda 2030 underlines the shared responsibility of all actors - politics, business, science, and civil society. Moreover, it is universally valid - it concerns all states, developing and industrialised countries alike. It also important to take into account the global effects of national action, for example with regard to climate change, trade, sustainable consumption and sustainable production.[6] Companies are also being held accountable for acting more sustainably, paying more attention to human rights, improving their environmental footprint and ensuring equality. Thus, the trend is moving more and more towards philanthropy: people-friendly thinking and behaviour. This philanthropic action is mostly materialistic, for example through donations or the establishment of foundations. The image of philanthropy is characterised above all by the large-scale actions of very wealthy people. Nowadays, however, it is not enough to think in a people-friendly and equal way, but it has also to be considered that the ideas and implementations are also environmentally friendly and sustainable for our planet. Also, companies nowadays have to find a balance between profited oriented, quality and social values for example when it comes to looking for new employees. They have to find a way to choose both qualified people but still respecting equality and minority. Another remarkable point is, that during the last years it can be observed that a new buying behaviour is also developing among the population, people become more cautious for the environment and tend to buy sustainable products. This means that the product itself is no longer in the foreground, but also which ecological footprint the product itself and its production has. There is a greater awareness of the environment and the sustainability of products is becoming more and more important. Also, the Covid-19 pandemic has made many people aware that global care chain can no longer be taken for granted. Suddenly, production can stop due to company closures, supply chains can be interrupted, or delays can occur at any moment, either caused by a pandemic or a traffic jam in the Suez channel. So, the companies and even whole countries now try to get more independent an to produce or at least purchase as much possible locally to be more independent to be prepared for future crises. One example for this development is the biopharmaceutical company Curevac. The company works on developing a medical printer together with the electric car manufacturer Tesla to facilitate the logistics for Covid vaccinations, but also for other medicines. The printer should be easy to transport and to be set up quickly and then print special mRNA that triggers an immune response against the virus. But also, other mRNA medicines could be produced, for example for cancer therapy. This would mean that people would no longer have to rely on other suppliers and could produce their own medicines. But it will take a few more years before this really becomes reality. However, the first mRNA strands are to be printed in the summer

[6] BUNDESREGIERUNG: *Deutsche Nachhaltigkeitsstrategie.* Berlin : Bundesregierung, 2018.

(2021).[7] Besides the advantage of being more independent from other companies and getting medicines quickly, here again the environmental factor and sustainability naturally also play a major role, as medicines no longer have to be transported all around the world. This exactly is a point that is becoming increasingly important. Because sustainable companies are favoured both by the public in general and on the capital market with regard to financing. Based on this we should now focus on the importance of sustainable aspects in companies and the communication about them. For this purpose, following the 30 DAX companies have been compared with regard to their communication on sustainability on their websites. Therefore, it was searched for buzzwords. The used buzzwords were "2030" from Agenda 2030 or the trigger-year 2030, "SDG" as an abbreviation of Sustainable Development Goals, "Sustainability" and "ESG" (Environment, Social, Governance Criteria). To find out how much value the companies place on sustainability aspects, the respective websites have been checked. Firstly, how many of the buzzwords were on the website. The clicks it took from the start page to reach the given sustainability terms are gathered in the below table. Also, it was examined whether a sustainability report was available or not. The results have then been summarised in a table below with the following outcome:

Of the 30 Dax companies, buzzwords can be found on the website of 28 companies, that represents 92 percent of the companies. Of these, 20 companies have the word "2030" (71 %), 17 have the word "SDG" (61 %), all 28 have the word "Sustainability", and 15 have the word "ESG" (54 %) on their website. 21 of the 28 companies can present a sustainability report. That is 75 percent of them.

For the 28 companies using buzzwords, the words "2030" can be found 4 times, "SDG" 1 time, "Sustainability" 11 times and "ESG" 2 times on the website with just one click. With two clicks you will find the word "2030" 10 times, the term "SDG" 10 times, "Sustainability" also 10 times with 2 clicks and "ESG" 4 times. With a few more, with 3 clicks, you can find the word "2030" 5 times, "SDG" 4 times, "Sustainability" 6 times and "ESG" 7 times. Difficult to find with 4 clicks is "2030" 1 time, "SDG" 2 times, "sustainability" 1 time and "ESG" 2 times.

It is interesting to see that 65 percent of buzzwords can be found with one or two clicks on the company website. This is indicating the importance of these words and therefore the importance of these topics for companies. These are the topics that visitors to the website are interested in and want to learn more about. It is also interesting that 10 companies refer to all 4 buzzwords on their website and go into detail about them, which is a lot. 9 of the companies point to 3 of the words in connection with sustainability, 4 of the companies to 2 words and 5 of them only refer to one word. The importance of sustainability for companies is also shown by the fact that the German stock exchange has set up a new index for investors who want to invest in German shares and focus on companies that operate sustainably. Unlike the classic Dax, the Dax 50 ESG[8] not only takes into account the largest listed companies with the highest trading turnover, but also assesses the extent to which companies are concerned with environmental protection, social issues and good corporate governance. Of the 30 Dax companies, seven did not make it

[7] MENN, A.: Wie Curevac und Tesla Medikamente drucken wollen. In *WirtschaftsWoche*, 2021. [online]. [2021-03-05]. Available at: <https://www.wiwo.de/technologie/forschung/impfstoffe-wie-curevac-und-tesla-medikamente-drucken-wollen/26974970.html>.

[8] ZYDRA, M.: Ein Dax für die Nachhaltigkeit. In *Süddeutsche Zeitung*, 2020. [online]. [2021-03-04]. Available at: <https://www.sueddeutsche.de/wirtschaft/klimawandel-ein-dax-fuer-die-nachhaltigkeit-1.4830815>.

into the Dax 50 ESG. For example, companies that still rely on coal or nuclear power, do business with the military or are involved in environmental scandals.[9]

Table 1: List of the 30 Dax companies and frequency of clicks needed on the website to access specific sustainability terms.

Company	Buzz-Words	„2030“-no. clicks	„SDG“-no. clicks	„Sustainability“ -no. Clicks	„ESG“-no. clicks	„Sustainability report“
Adidas[10]	yes	3		1	3	yes
Allianz[11]	yes	1		3	4	no
BASF[12]	yes	2	2	1	3	yes
Bayer[13]	yes	1	2	1	2	yes
Beiersdorf[14]	yes	2	2	1	3	yes
BMW[15]	yes	2		2		no
Continental[16]	yes	2	2	2	2	yes
Covestro[17]	yes		2	2		
Daimler[18]	Yes	3	1	1	3	yes
Delivery Hero[19]	Yes			1		
Deutsche Bank[20]	Yes	2	2	1	1	
Deutsche Börse[21]	Yes	2	2	1	2	yes
Deutsche Post[22]	yes			4		
Deutsche Telekom[23]	Yes	3	2	2	2	yes
Deutsche Wohnen[24]	Yes			1		yes
EON[25]	No					
Fresenius[26]	Yes	2	2	2		yes
Fresenius Medical Care[27]	Yes	2	3	2		yes
HeidelbergCement[28]	Yes			3		
Henkel vz.[29]	Yes	1	3	1		yes
Infineon[30]	Yes	2		2		yes

[9] KANNING, T., MANNWEILER, A.: Ein Dax für das gute Gewissen. In F*rankfurter Allgemeine Zeitung*, 2020. [online]. [2021-03-05]. Available at: <https://www.faz.net/aktuell/finanzen/finanzmarkt/welche-unternehmen-im-leitindex-der-deutschen-boerse-sind-16663812.html>.
[10] *Adidas Group*. [online]. [2021-03-19]. Available at: <https://www.adidas-group.com/de/>.
[11] *Allianz*. [online]. [2021-03-19]. Available at: <https://www.allianz.de/>.
[12] *BASF*. [online]. [2021-03-19]. Available at: <https://www.basf.com/global/de/topics/emobility.html>.
[13] *Bayer*. [online]. [2021-03-19]. Available at: <https://www.bayer.com/de/>.
[14] *Beiersdorf*. [online]. [2021-03-19]. Available at: <https://www.beiersdorf.de/>.
[15] *BMW*. [online]. [2021-03-19]. Available at: <https://www.bmw.de/de/home.html>.
[16] *Continental*. [online]. [2021-03-19]. Available at: <https://www.continental.com/de>.
[17] *Covestro*. [online]. [2021-03-19]. Available at: <https://www.covestro.com/de>.
[18] *Daimler*. [online]. [2021-03-19]. Available at: <https://www.daimler.com/de/>.
[19] *Delivery Hero*. [online]. [2021-03-19]. Available at: <https://www.deliveryhero.com/>.
[20] *Deutsche Bank*. [online]. [2021-03-19]. Available at: <https://www.deutsche-bank.de/pk.html>.
[21] *Deutsche Börse*. [online]. [2021-03-19]. Available at: <https://deutsche-boerse.com/dbg-de/>.
[22] *Deutsche Post*. [online]. [2021-03-19]. Available at: <https://www.deutschepost.de/de.html>.
[23] Deutsche *Telekom*. [online]. [2021-03-19]. Available at: <https://www.telekom.de>.
[24] *Deutsche Wohnen*. [online]. [2021-03-19]. Available at: <https://www.deutsche-wohnen.com/>.
[25] *Eon*. [online]. [2021-03-19]. Available at: <https://www.eon.de/de/gk.html>.
[26] *Fresenius*. [online] [2021-03-19]. Available at: <https://www.fresenius.de/index>.
[27] *Fresenius medical care*. [online]. [2021-03-19]. Available at: <https://www.freseniusmedicalcare.com/de/startseite/>.
[28] *HeidelbergCement*. [online]. [2021-03-19]. Available at: <https://www.heidelbergcement.de/de>.
[29] *Henkel*. [online]. [2021-03-19]. Available at: <https://www.henkel.de/>.
[30] *Infineon*. [online]. [2021-03-19]. Available at: <https://www.infineon.com/cms/de/>.

Linde[31]	No					
Merck[32]	Yes	2	2	2		yes
MTU Aero Engines[33]	Yes	4	4	3		yes
Münchener Rückversicher-ungsgesellschaft[34]	Yes			3	3	yes
RWE[35]	Yes	1	4	1	1	yes
SAP[36]	Yes	3		3	4	yes
Siemens[37]	Yes	3	3	3	3	yes
Volkswagen[38]	Yes			2		yes
Vonovia[39]	Yes		3	2	3	yes

Source: Own processing.

A company's website is a big part of marketing and serves as external presentation of the company. There is a clear trend that the public benefit is increasingly more in front of the self-interest. As a result in the marketing approaches, companies structures and the product values it could be determined that the aspect of product values has reduced importance compared to the aspect of social benefits. Also a new rating system is established to rate companies in a „GIIRS" (Global Impact Investing System)[40] to extend the existing economical rating system. GIIRS is a comprehensive and transparent system to rate the social and environmental impact of companies and funds from industrialised and emerging countries. To receive a GIIRS rating, a fund must have deployed at least 25% of their committed capital and have 75% of that committed capital go through the GIIRS rating process. The past century has created unprecedented prosperity and improved the quality of life for much of humanity. Despite this progress, today we face the greatest, most urgent and complex economic, social and environmental challenges in history. Many of these challenges are the consequences of outdated and unsustainable economic systems that have become the global norm. The economies of most countries are made up of three sectors: the public sector (also known as government), the private sector (also known as business) and the non-profit sector (also known as civil society). But now a fourth sector of the economy is emerging, combining market-based approaches of the private sector with the social and environmental goals of the public and non-profit sectors to solve pressing problems.

In the future it seems that there will be four different types of companies:

- The for-profit-companies.
- The non-profit-companies.
- The public sector.
- And innovatively: companies, who serve to benefit society and at the same time earning money.

[31] *Linde Gas*. [online]. [2021-03-19]. Available at: <https://www.linde-gas.de/de/index.html>.
[32] *Merck Group*. [online]. [2021-03-19]. Available at: <https://www.merckgroup.com/de>.
[33] *MTU Aero Engines*. [online]. [2021-03-19]. Available at: <https://www.mtu.de/de/>.
[34] *Münchener Rückversicherungsgesellschaft*. [online]. [2021-03-19]. Available at: <https://www.munichre.com/de.html>.
[35] *RWE*. [online]. [2021-03-19]. Available at: <https://www.group.rwe/>.
[36] *SAP*. [online]. [2021-03-19]. Available at: <https://www.sap.com/germany/index.html>.
[37] *Siemens*. [online]. [2021-03-19]. Available at: <https://new.siemens.com/de/de.html>.
[38] *Volkswagen*. [online]. [2021-03-19]. Available at: <https://www.volkswagen.de/de.html>.
[39] *Vonovia*. [online]. [2021-03-19]. Available at: <https://www.vonovia.de/de-de>.
[40] The Global Impact Investing Rating System (GIIRS) uses a common set of indicators to measure the social performance of funds and companies that intend to create impact; JACKSON, E. T.: Interrogating the theory of change: evaluating impact investing where it matters most. In *Journal of Sustainable Finance & Investment*, 2013, Vol. 3, No. 2, p. 95-110.

The new form of company in the future will be the one that makes profits but still adapts and acts according to the goals and desires of society. Wilburn and Wilburn (2014) in their publication "The double bottom line: Profit and social benefit", they speak of a shift in business focus, that companies can not only be charitable, but also profitable in the process. They also have this audited annually by external experts. The new business model stands for companies that combine a social mission with a corporate mindset and do not compromise on either front.[41]

On long term, companies will have to adjust themselves and their products in order to meet the todays social trends and challenges, according to the principle "survival of the fittest[42]" . Thus, new markets will occur and with them new measurements, for example for bonus payments for managers to be measured on implemented social and environmental aspects. The Deutsche Bank for example has published annual growth targets for the areas of environment, social issues and good corporate management (ESG) and plans from 2021 on to link the payments of the management with it. With this action, the Deutsche Bank, as an atypical company, wants to be a role model for sustainability in the financial sector and thus contribute to an ecological- and socialwise improved economy.[43] In order to make globalisation more social and ecological, a global compact was officially offered by UN Secretary-General Kofi Annan to all interested corporate leaders in 1999. This is a worldwide pact concluded between companies and the UN. In doing so, the company agrees to comply with certain minimum social and ecological standards in the future. These principles are summarised in ten principles. By mid-2018, over 13,000 participants worldwide had already committed to this, 10,000 of them companies.[44]

Conclusion

"Sustainability" is probably one of the most important buzzwords of the 21st century. It is impossible to imagine today's economy, science and media without it. However, awareness of this has long since ceased to be relevant for private consumers alone. Since companies have a decisive influence on the consumption behaviour of the population, they have a direct impact on ever-increasing problems such as resource scarcity, drinking water shortages, environmental pollution, poverty and global warming. Consequently, they have a duty to become aware of their responsibility towards the environment and society. Therefore, companies are taking their impact on the environment more and more seriously and the importance of a corporate sustainability concept as part of the company culture is becoming increasingly important. Many large German corporations have already expanded their communication in the areas of Agenda 2030, sustainability and ESG and even put these corporate presences in the foreground on their websites. But it is not only the large companies that should focus on a good sustainability strategy; small and medium-sized enterprises (SMEs) in particular should also do so. Because especially in these companies, the measures for ecological, economic and social sustainability can usually be implemented easily and cost-effectively. Due to their small size and the possibility to act flexibly and innovatively, SMEs even have particularly good prerequisites for comprehensively fulfilling their responsibility. By now, probably even the smallest companies

[41] WILBURN, K., WILBURN, R.: The double bottom line: Profit and social benefit. In *Business Horizons*, 2014, Vol. 57, No. 1, p. 11-20.

[42] CLAEYS, G.: The "survival of the fittest" and the Origins of Social Darwinism. In *Journal of the history of Ideas*, 2000, Vol. 61, No. 2, p. 223-240.

[43] DEUTSCHE BANK: *Deutsche Bank will Vergütung an Nachhaltigkeitskriterien knüpfen*. [online]. [2021-03-05]. Available at: <https://www.db.com/news/detail/20201207-deutsche-bank-plans-to-link-compensation-to-sustainability-criteria?language_id=3>.

[44] KELL, G.: The Global Compact Selected Experiences and Reflections. In *Journal of Business Ethics*, 2005, Vol. 59, No. 1/2, p. 69-79.

will have realized that sustainability, environmental protection and equality are becoming more and more important and that no one can avoid addressing these issues. The Covid-19 pandemic has increased the development of digitalisation and modernisation in many companies, since they were suddenly forced to deal with it. Since travelling around the world for customer contact, maintenance of machines or contract signing wasn't possible any longer, there had to be a change in thinking. Suddenly video meetings, remote maintenance and the virtual installations of machines through virtual assistance have been possible, which seemed impossible before the pandemic. In some companies, this strategy has been working so well, that travelling to distant countries might not even be necessary anymore after the pandemic, which also benefits the environment. But it is not only for companies that the fulfilment of ESG criteria is becoming increasingly important; capital market players are paying more and more attention to them. Sustainability is becoming a decisive criterion when it comes to financing. Recently, a disclosure regulation has been in force within the EU, which focuses on sustainable aspects of financial products and more transparency for investors. This regulation specifies how ESG risks and opportunities are to be integrated into the respective processes as part of the obligation to act in the best interests of customers. Experts believe that the next 10 - 20 years will be crucial for limiting the climate change. Due to the increasing environmental threats, it can be assumed that governments will thus intensify their ESG policies soon. However, ESG factors also affect the customer and investor behaviour. The example of prohibiting single-use plastic shows how increasing awareness can have a significant impact on consumer behaviour. As of today, we can still experience many developments and changes until the long-term goal or interim goal of Agenda 2030 is reached - until then, we should adapt and somehow survive.

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RADIO PODCASTS – NEW COMMUNICATION TOOL

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Abstract
The study is concerned with a new communication format, that is currently used more and more, in Slovakia. Podcasts are starting to be a regular part of broadcasting as well as communication of Slovak media. In this study, we have focused specifically on radios, narrowing our interest to private radios only. We used audience surveys to decide which radios to examine. We tried to address the radios, in Slovakia, with the highest number of listeners. In selected radio stations, we addressed people responsible for the development of new media and thus podcasts. In the form of semi-structured interviews, we found out how and for what purposes they use podcasts on their radio, how and when they started to produce podcasts and what is their strategy for producing or deploying podcasts in the future. We were also interested in the content structure of the podcasts, as well as the extent to which it corresponded to the broadcasting structure of the radio. The aim of this study is to point out the strategies used in creating podcasts on the most listened radio stations in Slovakia.We analyzed the obtained data, using methods such as comparison, generalization, induction, or deduction.

Key words:
Broadcasting. New media. On-demand service. Online environment. Podcast. Radio. Strategy.

Introduction

Podcasts, like sound recordings, are essentially based on radio broadcasts. They use all the benefits of radio production, which have been appealing to listeners for decades. Unlike television or video recordings, podcasts rely primarily on providing the ability to do several activities at once, in addition to listening to them. The podcast has taken this basic benefit of radio production even further. Its listeners do not have to listen to it in real-time, i.e during the live broadcast, but they can download it to the online environment and listen to it anytime and anywhere. This is also stated in one of the many definitions of podcasts. As early as 2006, Deborah Potter described podcasts as *"digital files you can download from the Internet and listen to whenever and wherever you want."*[1] Gradually, Slovak radios have also started to recognize this benefit. They understood that the rapidly changing and ever-accelerating lifestyle of people would require new, modern solutions. First, they started posting their sessions on their websites. The intention was to make the sessions available to those listeners who did not have the time to listen to them live. But even this solution did not meet the changing demands of the current times. People needed to have recordings or shows available in a way that they could listen to them anytime, anywhere. That's why radios have started to transform their shows into podcasts. Decisions about the form of podcast production were not easy. They were often preceded by long discussions, and many radio stations experimented with content, podcast processing, and their online placement. They also discussed what can actually be considered to be a podcast - whether they are shows processed to the podcast format and placed in an online environment or only those recordings that were not primarily produced for radio broadcasting, but specifically recorded only as podcasts. It is therefore interesting to look at how radios currently work with podcasts, what they use them for, but also how podcasts started on the radio, what are they like currently - that is, how radios approach them at the moment, and what is their strategy for the development into the future. Our ambition was to address the three most listened to private radio stations in Slovakia. In our selection, we relied on the official survey

[1] POTTER, D. L.: *IPod, you pod, we all pod: eager to lure news consumers, media outlets are experimenting with news-on-demand podcasts. They're fun, fresh--and often unpolished. SemanticScholar.* [online]. [2021-10-26]. Available at: <https://www.semanticscholar.org/paper/iPod%2C-you-pod%2C-we-all-pod%3A-eager-to-lure-news-media-Potter/7465ac4537dfc82521a1d4e0a2c427c3279c9418>.

of the Median SK agency, which has been conducting the Radioprojekt continental survey since 2009. The survey, which we relied on, was conducted on a sample of 3,137 respondents aged 14 to 79 years in the period of June-September 2021. Based on this survey, the most listened to private radio in Slovakia are- Radio Expres, which has an audience of up to 34% of the population, followed by Fun radio - 22.7%, radio Vlna has a listening rate of 17.8%, Radio Europe 2 has a listening rate of 16.2% and Radio Jemné has 14.8% of listeners.[2] However, at the time of our study, there were significant changes in the radio media market. Radio Jemné and Europe 2 have changed owners. They were bought by the media company Bauer Media Audio, which also owns radio Expres.[3] Similarly, there was a change of ownership in the case of Radio Vlna, which was passed under the Fun media group, which also owns Fun Radio.[4] The new owners were not willing to comment on the topic of podcasts at the time of the study, as the strategy of the new communication channels is expected to also change in the near future. Therefore, for the purposes of our study, we added to the two most listened to radios - Radio Expres and Fun Radio - Radio Lumen. It belongs to the Regiomedia network, which has a total audience of 8.4 percent of the population.[5] In the monitored radio stations - Rádio Expres, Fun rádio, and Rádio Lumen - we addressed competent people responsible for new media and communication channels. Specifically, there were three respondents. As we have already mentioned in their selection, as well as in the selection of the radio, we based on current listening. We narrowed the originally larger set due to the current market situation, but the primary factor that decided on the choice of radios remained the condition of nationwide broadcasting. We obtained information in the method of semi-structured interviews, which we then analyzed and processed using methods such as comparison, deduction, induction, generalization.

1 Dual system of broadcasting

Public radio (RTVS), as well as private radio, are aware of the importance of working with podcasts. And although they are different types of radios, they all try to use the potential of this modern format to gain and retain their audience. The basis for the emergence of a dual system of radio broadcasting in Slovakia goes deep into the modern history of the then common state of Czechs and Slovaks, specifically to the period of the Velvet revolution. When the leading role of the Communist Party was removed after November 1989 and the system of state control of the mass media disintegrated, the new government faced the task of transforming the mass media system. This transformation was to go in two directions. On one hand, it was essential to create the necessary conditions to guarantee freedom of expression and the right to information, abolish the state monopoly in the media and create legal conditions for the gradual building of a dual media system, in which private media also operated under the statutory media.[6] The debate on the new democratic media environment began in 1990. The need to transform the state's electronic media into statutory media was clear. It was more difficult to decide on the opening of space for private media and the creation of a dual system in Slovakia ... In the field

[2] *Základné výsledky, IV. až IX. Etapa 2021*. [online]. [2021-11-04]. Available at: <https://www.radia.sk/_subory/median_prieskum_radia/radioprojekt/2021/10/ts.pdf>.

[3] *Majiteľ rádia Expres kúpil dve konkurenčné rádiá*. [online]. [2021-11-04]. Available at: <https://www.omediach.com/radio/21315-majitel-radia-expres-kupil-dve-konkurencne-radia>.

[4] *Majiteľ Fun rádia získal Rádio Vlna.* [online]. [2021-11-04]. Available at: <https://www.omediach.com/radio/21377-majitel-fun-radia-ziskal-radio-vlna>.

[5] *Základné výsledky, IV. až IX. Etapa 2021*. [online]. [2021-11-04]. Available at: <https://www.radia.sk/_subory/median_prieskum_radia/radioprojekt/2021/10/ts.pdf>.

[6] BREČKA, S.: Médiá a politika. In BREČKA, S. a kol.: *Médiá na Slovensku v nových spoločenských podmienkach.* Bratislava : Novinársky študentský ústav, 1993, p. 9-10.

of radio broadcasting, the decision was easier due to its lower financial demands (and less political influence), moreover, Fun rádio have already been broadcasted, thus somehow prejudging the legalization of private radio broadcasting.[7] The Federal Assembly passed the Act on the Operation of Radio and Television Broadcasting on October 30, 1991, which marked the beginning of a dual media environment, then still in Czechoslovakia. This law no. 468/1991 Coll. adjusted the conditions for the creation of a dual system, defined the basic tasks, obligations, and rights of broadcasters by law and broadcasters based on a license. At the same time, it determined the procedure and rules for the granting of licenses, their withdrawal, and the application of sanction measures for non-compliance with the provisions of the law and licensing conditions.[8] The radio scene has changed over the years. Several radios were established and eventually disappeared, lost their license, some radios were transformed from existing radios. Already at the end of 2000, there were 26 radio stations in Slovakia, which offered a wide range of music programs, regional and local news.[9] The oldest private radio in Slovakia is Fun radio. It began broadcasting on June 10, 1990, thus prejudging the emergence of private radio broadcasting. Initially, it was just a local Bratislava radio station, founded by a group of "revolutionary students." Nowadays, we can talk about a radio that belongs to the EHR (European Hit Radio)[10] format. Gradually, other private radios were established in Slovakia, such as Rádio Koliba, later Rádio Okey, Rádio Twist, as well as regional radios, such as Rádio Východ, Rádio Nitra, later Hviezda FM, Rádio Rebeca, Rádio Kiks, Rádio Forte or Rádio Lumen, commercial station with an evangelistic mission. In 1992, Rádio Mária was established as a commercial radio with an evangelistic character. It began broadcasting in April 1993. In 1994, it changed to Radio Lumen.[11] Formatting in the Slovak commercial space was first brought by Rádio Expres, which started broadcasting on December 31, 1999. In the beginning, it had the character of a traffic radio with a significant dominance of motoring programs. In 2001, the station was reformed and given the form we know today. In terms of radio formats, it can be classified as a so-called AC (Adult Contemporary)[12] music format. At present, there are private radio stations Rádio Expres, Fun rádio, Radio Vlna, Radio Európa 2, Radio Jemné. Other radios are part of radio networks - Radio Services and Regiomedia. Today there are 51 radio stations that operate on air, along with the ones on the Internet there are 108 radio stations.[13] The study focuses on private radio stations. Based on the current listening survey, we focused on the radios that currently appeal to the most listeners. Due to the already mentioned changes on the radio market, we added radio Lumen to the two most listened to radios. In these radios, we addressed competent people who work on the development of new media, including podcasts. We addressed them in the form of semi-structured interviews. We were interested in when and why they started producing podcasts on their radio, what is the current situation of their production - in terms of content and staffing. The topic was also the vision or a strategy of deploying podcasts in the future, not only on their radio, but also within Slovakia.

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[7] MISTRÍKOVÁ, Z.: *Vývoj súkromného rozhlasového a televízneho vysielania na Slovensku.* Bratislava : Asociácia nezávislých rozhlasových a televíznych staníc Slovenska, 2000, p. 20.

[8] Ibidem, p. 21.

[9] BREČKA, S.: *Médiá v Slovenskej republike*. Trnava : Univerzita sv. Cyrila a Metoda v Trnave, 2002, p. 88.

[10] CENKOVÁ, R.: *Formátovanie slovenských komerčných rádií.* [online]. [2021-11-04]. Available at: <https://www.pulib.sk/web/kniznica/elpub/dokument/Bocak1/subor/2.pdf>.

[11] BREČKA, S.: *Médiá v Slovenskej republike.* Trnava : Univerzita sv. Cyrila a Metoda v Trnave, 2002, p. 91-93.

[12] CENKOVA, R.: *Formátovanie slovenských komerčných rádií.* [online]. [2021-11-04]. Available at: <https://www.pulib.sk/web/kniznica/elpub/dokument/Bocak1/subor/2.pdf>.

[13] *Prehľad slovenských rádií.* [online]. [2021-11-04]. Available at: <https://www.radia.sk/radia>.

2 Podcasts on Radio Expres

Radio Expres has been the most listened to radio in Slovakia for many years. The owner of this private radio is Bauer media Slovakia. The format is Adult Contemporary radio, the target group is people aged between 25 to 45. The program structure of the radio harmonizes with the headline of the radio "We only play hits". It is a combination of music hits, news, traffic information, competitions. Radio Expres shows also include Hemendex (morning show every working day from 6:00 to 9:00), Martin Nikodým Show (Millionaire who loves Slovakia, our most famous beekeeper and Saturday afternoon with a popular moderator and with the biggest hits of the '80s, '90s, and 2000s, every Saturday from 14:00 to 18:00), Braňo Závodský live (clear questions - direct answers, Braňo Závodský and his guests every working day 10 minutes after the 12th live on current topics), Club 90 (you will find yourself on the dance floor in the disco club of the 90s, every working Friday from 20:00 to 21:00).[14] Radio Expres started with podcasts a little before this trend spread to Slovakia and began to appear on a larger scale. As Dušana Dingová says, it was in 2015 that they founded a youtube channel for Braňo Závodský and his show Braňo Závodský live. *"We recorded the whole show, it lasted about 10-15 minutes. So basically since 2015, we have a recording of every single show on Youtube, and the year after that we started to put an audio recording of this show on Soundcloud, which is a hosting service providing a podcast publication. But since the podcast wasn't such a topic, at least not in Slovakia, we didn't address it, we just had it in our archive, where people could hear it only as audio if the YouTube format didn't suit them".*[15] Dušana Dingová has been working for Radio Expres for about 7 years as a "head of digital." She is therefore the director of the digital department, which also includes the podcasts section. Braňo Závodský's show was chosen based on its high audience and demand from listeners. Every day, they made an article for the show on the web, which included both audio and video. *"And then, when the podcast wave came in 2018-2019, we technically made sure that our audio went from Soundcloud to all podcast applications"*[16]. Gradually we started to add different shows, for example, Slovaks living abroad (stories of successful Slovaks living abroad) and others. "We chose the highlights, the most listened to shows. At first, they were all as one podcast, but then, when the podcast format came along, we understood that each show should be separate. We understood that there was a new medium, a new way of distributing audio, and so each show created had its separate podcast with its own name.[17] Subsequently, as Dušana Dingová continues, some radio moderators were also interested in making podcasts that were not primarily made for broadcasting. *"But these were more or less experiments at the beginning, then we kept going with the most successful shows."*[18] A more significant shift towards their own author's podcasts occurred much later. *"The podcast market started to rapidly develop in Slovakia, we started to monitor markets abroad, what works, what doesn't work, and based on that, we started to focus on having purely podcast production outside of the radio content"*[19]. At the beginning of 2021, they started to produce the crime recordings podcast - something between a podcast and a radio play, it's a true-crime format. *"We have truly invested in this format, it is very production-intensive, it has a script, a professional narrator actor, there are sound effects, interviews with experts, psychologists, etc. This podcast is extremely successful, each episode has an average*

[14] *Rádio Expres*. [online]. [2021-11-06]. Available at: <https://www.expres.sk/program-vysielania/>.
[15] Interview, Dušana Dingová, 6.9.2021.
[16] Interview, Dušana Dingová, 6.9.2021.
[17] Interview, Dušana Dingová, 6.9.2021.
[18] Interview, Dušana Dingová, 6.9.2021.
[19] Interview, Dušana Dingová, 6.9.2021.

of 30-40 thousand hearings".[20] In an ideal world, according to Dušana Dingová, radio would continue to produce more demanding podcasts, but it faces problems of capacity and bad financial returns. *"The problem is that podcasts are still unable to make money and it will probably take a long time in our market for this format to become so interesting for clients that they will want to pay for advertising within a podcast"*[21]. That's why Radio Expres, when it comes to original podcasts, wants to continue the trend of external collaboration in the future. *"We want to continue to focus on working with celebrities, influencers who would like to create podcasts. We can give them recording capacity and a media space, they create a podcast, which we then help them to promote"*[22], says Dušana Dingová. For example, they work with a former colleague Mišo Sabo in his podcast Sabo (Michal Sabo discusses all the shades of social responsibility with the guests, talks about how to do things differently, together, better), as a result of a collaboration with two bloggers is the podcast Fashion Session (the first Slovak podcast, thanks to which you will get to know the story of your clothes better, presented by Zuzana Dutková and Natálie Pažická), the podcast Sober Mama is produced by a colleague from the radio who went on maternity leave (these are thoughts of a new mother on maternity leave, a mother who perceives motherhood a little differently). Radio Expres has also podcasts in its portfolio that are made by radio editors or moderators, but there are fewer of them - for example, the Lemon Talks podcast (a podcast about everyday life, easy and difficult situations, family, love, children, and partners, but also about their own feelings) or Interesting Slovakia (presentation of well-known, lesser-known or even completely unknown places and attractions in Slovakia). When it comes to production, one manager is responsible for all the podcasts on the radio. She manages internal people, motivates them to produce podcasts- if the podcast and its topic have the potential to be successful. At the same time, she is looking for possible external cooperation, there is an effort to reach out to better-known people who also have their base on social networks and can promote the podcast. About a specific strategy, whether current or one for the future, Dušana Dingová says that podcasts are still under development. *"It's very difficult to talk about a strategy at the moment, everything is still being created and we are adapting accordingly. It's still very individual, in the case of podcasts made by our people, as well as in the case of external collaboration. So far, we have only used a more thoughtful strategy in the production of the Criminal Records podcasts. That will certainly be the way for the future, but we still have a long way to go".*[23]

3 Podcasts on Fun radio

Fun radio is the second most-listened-to commercial radio. The owner is Fun media group. The station is aimed at listeners aged 20-45. The program structure is a mix of music hits - foreign and domestic, news, traffic news, competitions. The headline of the radio is the Hits you love. Fun radio shows also include: Morning show with Junior and Marcel (It's not important to get up, but to wake up. Every working morning from 6:00 to 10:00, get up with the funniest morning on the Slovak airwaves), Hits you love with Didiana (music block during the working day, from 10:00 to 14:00), Sajfa show (entertaining afternoon from Monday to Thursday from 14:00 to 18:00), Adela and Sajfa (legendary radio host couple and interesting guests, entertaining interviews on topics of the past days only as Adela and Sajfa can do them, every Friday from 17:00 to 18:00).[24] Podcasts at Fun Radio are overseen by Katarína Vargová, who

[20] Interview, Dušana Dingová, 6.9.2021.
[21] Interview, Dušana Dingová, 6.9.2021.
[22] Interview, Dušana Dingová, 6.9.2021.
[23] Interview, Dušana Dingová, 6.9.2021.
[24] *Fun radio*. [online]. [2021-11-06]. Available at: <https://www.funradio.sk/clanok/10-vysielanie/>.

is the editor-in-chief at Fun Radio, she is in charge of the daily program, works with the moderators, and is also responsible for the dramaturgy of the morning show. As she says herself, she is a big fan of podcasts, she listens to them herself. She manages podcasts on Fun Radio to a large extent on her own. It could be said that the forerunners of podcasts on Fun Radio were articles on the web connected with an MP3 recording. *"It was natural that we always put the best things from the radio on a website, such as some interviews or the Zdeno from Poprad section (listeners send familiar songs and say what they hear in them). So listeners could read the article on the web and listen to the recording. But podcasts seemed easier to me over time, you don't have to click on a page, an article, or a recording. The podcast seemed practical to me in the sense that you have them all in one place, you can just click through"*[25]. Fun radio started with podcasts three years ago. According to Katarína Vargová, the start was quite difficult. *"We also wanted to make music podcasts, in other words- to use music in podcasts, therefore we needed to resolve the copyright. We've been dealing with SOZa for quite some time. At that time, they had not yet evaluated it, they were discussing what music downloads are, what playback is, what the fees are, and so on. Then we also had our own technical problems, we moved to our own servers, but in the end, everything was resolved.".*[26] The first podcast was broadcast by Fun radio in December 2018. It was a talk show with Šarkan, which was specially adapted to the podcast form. *"Specifically, the individual entries were edited, we didn't want to put songs there, and the interview was cut into a coherent text, which was about 35-40 minutes*"[27]. After the first podcast, Fun Radio began processing other interesting shows into podcasts. These were not radio shows that were broadcasted on a regular basis. According to Katarína Vargová, it was for example an interesting interview from the morning show, they also included special editions of a show about Slovak music, Fun in Slovakia, for example about the singer from Hex, Ďuďo on the occasion of his death, or an interview with Miroslav Žbirka about his discography. *"We didn't want to put there every single thing from the broadcast. It's a bit of a problem with the radio - not actually sending people away from the radio to go and listen to something else. You want them to stay in your ecosystem, so with the podcasts, it's a bit of schizophrenia"*[28]. Podcasts started to be fully produced in 2020 when radio celebrated its 30th anniversary. *"At the time, we did the Fun Radio 30 project, moderated by Adela and Sajfa, and we invited various well-known and lesser-known people who had some type of a connection with the radio. That was the moment we started doing podcasts regularly. So we started practically with this show because until then it was irregular".*[29] After working with Adela and Sajfa on the occasion of the 30th anniversary of the radio, the radio decided to continue working with these moderators, also based on good feedback from the listeners. According to Katarína Vargová, their show was created again, which is broadcasted on the radio as Talkshow of Adela and Sajfa and is also processed as a podcast. In addition, a selection of the best of the afternoon with Sajfa is processed as a podcast, and the best of the morning show with Junior and Marcel is also published as a podcast. In addition, in the future podcasts will be prepared, ad hoc, in case something is interesting, exceptional in the broadcast that would be appropriate to include in the podcast format. However, Fun radio does not preclude external cooperation. This is also proved by the special daily audio journal Cestovanie po Slovensku. *"I was approached by young people who wanted to cross the path of the SNP heroes, the latest tourist route in Slovakia, that they would be willing to record their experiences. So I suggested to them not to do it in the form of phone calls but in the form of recording audio diaries. But since those audio diaries are long for the radio format, we selected the best of them for broadcasting and have them in full length*

[25] Interview, Katarína Vargová, 25.8.2021.
[26] Interview, Katarína Vargová, 25.8.2021.
[27] Interview, Katarína Vargová, 25.8.2021.
[28] Interview, Katarína Vargová, 25.8.2021.
[29] Interview, Katarína Vargová, 25.8.2021.

in the podcast format. "[30] According to Katarína Vargová, they have not yet systematically considered podcast production as such on Fun Radio. *"Although we have already thought about it with colleagues, we also have some good ideas, we did not get to the implementation. The problem is not with the initial enthusiasm, but rather with it being done for the long run and in good quality. At present, our radio concentrates all people's energy on broadcasting, podcasts are more of a supplement so far."*[31] In terms of personnel, podcasts are processed by people from the radio. The broadcaster also processes podcasts. *"This means that if we started working on a more comprehensive podcast solution, then there is the issue of human resources"*[32]. And that is also an economic issue. *"Although podcasts are facing a big boom in Slovakia, compared to the listening numbers we have on the radio, the listening to podcasts is negligible. It is somewhere at the level of regional broadcasting, which is still very difficult to trade. If you are a commercial radio station that depends only on the sale of advertising, then simply the things you do must be profitable for you and the investment must return."*[33]

4 Podcasts on radio Lumen

Radio Lumen broadcasts its program for a different target group. It is a private radio station with an evangelistic character. The program focuses on adults, the elderly, the sick, the lonely, families with more children and children. The program mostly prevails by programs in the public interest, religion, and programs that are spiritually attuned. It has a smaller share of music compared to other commercial radios. The radio is owned by the Catholic Church in Slovakia. The program structure includes news, moderated programs, children's programs, songs on request, music programs, prayer. Radio Lumen shows include Študentské šapitó (a show with young people for young people about what bothers them and pleases them. Ten minutes of practical information for students, music, but especially live interviews on engaging topics, Monday 20 : 00 - 21:30), Spiritual Horizon (contact session in which Catholic theologians and Christian philosophers provide information and scientific knowledge from theological and philosophical disciplines, Tuesday 20:00 -21: 30), History and us (man has always been and is a part of History, in order to make good decitions he must understand his past, Thursday 20: 00-21: 30), Karmel (interviews with important personalities, inspiring ideas from scientific conferences, projects to support spiritual and cultural heritage, Sunday 20:00 -21: 30).[34] Podcasts in radio Lumer are managed by Ivo Novák, who has been working there since 2014. He is responsible for the PR activities of the radio which include new media such as - Facebook, Instagram, the website, and therefore also podcasts. His position is cumulative, he also works as a live broadcast editor. The radio, therefore, does not have a specialized position only for new media. Radio Lumen, like Fun Radio, launched podcast-like services on its website. *"In 2013, we mirrored our archive on our then-new website. This brought new possibilities and a rich archive, our listeners reached for it. Of course, this has not been done in a way as it is now. When a person clicked on a selected session, it generated a hyperlink and he had to put it in his podcast application."*[35] They did not start working more systematically with podcasts until February 2020. *"That's when we did the first podcast in a true sense of the word. It was on the occasion of the parliamentary elections; we had a debate. Part of it was also broadcasted, the rest was as a podcast, which we also linked with applications such as Spotify,*

[30] Interview, Katarína Vargová, 25.8.2021.
[31] Interview, Katarína Vargová, 25.8.2021.
[32] Interview, Katarína Vargová, 25.8.2021.
[33] Interview, Katarína Vargová, 25.8.2021.
[34] *Rádio Lumen*. [online]. [2021-11-06]. Available at: <https://www.lumen.sk/aktualny-program.html>.
[35] Interview, Ivo Novák, 23.9.2021.

Google podcast, Apple podcast. Podcasts on Radio Lumen operate on these platforms to this day. "[36] According to Ivo Novák, the reason for the decision to start making podcasts was the listener's demand. The audience base grew younger, and people in their thirties or forties were used to podcasts from other media. Since then, Radio Lumen has begun uploading to the cloud recordings that are part of the broadcast but are not in the archive. *"On the occasion of the visit of the Holy Father, we created a podcast- We are looking forward to the Holy Father. There were over 30 recordings each working day. In the podcast, several personalities spoke about the Pope's visit. So we use podcasts for such campaigns. We dealt with the period of All Saints 'Day in a similar way, in the podcast Saints we talked about how to pray for the dead, and how to connect well during the time of All Saints' Day. "*[37] The radio also addresses other current topics of interest to people in a similar way. For example, during the Covid 19 pandemic, they talked about how to handle the situation, how to live a spiritual life, Holy Mass, confession, and so on. *"Sometimes these are things that are also in the broadcast, but they are given priority in the podcast. Or sometimes, we first put it out as a podcast, promote it, and then it's going live. "*[38] In addition, Lumen Radio has all of its shows in the archive, automatically uploaded as podcasts. As Ivo Novák says, the podcast portfolio is huge, 10 new podcasts are automatically poured daily. These are sessions switched directly from the broadcast, from the archive, without any editing. Only some are specially modified, shortened, without songs. But it's also about staff capacity. "Basically, I'm the only one doing it, we don't have a special department, I'm the person who's responsible on the radio, sometimes someone will help me with the implementation or editing." [39]According to Ivo Novák, the radio will continue to produce podcasts, it is already expected by the listeners. But they will mainly focus on the so-called campaign podcasts, produced on various occasions. *"We see podcasts as an important thing, but we may not do it the same as other media. We see this as a very good platform for presenting our stuff, but our listener is still conservative. We already have younger, middle-aged listeners, but about 70 percent of people are over the age of 60. So many people have already trouble with going to the archive, not to mention the struggle of subscribing to a podcast. So we perceive their feedback and we don't want them to feel like we are doing something that is bypassing them. "*[40]

Conclusion

Slovak media, including popular commercial radio stations, perceive podcasts as a new promising communication format. They started to systematically address it during the growing popularity of this format in Slovakia, i.e in 2018-2019, some even a bit earlier. The most natural way for every radio is to declassify their broadcasted shows as podcasts, in their original form or after format changes specifically made for podcasts. If they decide to adjust the format, it usually mainly means cutting it shorter, editing moderator entries, or cutting music. Commercial radios have several limitations when considering making their own copyrighted podcasts that would be explicitly produced for this purpose. The most significant is the economic side. Private media live mainly on advertising revenue, so it is important for them whether podcasts will be financially profitable. In other words, whether the invested podcast production costs will be refunded. So far, this is not the case, according to Dušana Dingová from Radio Expres. *"You can't say that podcasts are profitable. Advertising revenue is there,*

[36] Interview, Ivo Novák, 23.9.2021.
[37] Interview, Ivo Novák, 23.9.2021.
[38] Interview, Ivo Novák, 23.9.2021.
[39] Interview, Ivo Novák, 23.9.2021.
[40] Interview, Ivo Novák, 23.9.2021.

but it's more likely to cover the cost of producing it."[41] Increased production of podcasts on each radio would mean additional staffing costs for the team responsible for their production or placement on online platforms. The solution is to focus more on monetizing podcasts. In this context, Katarína Vargová from Fun Radio assumes that clients will eventually understand how they can effectively use podcasts for their promotion. *"It's a question of how many clients understand that they don't always have to target a large number of people. They might not reach a high number of people but the more specific the targeting can be. For example, the technological podcast will affect people who are interested in the topic, and therefore it may be more effective and relevant. "*[42] Ivo Novák from Radio Lumen believes that advertising in podcasts may increase. *"If it is interesting for clients, why not. For example, who would have thought that we will be paying for an online newspaper?"*[43] Until then, however, private radio stations will be very careful about whether and to what extent to produce their own podcasts. They are more likely to consider less costly external collaboration when they provide the creators with their capacity and promotion opportunities. They will produce their own podcasts sporadically, thematically, as one-time products. This statement can also be confirmed by the fact that none of the addressed private radio stations currently has a comprehensive strategy or concept for the development of podcasts for the future. Podcast production and deployment is still a matter of intuition, in an effort to respond to current developments, the expansion, and the ever-increasing popularity of podcasts. Thus, all of the addressed radios see podcasts as a promising communication channel in the future, but they assume a natural transformation of the podcast market. After the satisfaction of the current podcast boom, it is expected that they will be narrowed down to the most popular formats. *"I expect good quality productions, longer genres that will get closer to radio plays. In addition, there will still be current news and long, well-founded interviews with competent people. In the future, podcasts can also be used as an educational format."*[44] According to Ivo Novák from Radio Lumen, podcasts have their future. *"I'd say it's probably not only a phase, podcasts will just go for years"*[45]. And there's another interesting look at podcasts. As our respondents also pointed out, podcasts cannot be perceived alone as a separate communication channel. They are part of the mix of new media and should suitably complement the whole media-communication ecosystem. This also applies to classic media, including radio. *"We, as a radio, the old medium, must also include the new media and together create an ecosystem, in which our listeners will remain satisfied, either on social networks, in radio or podcasts. "*[46] However, the quality of podcasts, both in terms of content and technology, will be paramount. It is assumed that the podcast listener will also evolve, his demands will increase. Therefore, he will also care about the extent to which he will be satisfied with the offer of podcasts and their quality.

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[41] Interview, Dušana Dingová, 6.9.2021.
[42] Interview, Katarína Vargová, 25.8.2021.
[43] Interview, Ivo Novák, 23.9.2021.
[44] Interview, Dušana Dingová, 6.9.2021.
[45] Interview, Ivo Novák, 23.9.2021.
[46] Interview, Katarína Vargová, 25.8.2021.

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OPTIONS FOR ANALYZING CONSUMER BEHAVIOR IN BRICK-AND-MORTAR STORES DURING THE PANDEMIC SARS-COV-2

Tomáš Fašiang – Pavel Gežík

Abstract
A predisposition for effective retail communication with the target consumer group is the knowledge of their purchasing decision-making processes. Purchasing decision-making and the factors that influence it are very dynamic, thus it is necessary to indicate the purchasing decision-making process within the retail industry and to update communication activities according to current trends. The current pandemic situation brings new incentives influencing the behaviour before, during and after purchase. It is necessary that a proactive retail approach to monitoring consumer purchasing behaviour is taken and marketing communication is enhanced by safety components of purchase decision. The aim of this article is to show the correlation between the incidence of positive testing for Covid in the Slovak republic and the decline in visits to the brick and mortar (retail stores) with a predominance of grocery goods. The demonstration of the interdependence provides a marketing basis for targeted retail communication oriented towards demonstrating the safety of the very act of purchasing during the SARS-CoV-2 pandemic situation.

Key words:
Consumer Behaviour. Covid incidence rate. Promotion. Retail. Retail attendance.

Introduction

The very act of purchasing begins with a motive, which is transformed into the state of the need and that drives the consumer towards its satisfaction. When satisfying the needs, a consumption is created, which turns a customer into a consumer. As the personalities are unique, the consumer behaviour is unique equally. There are many factors influencing the consumer behaviour. The first buying habits are formed in the family, later the consumer is influenced by the environment, marketing activities, economic situation and many other aspects. This phenomenon can be studied only to a certain extent. A large part of decision-making happens inside a person. This is closed to the public as if was in a black box. In these days, globally, consumer behaviour is strongly influenced by the fight against the dangerous SARS-CoV-2 coronavirus pandemics. Countries take measures and restrict the movement of people. The restrictions affect almost every area of life. One of the sectors that has suffered greatly is the retail sector. The retail sector is forced to react promptly to the change in consumer buying behaviour with a focus on the safety of making purchases in stores.

1 Consumer behaviour and retail trade

Every person has different needs and satisfies them in a different manner. All circumstances and influences, which have an effect on satisfying the needs, create an individual consumer behaviour at every person. The consumer behaviour is a wide and comprehensive complex of interconnected and influencing elements.[1] The whole process gets complicated by the needs of an individual, by the opinions of the groups, where the individual is present. "Consumer behaviour refers to the behaviour of people - final consumers – relating to the acquiring, use and disposal of consumer goods - products."[2] The area of purchase behaviour includes the

[1] KOUDELKA, J.: *Spotřební chování a marketing*. Praha : Grada Publishing, 1997, p. 8.
[2] KOUDELKA, J.: *Spotřební chování a marketing*. Praha : Grada Publishing, 1997, p. 11.

selection, purchase, use and disposal of the products and services. Perception is a process, in which the consumer choses, organizes and interprets all stimuli. In consumer buying behaviour, we need to focus on the incentives that interfere with the buyer's actions.[3] The purchasing decision is very complex, often unintentional and unorganized. Consumer purchasing behaviour refers not only to the immediate purchase, but also to the overall use of the product, the environment by which the consumer is influenced, and the time at which the user stops using the product.[4] The interesting indicator of the consumer thinking is the time. The time spent in the store and the time they spent in the discourse with the shop assistants mirror the amount of the products that are purchased.[5] The studies that examine the consumer behaviour explain how the individuals decide to spend their funds on buying a product which is offered to them. They pay attention to the type of the purchased product not to the repetitiveness of the purchase.[6] According to Koudelka we know three attitudes to the consumer's behaviour:[7]

- A psychological view. It deals with the links between the psyche and human behaviour. According to it, all purchasing decisions are conditioned by the psyche. This is the so-called behavioural approach, in which the stimulus-response scheme is observed. Decisions are formed in the inner world of the purchaser, which is referred to as the consumer's black box.
- A sociological view. This approach observes people's reactions to social situations and the degree to which they are influenced by that situation. It focuses on social groups, their influence on the individual and the way in which these aspects are reflected in their behaviour.
- An economic view. The economic approach understands purchasing behaviour as the result of rational consumer reasoning. It considers factors such as income, product price, budget constraints, usefulness and others.

The black-box model, otherwise also called the model of incentives and reactions, mentioned in the first view, shows that the human mind represents certain black box which we can understand only in a restricted way. This model comprises of the stimulus – black box and reaction. The black box in this case represents all the influences, which have an effect on the decision process of the consumer. It is a mental process and it is not possible to investigate it. The influences which are in the black box are mainly of social, socio-cultural, individual and psychological character. When penetrating into the black box of the consumer, we attempt to find the source of reactions. It comprises the answer to the questions, why one stimulus brought a positive, expected reaction, while on the other hand, why different stimulus caused negative or no reaction. The unconscious mind of the person is often analysed, but still not an explored space. Even with great effort to explore the unconscious, it is almost impossible. There are processes going on inside each of us that even we ourselves often cannot describe and explain. Retail can be simply defined as small trading involving the activities connected with preparation and sale of goods to an end user. According to Francová, it involves all the activities linked to sale of goods and services to final consumers regardless of the manner and place of sale. Retail is the holder of changes in the lifestyle and culture as well as it forms the public opinion of inhabitants.[8] The retail process consists of a number of specific activities including, among others: [9]

- Purchase of goods for further sale to a consumer,

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[3] KOUDELKA, J.: *Spotřební chování*. Praha : Oeconomica, 2010, p. 90.
[4] KOUDELKA, J.: *Spotřební chování a marketing*. Praha : Grada Publishing, 1997, p. 11.
[5] GRAVES, P.: *Consumer.ology*. London : Nicholas Brealey Publishing, 2010, p. 75.
[6] SCHIFFMAN, L., WISENBLIT, J.: *Consumer Behavior*. 11. edit. England : Pearson Education, 2015, p. 30.
[7] KOUDELKA, J.: *Spotřební chování a marketing*. Praha : Grada Publishing, 1997, p. 11-13.
[8] FRANCOVÁ, Z.: *Teória obchodu*. Bratislava : Ekonóm, 2009, p. 23
[9] VIESTOVÁ, K.: *Teória obchodu*. Bratislava : Ekonóm, 2004, p. 45

- activities accomplished within the distribution network through intermediaries - Breaking bulk,
- sales and sales promotion,
- goods transfer, e.g. in specialised containers,
- transfer of a business risk,
- financial operations,
- obtaining information for the decision-making process.

The decisive part of retail processes takes place within fundamental organisational business units, i.e. retail outlets. A retail outlet can be defined as an object of an organisational unit where the goods are sold to end users. A retail outlet represents a key bearer of the sale function while being the core operational unit of a retail business. When looking at their common features, particular retail outlets can be merged into specific types. From the typological aspect, retail outlets can be categorised according to the following key features):[10]

- Business product range - food, non-food, mixed;
- form and manner of sale - self-service, individual service, free selection, sale by samples, automated sale, mail-order sale, mobile sale and their combination;
- range and structure of services - a full / limited offer of services;
- allocation - outlets - a business street, a shopping centre, a culture/business centre, a town, a village, an outlet without a point of sale;
- a construction of an outlet;
- a type of an outlet - a point of sale, a wholesale outlet, a department store, a boutique, a show room, a shopping mall, a discount outlet, a virtual outlet;
- a size;
- a price - standard prices, high prices, low/affordable prices;
- construction-technical features of an outlet - a solitary, a multifunctional construction, a monothematic construction;
- e-commerce - an almost unlimited offer of food, non-food or mixed goods and services with a different degree of specialisation.

By an appropriate combination of the above features, we are able to establish the most appropriate type of the retail outlet from the territorial, time and dispositional aspects.

1.1 Pandemic impact on consumer behaviour

Foreign studies claim that during the crises, consumers are open to new ideas and products. Innovations flourish more because they can reflect current mood of consumers. There is an increased interest in home appliances, for an example, products for indoor and digital services such as online banking. The results of the study highlight the extent to which consumers are affected by the pandemic.[11] The purchasing power is on the decline and new strategies arise for purchase. Purchase for pleasure recedes, the frequency of purchases is reduced. The customers carefully choose the assortment, seek sales and discounts.[12] The consumers in this time face lack of finances, the loss of jobs or the fear that they will not have the resources to pay for their bills. In times of crisis, consumer behaviour changes, but some changes may remain permanent. The pandemic is disrupting consumers' normal habits, making them more open to new products

[10] VIESTOVÁ, K.: *Teória obchodu*. Bratislava : Ekonóm, 2004, p. 45
[11] *Inovácie v ťažkých časoch – prieskum v čase COVID-19.* [online]. [2021-10-20]. Available at: <https://www.ipsos.com/sk-sk/inovacie-v-tazkych-casoch-prieskum-v-case-covid-19>.
[12] ŽITŇANSKÝ, E.: *Čo robí kríza so spotrebiteľmi*. [online]. [2021-10-20].

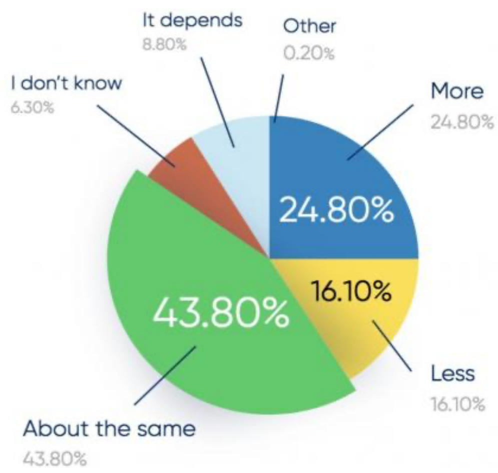
and options.[13] Even though the situation is calming down, the return to the previous consumption shall last very long. It is dependant mainly on the economics of the country. The cost for food have understandably started to rise, while other costs have fallen. In the first place, spending on durable goods began to fall as consumers feared a loss of income. The purchase of more expensive goods was postponed on the first place and will be among the last to be renewed. Services lost their reliance as people became afraid of social contact.[14] Influenced by current pandemic situation, the consumers change even their attitudes towards their ways of purchasing and focus on online purchase. The question arises, how will buying behaviour change after the pandemic? Will consumers prefer online shopping to store shopping? Based on the study realised in 2021, Zboraj mutually compares both forms of purchase as follows:[15]

Online shopping
Aside from the ability to compare product specifications and browse reviews, online shopping has a number of other advantages:
- Being able to shop 24/7.
- Saving money - online shopping allows the customer to compare pricing and find the best possible deals.
- Not having to use a personal vehicle and deal with parking and other issues or take transit to shop in-store.
- Saving time - in-store shopping can be hugely time consuming, particularly if it involves visits to multiple stores in different locations.
- Convenience - many people dislike crowds, cashier line-ups, etc. and prefer to shop from home.
- Availability - hard to find items are much easier to source online.
- Free shipping is sometimes available from online vendors. For example, for a small yearly fee the Amazon Prime service includes free shipping on most items ordered through Amazon.

Brick-and-Mortar shopping/shopping in stores
- Being able to physically interact with an item before buying, particularly with personal items such as clothes, cosmetics, furniture, etc. or with grocery items that need to be checked for quality and freshness.
- Goods can be obtained immediately rather than waiting for shipping.
- Customer service—the ability to speak directly to a sales representative and get further information and advice about products or services.
- Avoiding shipping costs.
- Avoiding the hassle and complexity of returning unwanted items.
- Much faster and easier to return a defective or unwanted product in-store rather than shipping back to an online retailer.
- The experience—many people enjoy a shopping outing in retail stores, often with spouses or friends and conjunction with other activities such as dining, having a specialty coffee, etc.

Available at: <https://www.trend.sk/spravy/co-robi-kriza-spotrebitelmi>.
[13] *Inovácie v ťažkých časoch – prieskum v čase COVID-19.* [online]. [2021-10-20]. Available at: <https://www.ipsos.com/sk-sk/inovacie-v-tazkych-casoch-prieskum-v-case-covid-19>.
[14] MRÁZIKOVÁ, V.: *Spotrebiteľské správanie slovenských domácností v čase pandémie*. [online]. [2021-10-20]. Available at: <https://www.nbs.sk/_img/Documents/_komentare/AnalytickeKomentare/2020/AK83_Spotreba_domacnosti_v_case_pandemie.pdf>.
[15] ZBORAJ, M.: *Consumers Still Prefer In-Store Shopping*. [online]. [2021-11-03]. Available at: <https://retailleader.com/consumers-still-prefer-store-shopping>.

The study shows (Figure 1), that compared to the way of purchasing in the year 2020, 43,80% of consumers will continue in their purchasing the same way, 24,80% respondents will buy more in stores, and only 16,10% will preferably buy online.



Picture 1: Do you believe you will shop in physical locations more, less, or same compared to 2020
Source: ZBORAJ, M.: *Consumers Still Prefer In-Store Shopping*. [online]. [2021-11-03]. Available at: <https://retailleader.com/consumers-still-prefer-store-shopping>.

2 Methodology

The aim of this paper is to show the relation between the incidence of positive testing for Covid in the Slovak Republic and the decrease in the number of visitors in the retail stores with a predominance of grocery stores. In order to meet the stated, a case study was carried out, which is based on the outputs of the technological tool for monitoring consumer behaviour at the point of sale by Pygmalios - Pygmalios Analytics company and the identification of the incidence of positively tested population based on the available information from the portal of the National Centre for Health Information (Slovak: NCZI). The data collection was carried out between 1 March 2020 and 2 December 2021, with the focus on selected retail stores and the incidence of the number of ill people in Western part of the Slovak republic. Pygmalios Analytics is a tool providing the possibilities to gain data, which are the basics for the customer analysis, to create statistics connected to the visits and identification of purchasing processes of a customer. It offers the collection of data based on the newest technologies, its basic illustration in well-arranged charts as well as the possibilities to gain not only aggregated but also collected data that can be used for deeper analysis on the retail side. Pygmalios Analytics can be characterized in three points:

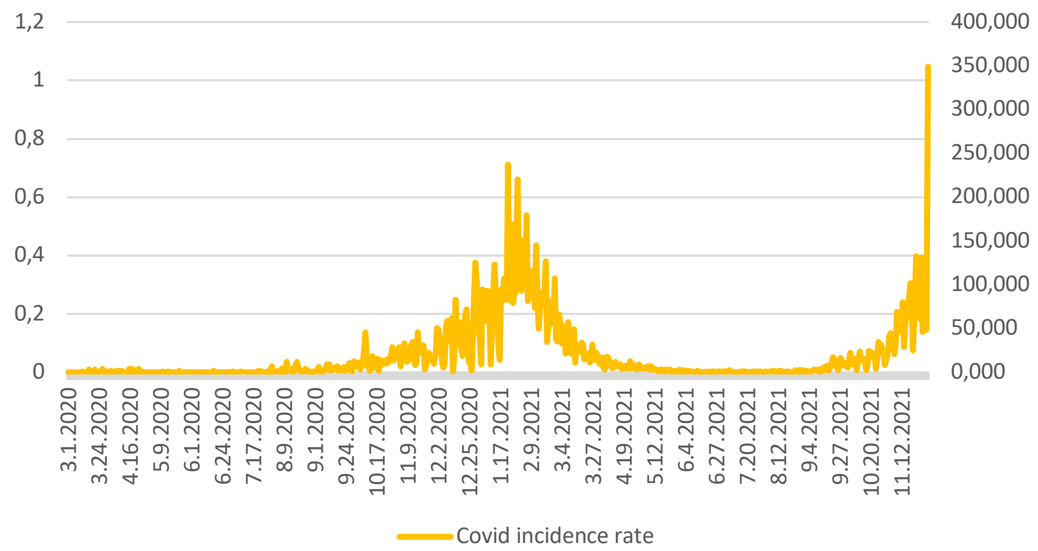
- The collection of data during whole customer way through the store.
- The analysis of data and the evaluation of the way customers behave at the place where they do the purchase.
- The utilization of the principles of AI for visualisation of data in real time.

The Pygmalios Analytics technology tool uses devices which are installed in the store and extracts data from them about consumer behaviour in that particular store. The basic sensors, i.e. the devices that collect customer data, are the counters at the entrance. The People Counters obtain the basic metrics that the tool displays about a given store – the visits and occupancy. These sensors can be supplemented with additional sensors which track the movement of customers around the store. There are also the sensors to determine gender and age or sensors that detect customer devices (smartphone or tablet). In order to interpret the data, mathematical and statistical methods were used, mainly:

- Regression analysis – enables reckoning of a functional correlation between the explained and explaining variable based on the collection of statistic methods and procedures. The regression analysis is used for reckoning of mutual relations between the number of visits in the store and the incidence of the number of ill with coronavirus SARS-CoV-2.
- Correlation analysis – enables determination of the tightness of the linear dependence, dependent and independent variables. The linear dependence is used in assessing the strength of the studied interdependencies.

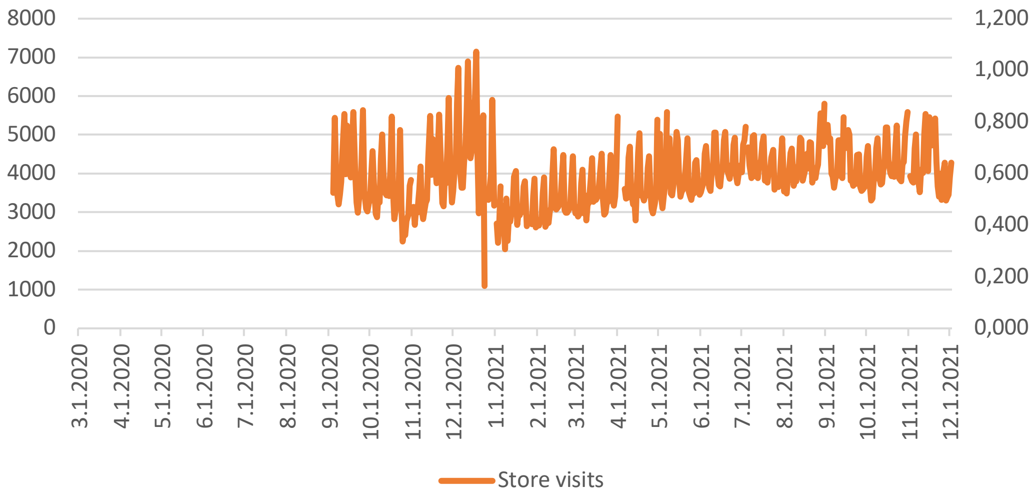
3 Case study - Options for analysing consumer behaviour

The case study presents the relationship analysis identifying mutual interconnection between the decrease of the visits in store and the rise in incidence of the number of ill people with coronavirus SARS-CoV-2. The number of ill people is determined by the data from National Health Information Centre, based on the number of PCR and AG tests done. Customer visits in the stores are interpreted through the values of average number of visits on the specified day in selected retail stores in Western Slovakia. The following chart interprets the development of the incidence of the ill in the set period of time. Two significant peaks in pandemics can be observed in the chart; one on the turn of January and February 2021 during the second wave of pandemics when the number of the ill people with Covid culminated and the other at the end of the year 2021, at a beginning of the third wave of the spread of virus disease in the population of the Slovak republic. The chart shows that mainly the third wave appears to be the most dangerous from the spread of the virus point of view.



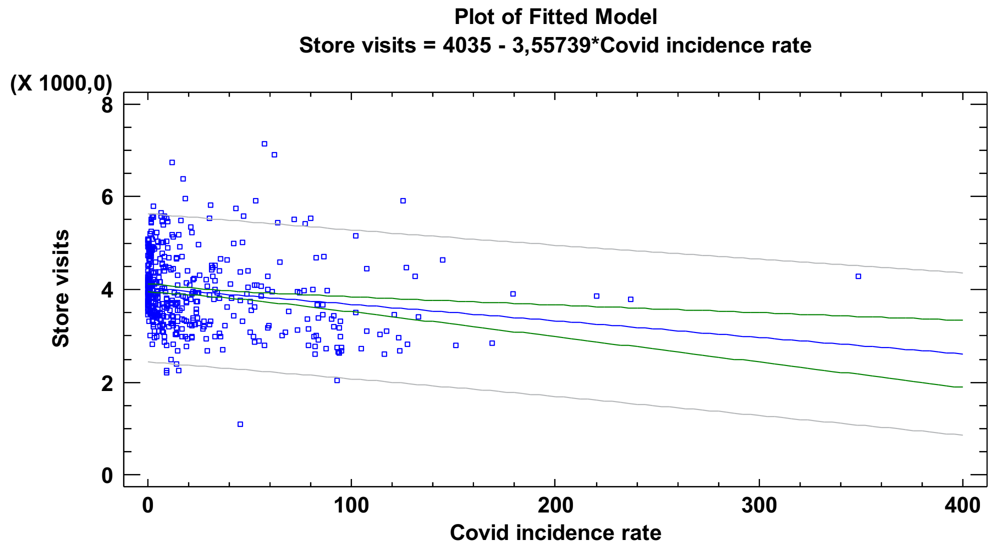
Picture 2: Covid incidence rate 2020 - 2021
Source: Own processing according to *Koronavírus v grafoch – NCZI*. [online]. [2021-12-02]. Available at: <https://covid-19.nczisk.sk/sk>.

In order to carry out the relationship analysis, it is necessary to look at the actual development of the visits in retail stores. In order to monitor the number of visits to the selling area, the analytical tool Pygmalios Analytics is used. It is possible to identify a significant drop in visits to retail stores by customers in the period of January-February 2021, as it can be seen in the following chart, due to the second pandemic wave and the adoption of anti-pandemic measures by the government in the form of "Lockdown". As a result of the introduction of the governmental measures a significant drop in visits to the stores can also be identified in late 2021.



Picture 3: Store visits 2020 - 2021
Source: Own processing according to PYGMALIOS: *Pygmalios Analytics 2021.* [online]. [2021-12-02]. Available at: <https://pygmalios.com/>.

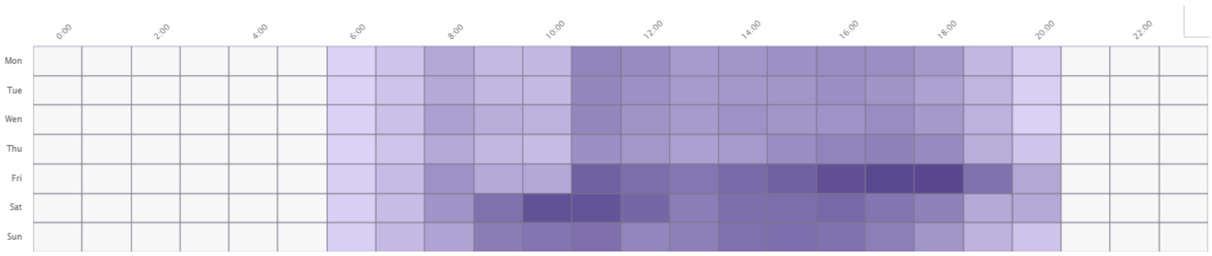
Based on the above stated characteristics one can identify the precondition of the mutual close bond. It means that the negative influence of the pandemic situation has negative influence on the customer visits in the retail stores. In order to verify the established assumption, through which the interrelation of the above mentioned indicators will be explained, we used the regression and correlation analysis. The regression analysis allows estimating the functional relationship of the interdependencies between the explained and the explanatory variable. When comparing the correlation, the explanatory and therefore the dependent variable is the retail store visits indicator and the illness incidence indicator is used as the independent variable inducing changes in the dependent variable. Through correlation analysis, the tightness of the linear dependence of the dependent and independent variables can be determined. In the following text, the correlation between the variables in question will be described. If the assumption for the interrelation is to be confirmed, the change in the illness incidence must elicit change in the visits to the retail shops. By the use of regression model it is possible to demonstrate correlation, which is demonstrated by the linear model ($y = a + b*X$). Through the calculation, we obtain a point estimate of the smoothing line, whose equation has the subsequent form: store visits = 4035 - 3.55739*Covid incidence rate. By (a), we mean the locking constant that represents the average visit rate at zero positivity level. However, in terms of substantive interpretation, the locking constant only provides us with information about the location of the regression line (Figure 4). By (b) we mean the regression coefficient, which represents the directive of the smoothing line. It is possible to conclude from the value of the regression variable that if the incidence of the positively tested inhabitant of the Slovak republic rises by one, the visits to the retail shops falls by approximately four customers (3.56 customers).



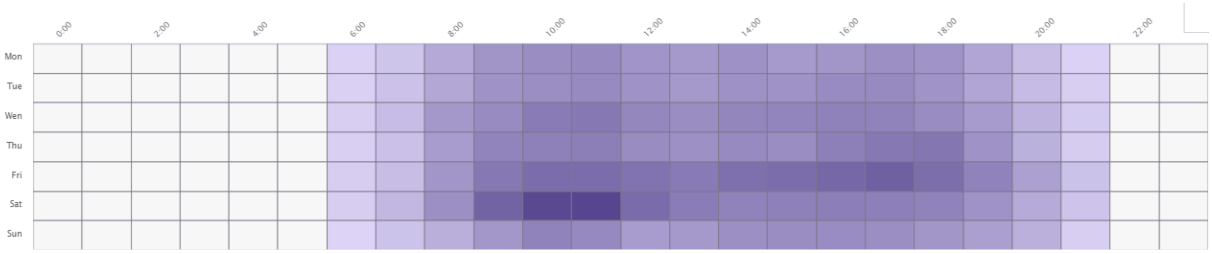
Picture 4: Interrelation of the visits to the retail stores and a Covid incidence
Source: Own processing.

The above mentioned statement and the statistic siginificance of the estimated model is tried by the testing characteristis of the Fisher division with the reliableness of 95%. The change in consumer behaviour comes not only through the total number of customers, which choose the purchase in the retail store, but also through the structure when they visit the store and for how long they stay there. It is the "store occupancy" indicator that best captures this relationship between visits and the time spent in the retail stores. The store occupancy rate indicates the number of customers in the sales area of a retailer at any given time. In the figures below, the occupancy of the sales area is shown in a well-arranged preview (rows = days, columns = hours, cells = average occupancy in a given hour) according to the intensity of the colour. This is for three months in 2021:

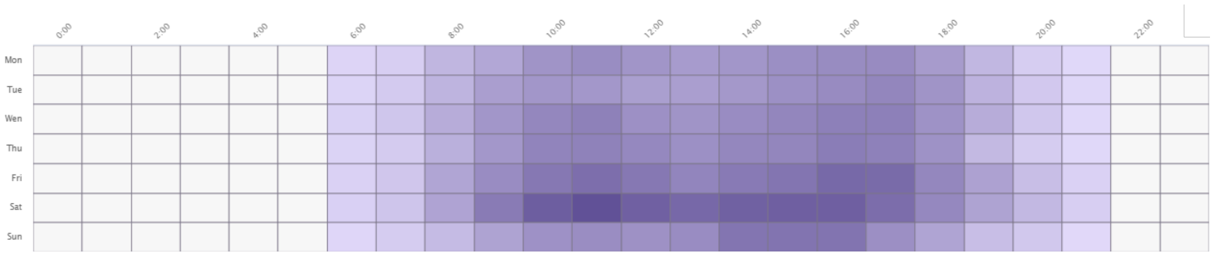
- April – one month after the lockdown, where the specifics in the morning hours is caused by the so called "pensioner hours."
- July – one month in summer, during minimal number of positively tested.
- November – the beginning of the third wave and the rise in positively tested.



Picture 5: Store occupancy, April 2021
Source: Own processing according to PYGMALIOS: *Pygmalios Analytics 2021*. [online]. [2021-12-02]. Available at: <https://pygmalios.com/>.



Picture 6: Store occupancy, July 2021
Source: Own processing according to PYGMALIOS: *Pygmalios Analytics 2021.* [online]. [2021-12-2]. Available at: <https://pygmalios.com/>.



Picture 7: Store occupancy, November 2021
Source: Own processing according to PYGMALIOS: *Pygmalios Analytics 2021.* [online]. [2021-12-2]. Available at: <https://pygmalios.com/>.

It is perceptible from the pictures that the purchase power realigned. The first change happened in the summer, when the customer density increased and showed up by more intense, thus higher values, but still did not reach its highest values of Saturday morning and Friday evening. At the end of the year 2021, so with the third wave coming, the values fell and at the same time became more "balanced". At the same time, it is obvious that the values of customer density fell.

Conclusion

The fact that the visits to the retail stores will decline as the number of positive tests for Covid increases is obvious even without detailed following of the data connected to the visits or to the sales. There is always a certain rationality in customer purchase behaviour, and given the possibility of online shopping, it is natural that customers are afraid of shopping and change their buying habits. Online sales have seen a big increase in recent years, and particularly in the FMCG sector, this increase has been driven by the pandemic. All stakeholders are aware of this fact, but by following the real retail data it is possible to quantify the changes in behaviour. This quantification is also explored in the case study. These values should represent the foundation for the retailer's decision-making and the retailer should be able to use these patterns of customer behaviour to their advantage and adapt its business and communication strategy accordingly. It is through information on store visits that the retailer can motivate customers who are concerned about the spread of the virus. The approximate information on current occupancy is directly integrated into the Google search engine and customers can find it out. It is then up to the retailer to use the available marketing tools to increase visits, which would lead to higher sales. The elimination of full customer density at a store and a balanced occupancy of the retail sales area is also a goal of retailers in the current period, as it leads to smoother shopping, balanced use of cashiers and, most importantly, a better customer experience. All of these aspects can be combined and used to motivate retail store shopping even for customers who are considering online purchases.

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IMPACT OF CONTEXT EFFECTS ON DECISION-MAKING BETWEEN GENERATIONS

Radka Kubalová

Abstract
The older consumers tend to be usually portrayed as easily manipulated and harmed by various scams but at the same time, the scientific literature brings evidence that older citizens are often more resistant to social or consumer influence than younger ones, with some studies reporting seniors do achieve a superior performance in decision-making tasks involving decoys as compared to the university students. This paper shifts the focus from undergraduate students and seniors and explores the possible differences in choices for washing machines and food processors among four generations (Boomers, Generation X, Millennials, Generation Z) in presence of decoy, and compromise effect. The analysis of choices in 2-item and 3-item condition is based on the data obtained in an online survey experiment with 420 Czech respondents between ages 18 and 64. The results show that there were no significant differences in choices between the generations when it came to the decoy effect. For the compromise effect, members of Millennials and Generation X showed positive preference for the middle, compromise option after the extreme decoy was added to the choice set.

Key words:
Choice. Consumer Behaviour. Context Effects. Generations.

Introduction

In the result of COVID-19 pandemics and lockdowns that prevented customers from visiting brick-and-mortar stores, the share of online shoppers grew from 39 % to 54 % between years 2019-2020[1]. Although one of the problems that online shops still deal with are low conversion rates which signify the share of visitors that also make a purchase in the e-shop. According to the global data the highest conversion rate in 2021 belongs to online retails with food and drinks, reaching 5,5 %[2]. Other industries reach even lower conversion rates, e.g., 1 % for home appliances online stores which means that 1 out of 100 visitors of the store website also makes a purchase there. Therefore, it could be more useful than ever for online shops to consider the impact of assortment context and relative position of products on the consumers' choices. Understanding how humans make decisions and what leads them to their choices has been in the interest of researchers in many disciplines beside marketing for which understanding the consumer buying behaviour is one of the most crucial, yet complex tasks. That is because each consumer experience is unique and is affected by many factors. Many of the factors, specifically the external ones, can be objectively observed but some factors can affect the consumers' decision even subconsciously, such as context effects which are in decision-making understood as specific effect of choice set structure. The findings about impact of relative position and choice set structure on consumers' choices has practical implications for firms who might utilize this knowledge when creating their product lines, designing the promotional offers or arrange their products in physical stores, but more so in e-shops where technology allows firms directly influence what specific product set or what assortment will be displayed to customers. However, it could be a mistake to treat all consumers the same it is also impossible to fully capture and understand every individual behaviour which is why firms and marketers focus on grouping the consumers with similar

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[1] *Využívání informačních a komunikačních technologií v domácnostech a mezi jednotlivci – 2020*. [online]. [2021-10-28]. Available at: <https://www.czso.cz/csu/czso/14-pouzivani-vybranych-financnich-sluzeb-online/>.
[2] *Online shopping conversion rate in selected verticals worldwide in 2021*. [online]. [2021-10-28]. Available at: <https://www.statista.com/statistics/1106713/global-conversion-rate-by-industry-and-device/>.

characteristics into segments and targeting the segments with specific communication. One of a popular approach of diving consumers into groups with similar characteristics or features is based on the concept of generations which can be defined as groups of people born and living around the same time.[3] Klapilová Krbová notes these similar characteristics and features in a generation can be found in many fields of interest, e.g. lifestyle, choice of education or job and also in shopping behaviour.[4] In this contribution, the focus is brought to question whether there are any differences between the generations when it comes to the influence of context effects such as decoy effect and compromise effect in the case of two products in the home appliances category.

1 Theoretical Framework

The research in decision-making showed the consumer choices are context dependent which is supported by cases when a new alternative introduced in the choice set can impact the relative preferences for the original alternatives. In the literature, several cases of context effects have been detected over the years, such as compromise effect[5], decoy effect[6], similarity effect[7] or single alternative effect[8] with compromise and decoy effects being the most discussed ones in the literature. The decoy effect is the classic example of how individual preferences can be shifted with an introduction of an inferior alternative (so called decoy) into the original choice set of two or more alternatives. This new less attractive alternative which is dominated by one of the original alternatives increases the attractiveness of the dominating target also in the relation to the rest of the original alternatives. This effect was examined in relation to various decision-making involving wide variety of tangible products like bean cans[9] or diamonds[10] and intangible products from airplane tickets[11] to restaurant menu[12] or even prolonged warranties as additional purchase service[13]. While the decoy effect consists of inferior alternative which is not in itself very popular, the compromise effect counts for the tendency of most consumers to choose a compromise aka some middle alternative between two extremes when each of them dominates in a different

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[3] MORRIS, W.: *The American Heritage Dictionary*. Boston, Houghton Mifflin : 1982, p. 549.

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attribute. This tendency to be influenced by context stems from uncertainty which attribute to prefer and factors such as high knowledge of product category or high experience which might lessen this uncertainty in decision-making were reported to lessen the compromise and decoy effects as knowledgeable or experienced buyers of the products are more certain about their preference when it comes to the product attributes. Connecting the aspect of general knowledge/wisdom/expertise in decision tasks to the age, some studies report that seniors are generally more consistent with their decisions than younger adults[14]. Younger adults, by contrast, appear to show consistent decisions in a domain of high interest, although not in a domain of indifferent interest[15]. Following this notion of different levels of general expertise/wisdom that comes with aging we decided to explore a deeper view on this topic to account for differences between generations when it comes to the decision-making involving context effects. There is an extensive marketing literature studying the various aspects of consumption and buying behaviour of generations have been studied for decades now, often in relation to various geographic regions[16], specific products and markets[17], distribution or communication channels[18] or activities[19]. It is possible to find various names and ranges for the generation cohorts which are caused by regional differences in events that shaped the lives of members of each generation. For this paper, we consider the generation cohorts in the Czech Republic as suggested by Hole, Zhong and Schwartz[20] which are Baby Boomers (1946–1964), Generation X (1965-1982), Generation Y or Millennials (1983-2000) with addition of Generation Z cohort which is presented by consumers born from 2001 on.

2 Methods and Data

Based on the literature review, this contribution focuses on the consumer decision-making in the presence of decoy effect and compromise effect and explores the possible relationship between the generation cohort and consumers preference for a product alternative in specific choice set contexts. We suppose there might be an effect of aging and raised general wisdom/experience with choice scenarios for the older generations. On the other hand, there might be also differences between the generations stemming from the life cycle phases and needs the generations have in the stages of life, e. g. the involvement in choice task might differ between the generations based on the product type. In this paper, the used product categories are two types of home appliances (washing machines and food processors). Thus, we do not suppose shopping for those is a relevant problem in the life stage of all generations. For example, it can be supposed the youngest Generation Z experience with buying such

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[20] HOLE, D., ZHONG, L., SCHWARTZ, J.: Talking about Whose Generation? Why Western Generational Models can't Account for a Global Workforce. In *Deloitte Review*, 2010, No. 6, p. 88. [online]. [2021-11-28]. Available at: <https://www2.deloitte.com/content/dam/insights/us/articles/talking-about-whose-generation-ages-and-attitudes-among-the-global-workforce/US_deloittereview_Talking_About_Whose_Generation_Jan10.pdf/>.

product might be limited such as the involvement or interest in such products itself as opposed to Millennials who are reaching the life stages of getting own places and starting the young families and buying appliances might be more relevant. Although, we do not assume the exact level of motivations, involvement, or experience differences for the generations, we merely assume from the generation typology theory that these differences do exist and might have also impact on the choices with the presence of context effects.

2.1 Experimental Design and Data Collection Procedure

To detect a causal relationship between the consumer choice and the presence of decoy among different age categories, the experimental method with online survey was chosen which combines the ability to draw casual attributions based on experimental design and the ability to generalize the results to the target population.[21] The between-subject study design was employed to avoid priming effect which could influence the consumers following choices based on their first choice in case they would make repeated choices. Hence, every respondent was assorted to just one of the experimental conditions (2-item choice set or 3-item choice set). In 2-item choice set, the decoy was absent whereas the 3-item choice set involved a decoy alternative which is captured in table 1.

Table 1: Overview of the experimental design

Decoy effect – Washing Machines				
Choice set	Competitor (A)	Target (B)	Decoy (C)	No choice
2-item	x	x	-	x
3-item	x	x	x	x
Compromise effect – Food Processors				
Choice set	Competitor$_{\text{extreme}}$ (A)	Compromise (B)	Decoy$_{\text{extreme}}$ (C)	No choice
2-item	x	x	-	x
3-item	x	x	x	x

Source: Own processing.

In the experimental survey, the respondents were facing two hypothetical purchase scenarios involving washing machines for the decoy effect and food processors for the compromise effect and were asked which of the product in the offer they would most likely buy. The washing machines were defined by number of programs, maximum spin speed and price. The food processors were defined by bowl volume, wattage, and price. In both choice scenarios the alternatives were accompanied also by the illustrative pictures without a brand information so the respondents would not be influenced by product's brand. In the control group, the respondents were presented with the information about chosen attributes for the alternatives A and B. In the experimental group, the choice set contained also the additional third alternative C, decoy, which positioned the initial alternative B in the position of a target or a compromise, depending on the context effect. The respondents were not forced to make a choice and in every condition the no choice option was present as well. The data was collected in April 2021 via Instant Research application of Ipsos agency which provides the usage of Ipsos ONLINE consumer panel containing more than 100,000 of registered respondents. Besides the respondents' choices, their basic demographic information was collected as well, including gender, education and age which was crucial for dividing the respondents into the generation cohorts. The data collection was taken in online environment with respondents making the choices on their devices like mobile phones or laptops when it

[21] LAVRAKAS, P. J. et al.: *Experimental Methods in Survey Research.* New Jersey : Wiley, 2020, p. 1.

was suitable for them, without any time pressure as they would do when online shopping in their everyday life which raises the ecological validity[22].

2.2 Statistical Methods

To find whether there is an association between the choices of the respondents and their generation under the two examined conditions, Pearson's chi-squared test of independency was employed which test null hypothesis that the two categorical variables are independent. The chi-squared value can be expressed as in the following formula 1:

$$X^2 = \sum \frac{(O_i - E_i)^2}{E_i} \quad (1)$$

where:
O_i = observed values,
E_i = expected values.
The chi-squared value was then compared to the critical value with the significance level α = 0.05 with given degrees of freedom which are for chi-squared test calculated as follows:

$$df = (r - 1) * (c - 1) \quad (2)$$

where:
df = degrees of freedom,
r = number of rows,
c = number of columns.

3 Results and Discussion

In this chapter, firstly the research sample characteristics are presented, then the results from the survey experiment are discussed, firstly focusing on the decoy effect among generations and then the compromise effect among generations. Lastly, the possible limitations of this research are discussed.

3.1 Research Sample Characteristics

In total, 420 respondents completed the survey between ages 18 and 64. In both groups, there were more women than men. When it comes to the age, in both groups the median age was slightly higher than the median age of Czech population which was 43.2 in 2021[23]. While there was not significant difference in median age between the two groups, there was 10 year difference in mode age between two examined groups. When it comes to the education, then majority of respondents in both groups achieved secondary education, then tertiary one and lastly, primary one which corresponds with the general educational structure of Czech population. The mentioned demographic characteristics of respondents divided into control and experimental groups are presented in the table 2 as well as their generation cohort which of course corresponds with the demographic factor of age.

Table 2: Sample Characteristics

Condition		**2-item set**	**3-item set**
		Control group (N = 210)	**Experimental group (N = 210)**
Gender:	Male	56.67 %	54.76 %

[22] LAVRAKAS, P. J. et al.: *Experimental Methods in Survey Research*. New Jersey : Wiley, 2020, p. 2.
[23] *Czech Republic Population Live*. [online]. [2021-10-28]. Available at: <https://www.worldometers.info/world-population/czech-republic-population/>.

	Female	43.33 %	45.24 %
Age:	Median Mode	46 54	45 64
Education:	Primary Secondary Tertiary	10.48 % 72.38 % 17.14 %	8.57 % 75.24 % 16.19 %
Generation:	Gen Z Millenials Gen X Boomers	7.62 % 34.29 % 35.71 % 22.38 %	8.57 % 30.95 % 37.14 % 23.34 %

Source: Own processing.

Based on the generation typology as employed by Hole, Zhong a Schwartz[24], over 35 % respondents belonged to Generation X in both control and experimental groups. The second largest cohort was Millenials with over 30 % of respondents. Over 20 % of respondents were Boomers and under 10 % of respondents belonged to Generation Z.

3.2 Generations and Decoy Effect

The table 3 summarizes the choices made by different generations, where A was a competitor, B was a target and C was the decoy itself. The results show that in the condition where decoy was present the popularity of alternative A decreased while the popularity of the target B increased among Generation Z and Millenials. However, the alternative A still remained the most popular option in both conditions and there was no preference reversal which would be typical for decoy effect. In Generation X, popularity of B alternative remained the same in both conditions and number of Boomers choosing B decreased when decoy was present in the choice set. Moreover, Generation X and Boomers tend to not choose any alternative and this tendency grew with the addition of the decoy. However, using Chi-squared test of independency it was found out both the choice deferral ($\chi^2(3) = 1.78$; $p > 0.05$) and the preference of alternatives A and B were independent on respondents‘ generation cohort whether the decoy was absent ($\chi^2(3) = 5.61$; $p > 0.05$) or present ($\chi^2(3) = 0.51$; $p > 0.05$).

Table 3: Choices of respondents in asymmetric dominance context based on generation typology

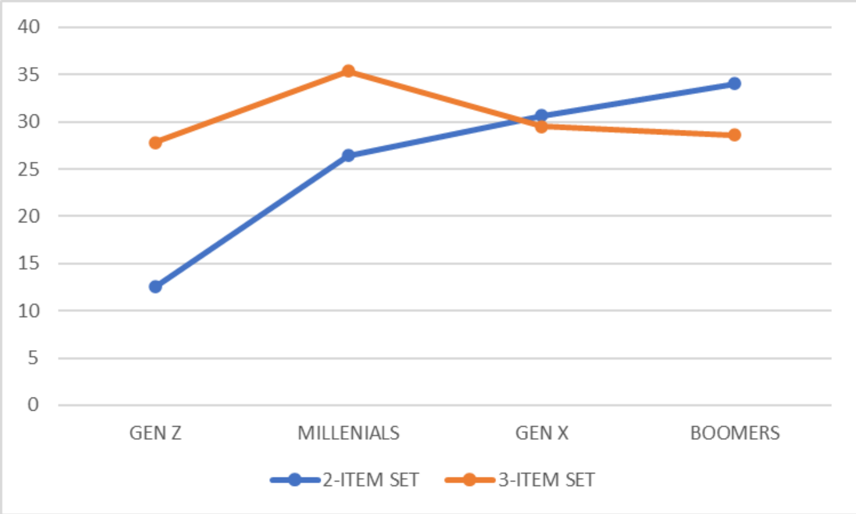
	2-item set (decoy absent)			**3- item set (decoy present)**			
GENERATION	**A**	**B**	**No choice**	**A**	**B**	**C**	**No choice**
GEN Z (N = 34)	14	2	0	10	5	2	1
MILLENIALS (N = 137)	51	19	2	37	23	2	3
GEN X (N = 153)	40	23	12	36	23	7	15
BOOMERS (N = 96)	23	16	8	18	14	6	11

Source: Own processing.

The picture 1 shows proportions of the respondents who chose the target alternative B based on the generation typology in the two conditions. The picture shows that Generation Z and Millenials preference for the target B raised after introducing the decoy in 3-item while the popularity of B was about the same for Generation X and decreased among Boomers when decoy was added into the set. From the picture 1 it could be concluded the most positively

[24] HOLE, D., ZHONG, L., SCHWARTZ, J.: Talking about Whose Generation? Why Western Generational Models can't Account for a Global Workforce. In *Deloitte Review*, 2010, No. 6, p. 88. [online]. [2021-11-28]. Available at: <https://www2.deloitte.com/content/dam/insights/us/articles/talking-about-whose-generation-ages-and-attitudes-among-the-global-workforce/US_deloittereview_Talking_About_Whose_Generation_Jan10.pdf/>.

influenced by the decoy were the younger generations as reported by previous studies but breaking down the difference in choices among the two conditions for each cohort, all cohort show that their choices of A and B are independent on the decoy presence (Gen Z: $\chi^2(1) = 1.92$, $p > 0.05$; Millenials: $\chi^2(1) = 1.85$, $p > 0.05$; Gen X: $\chi^2(1) = 0.08$, $p > 0.05$; Boomers: $\chi^2(1) = 0.05$, $p > 0.05$).



Picture 1: Proportions of respondents in generations choosing the target alternative (%)
Source: Own processing.

3.3 Generations and Compromise Effect

Also in the case of compromise, the summary of respondents‘ based on the generation typology are included and presented in table 4. In this case the alternative A was a competitor (extreme alternative), C was the extreme decoy and B was a compromise option in 3-item set context. According to the results when comparing the choices when the decoy was absent and present, there was a preference reversal for Generation X and Boomers as most respondents preferred alternative A when decoy was absent but the compromise alternative B became the most popular alternative after the extreme decoy C was introduced in the choice set. Majority of Millenials preferred alternative A in both conditions although the popularity of B raised after decoy introduction and there was a small decrease in popularity of B among Millenials. Moreover, the tendency to defer the choice grew after introducing the extreme decoy C in this case too and this tendency was again more prominent among the two oldest generations. Also in this case, the Chi-squared test of independency was used and it was detected the choice deferral in both conditions was independent on the generation cohort ($\chi^2(3) = 1.55$; $p > 0.05$).

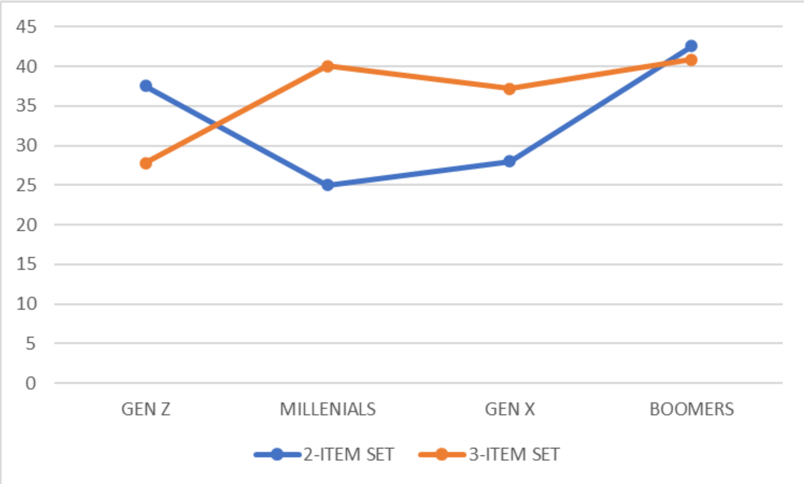
Table 4: Choices of respondents in compromise context based on generation typology

	2-item set (decoy absent)			**3- item set (decoy present)**			
GENERATION	**A**	**B**	**No choice**	**A**	**B**	**C**	**No choice**
GEN Z (N = 34)	9	6	1	8	5	2	3
MILLENIALS (N = 137)	48	18	6	30	26	4	5
GEN X (N = 153)	45	21	9	23	29	10	16
BOOMERS (N = 96)	21	20	6	15	20	4	10

Source: Own processing.

Lastly, the picture 2 shows proportions of the respondents who chose the compromise alternative B based on the generation typology. In the case of compromise effect, Millenials and Generation X were the generations whose preference for the compromise alternative raised after intoroducing the decoy into the choice set and it was found out that the Millenials‘

($\chi^2(1) = 4.82$, $p < 0.05$) and Generation X ($\chi^2(1) = 6.83$, $p < 0.05$) choices were not independent on the decoy presence ($\chi^2(1) = 4.82$, $p < 0.05$). However, the proportions of Generation Z and Boomers preferring the compromise decreased when decoy was added into the set tend to decrease with decoy presence in the choice set but it was found out the choices of those generations were independent on the decoy presence (Gen Z: $\chi^2(1) = 0.01$, $p > 0.05$; Boomers: $\chi^2(1) = 0.53$, $p > 0.05$).



Picture 2: Proportions of respondents in generations choosing the compromise alternative
Source: Own processing.

3.4 Study Limitations

The important limitation of this research is the fact respondents faced hypothetical choice scenarios and their choices had no real economic consequences unlike real life buying situations. Although, we suppose the consumers are still able to evaluate the hypothetical offers i tis questionable if the respondents dedicate as much effort to the hypothetical decision as they would during real shopping. Possible low effort could lead to random choices or not analysing the choices carefully enough to detect the dominance relationship between target and decoy which could explain why some respondents chose the decoy itself when target was superior to it. Another limitation that prevents from generalising the results are the product categories used, various products might have different level of relevancy and involvement for the generations who deal with different needs at their stage of lives.

Conclusion

Despite the rapid growth of the online shopping also due to the COVID-19 pandemics, the average conversion rates of turning website visitors into actual customers remain very low in 2021. Given, the technology allows firms to decide and directly influence what product assortments would be displayed to the visitors, the context effects which are the specific effects of relative relationships between the alternatives in the offered choice set could be of practical implication in the online environment. However, given that all consumers are not the same, we took the generation typology approach in examining the two context effects, decoy and compromise, for two product types in home appliances category. Building on the evidence that aging brings higher general wisdom/experience/knowledge when it comes to decision-making which might limit the context effects, in this paper we tried to detect any differences among the generations when it comes to the context effects in decision-making involving two types of home appliances. The aim of this paper was to explore the differences in choices of alternatives in the presence of specific context effects, namely decoy and compromise effect from the perspective of different generations, including Baby Boomers, Generation X, Millennials and Generation Z. The obtained results from the online survey experiment involving 420 respondents show that none of the generation reversed its preference due to the presence of the decoy which would account for positive decoy effect. Although the proportions of those choosing the target alternative after decoy was introduced raised in two youngest generations (Generation Z and Millenials) which would correspond with the previous findings of younger consumers being more easily affected by decoy effect, the differences before and after decoy introduction in choice set were not significant. Breaking down the results for compromise effect, the choices in this case were generally independent on the generation cohort as well. However, Millennials and Generation X showed preference reversal after the extreme decoy was introduced and there was a significant relation between the choices and the presence of the extreme decoy. This might imply the Millennials and Generation X were in this case the generations that preferred the "safe" middle option. The practical implications of these results could be a recommendation to the companies to consider the generation typology of their targeted segment as in case of Millenials and Generations X it seems companies could raise the popularity of a product alternative by presenting it between extreme products as these generations according to the results prefer the compromise product.

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POSSIBILITIES OF VISUALIZATION OF THE GROUNDSWELL SENTIMENT

Michal Kubovics – Anna Zaušková – Simona Ščepková

Abstract
The groundswell is a phenomenon of the last decade. Since the emergence of social media, the power of consumers and potential customers has also been transformed thanks to digital development. It is important to monitor not only the activities in the offline environment, but also the activity of the online environment. Because it is the groundswell that can affect a business entity to some extent. One of the elements that is quantitatively measurable within the groundswell is sentiment. Each post in the discussion may have some sentiment. If we correctly analyze the given discussion within the sentiment, we can conclude by explaining how the groundswell reacts and whether the groundswell has a positive or negative effect on the business entity. It is also important for simple perception and data reading to visualize sentiment. The aim of the paper is to clarify the possibilities of data visualization and to analyze practical examples of tools for sentiment analysis and visualization. Thanks to the clarification, a closer examination of the groundswell will be possible.

Key words:
Groundswell. Data Visualization. Social Media.

Introduction

The groundswell is a phenomenon today. For businesses, communication is essential, constant and coherent. The same is true in times of technological interference. The user is currently constantly communicating through digital devices. This is confirmed by statistics from 2020 from the Statista portal.[1] There is also an upward trend in the time spent on digital equipment when predicting the next period.

1 Groundswell and technological interference

According to Li and Bernoff, the bottom wave can be defined as a phenomenon that can be characterized by influencing the opinion of users through a stimulus, for example in the form of an influencer or an operating company.[2] The following figure describes the main attributes of the groundswell. The groundswell is created as a result of the forces acting on the social media. This phenomenon is usually caused by external influences, but the groundswell can be caused not only by social media users, but also by real-life people, companies with their behavior and individual cases in the form of cases or states generated by the entire Internet community. The groundswell was sparked by technological interference. As Madleňák says in the current situation, the bottom wave is an important factor, especially for building a reputation for online stores.[3] As Neu et al. say, we can follow the groundswell on all social media platforms. Subsequent analysis can not only contribute to the creation of a massive wave of positive or negative response, but on the other hand there is an opportunity to clarify interesting facts and observations, which a particular target group prefers, or more

[1] *Internet users in the world 2021*. [online]. [2021-11-20]. Available at: <https://www.statista.com/statistics/617136/digital-population-worldwide/>.
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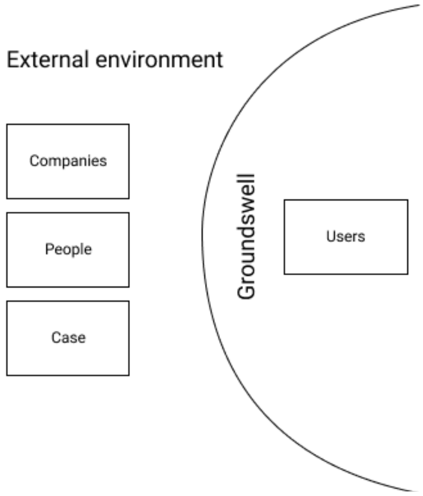
[3] MADLEŇÁK, A.: Social Media as an Opportunity for S-commerce Development at the Time of Covid-19 Pandemic. In KVETANOVÁ Z., BEZÁKOVÁ Z., MADLEŇÁK A. (eds.): *Marketing Identity*: *COVID-2.0*. Trnava : FMK UCM, 2020, p. 397-404.

information about demography, psychography or econography. The business entity thus knows how to target selected customers and markets more securely.[4] As Gulliver et al. says, the groundswell can occur in every realm, not excluding the environmental realm. The authors followed Australian organizations, which made some efforts with regard to social media. The conclusions clearly agree on the importance of examining the groundswell phenomenon.[5]



Picture 1: Groundswell and users
Source: Own processing.

On the other hand, the bottom wave was triggered by technological interference. The rebirth of society through digital devices also created the phenomenon of the bottom wave. With the influence of Web 2.0, we can talk about creating users who communicate with each other within the web space and thus can influence other users.[6]

2 Sentiment and visualization

Schneider and Carpenter cite the importance of examining sentiment, especially on social media.[7] In summary, we can say that it is an emotion in the form of text, which is either positive, neutral or negative. The research is carried out using analytical tools designed to examine sentiment. In the following text we will try to analyze the individual tools and the suitability of their use to examine the sentiment and visualization of the results obtained.

[4] NEU, D. et al.: Speaking Truth to Power: Twitter Reactions to the Panama Papers In *Journal of Business Ethics*, 2020, Vol. 162, No. 2, p. 473-485.
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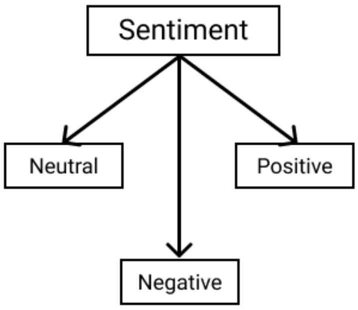

Picture 2: Sentiment
Source: Own processing

These tools work with keywords, which are divided into three categories: neutral, positive and negative. Based on the given division, the system can operatively respond and evaluate the complete contribution from the user. He then assigns the resulting sentiment to the comment. If the results prevail, the post or page is marked as positive, negative, or neutral. For the best possible reputation, companies should pay attention to positive sentiment. Visualization of sentiment is also important according to the authors Yf et al., who presented a wide range of possibilities for analysis and subsequent visualization of social media and in the same translated sense as groundswell.[8] On the other hand, the authors Dani et al. confirm that the visualization of sentiment is important not only from the point of view of business entities, but can also be used within the media for negative behavior, which can be predicted by analysis of discussions and comments.[9] We can also talk about emotions, which examination of sentiment can quantify and then visualize. The authors of Stieglitz and Dang-Xuan provide summary findings on sentiment and social media, which also include microblogging platforms and present more extensive research on shared user behavior.[10]As with the groundswell, planning and prediction are important from the point of view of business entities. This is also the case with social media as a tool. This is confirmed by the examination of Jeong et al., which summarized the possibilities of collecting data from social media and the subsequent examination of sentiment, resulting in a business planning model.[11] As Alaei and the team say, it is important to have a large amount of data that together form a set in connection with sentiment, we can then derive findings of trends and popularity of content and thus predict behavior in the target group.[12]

[8] LU, Y. et al.: Visualizing Social Media Sentiment in Disaster Scenarios. In *WWW '15: 24th International World Wide Web Conference*: *Proceedings of the 24th International Conference on World Wide Web*. Florence Italy : ACM, 2015, p. 1211-1215.
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3 Methodology

The present paper aims to clarify the possibilities of data visualization and analyze practical examples of tools for sentiment analysis and visualization. The research topic that forms the core of the paper is the groundswell in the context of sentiment. Within the research problem, the paper deals with the possibilities of measuring and evaluating sentiment in the groundswell, tools for collecting, analyzing and visualizing sentiment. The research goal can be achieved only by examining the theoretical basis and analyzing the current state of sentiment analysis tools. The research questions were defined as follows:

1. What are the most used tools for sentiment analysis and visualization?
2. Does sentiment measurement apply within the groundswell?
3. Is the visualization of the results of the sentiment analysis important?

This paper contains secondary sources. The procedure took place within the theoretical basis in the first stage by searching for available literary sources, which then resulted in a search. Following the summaries, the search was applied to the paper. Secondary sources contain the vast majority of articles from scientific journals. Subsequently, papers from domestic and foreign proceedings from conferences focused on the issue of the paper are represented in the optimal number. The contributions were searched through scientific databases and based on the keywords "groundswell", "sentiment", "social media" and combinations thereof. Subsequently, on the basis of theoretical knowledge, the theoretical dispositions of the presented paper were constructed. The next step was to analyze the available social media sentiment analysis tools. The selection was based on the leading author Geyser, who published on the Influencer MarketingHub portal.[13]

Table 1: Top 5 sentiment tools

1. Brand24
2. BrandMentions
3. Talkwalker
4. Keyhole
5. Mention

Source: Own processing according to Geyser.

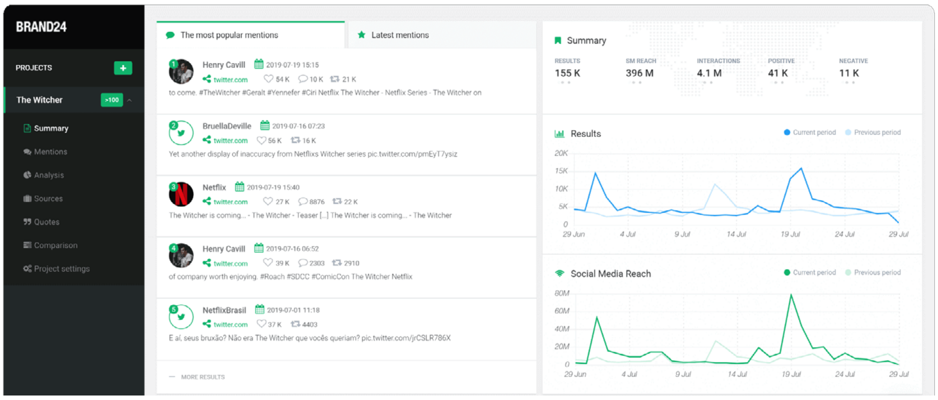
The first five tools that have been tested have been analyzed in detail, and examples with pictures are available in the following passages.

Results

Based on theoretical background, we use sentiment analysis tools to evaluate the attitudes of target consumer groups on social media. Consequently, we can say that the attitude towards the brand is related to the reputation of the brand in the minds of customers. Sentiment is thus a groundswell factor that is quantifiable and related to user motivation. The following is a summary of the most commonly used tools for sentiment analysis.

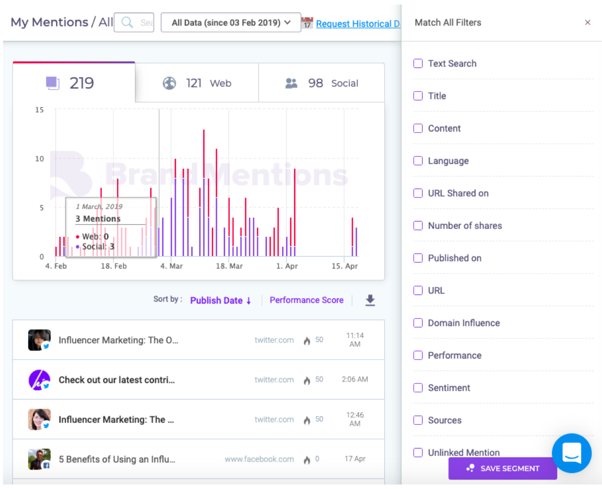
[13] GEYSER, W.: The 25 Best Sentiment Analysis Tools In the Market Today. In *Influencer Marketing Hub* [online]. [2021-11-20]. Avalible at: <https://influencermarketinghub.com/best-sentiment-analysis-tools/>.

Brand24



Picture 3: Brand 24
Source: Own processing from the site Brand 24.

This tool is a simple tool that monitors social media with great accuracy. There is not only sentiment analysis, but also other tools for social media analysis. The tool also has features for analyzing conversations in direct chat communications. This tool also contains an analysis of competing businesses, where the tool is able to display and visualize data about businesses, communities and potential customers. The tool is affordable for the general public, but especially for communication agencies and clients.[14]

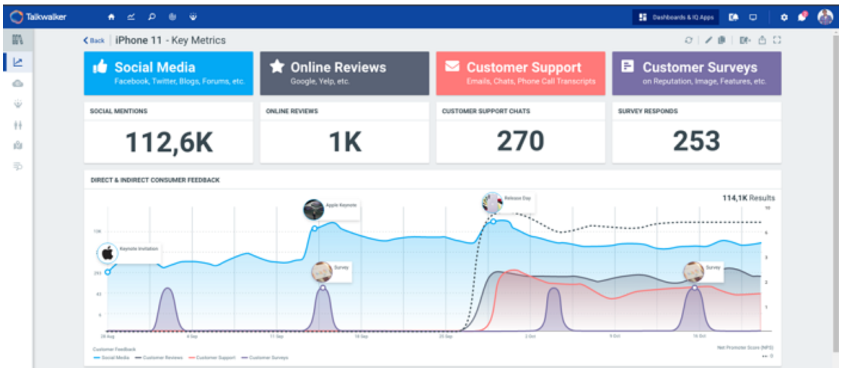


Picture 4: BrandMentions
Source: Own processing from the site BrandMentions.

Another tool is Social Mention as part of BrandMentions, which is designed primarily for social media search, which aggregates user-generated content into a single stream of information. Subsequently, user behavior can be analyzed and visualized. BrandMentions is primarily for social media monitoring, which allows you to track and measure what people are saying about the brand in real time with respect to sentiment.[15]

[14] *BRAND24*. [online]. [2021-11-20]. Available at: <https://www.g2.com/products/brand24/reviews>.
[15] *Social Mention #1 Free Real-time Social Mentions Search*. [online]. [2021-11-20]. Available at: <https://brandmentions.com/socialmention/>.

Talkwalker

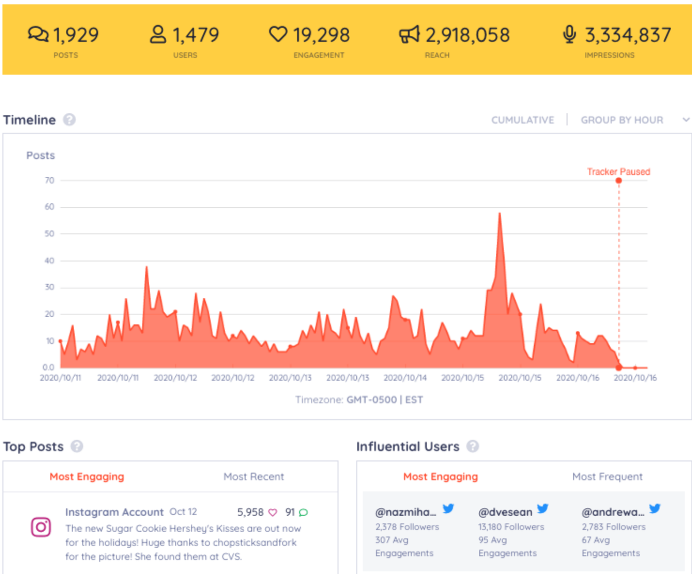


Talkwalker

Picture 5: Talkwalkers
Source: Own processing from the site Talkwalker.

Talkwalker is a versatile tool that is at the highest price range within the tools examined. This tool is a powerful comprehensive solution for analyzing social media. This tool is most often used in small and medium enterprises. Talkwalker gives managers the opportunity to examine the effectiveness of social media content. In addition to social media, there are other media such as print, television and radio. Sentiment can be analyzed in selected media and evaluated in the selected range and possibilities.[16]

Keyhole



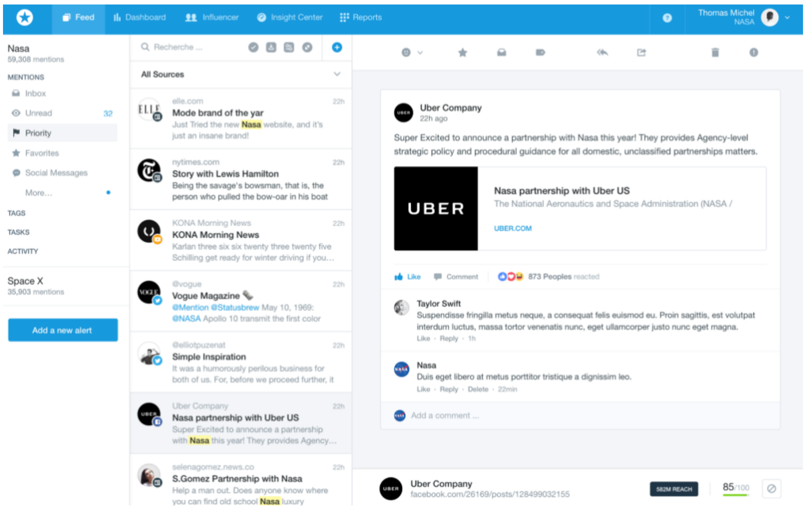
Picture 6: Keyhole
Source: Own processing from the site Keyhole.

The Keyhole tool is a smaller tool in scope, but it meets the basic requirements for the analysis of social media, especially sentiment. The visualization provides findings on the frequency of people discussing the selected key term on social media in real time. On the other hand, the tool also offers a competition analysis, which is very important in comparing and determining further developments in the field of social media with regard to content.

[16] *PCMAG*. [online]. [2021-11-20]. Available at: <https://www.pcmag.com/reviews/talkwalker>.

Sentiment that can be seen in real time is also processed. Data reports through visualization are very clear and you can link multiple accounts at once. The campaigns and trends that the tool displays are a supplement and inspiration for a wide range of companies that use the Keyhole tool.[17]

Mention



Picture 7: Mention
Source: Own processing from the site Mention

The last researched tool is the Mention tool, which is focused on the analysis and monitoring of a large number of media sources. These sources include press releases, blogs, reviews and other social media. Subsequently, the tool contains analytical tools that reveal trends, conversations, filters and analyze predictions for the next period. It is also possible to publish and schedule content for the future via the Mention tool.[18] The following is an overview table of tools.

Table 2: Sentiment tools with best benefits

Name	The best benefit.
1. Brand24	Affordability.
2. BrandMentions	Clear view.
3. Talkwalker	In addition to social media, also traditional media.
4. Keyhole	Sophisticated data visualization.
5. Mention	Broadband social media management.

Source: Own processing.

Discussion

The team of authors has set itself the goal of clarifying the possibilities of data visualization and analyzing practical examples of tools for sentiment analysis and visualization. Thanks to

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[17] *Hashtag Analytics for Twitter, Instagram and Facebook*. [online]. [2021-11-20]. Available at: <https://keyhole.co/>.
[18] *Monitoring and Social Media Management | Manage your Brand Online*. [online]. [2021-11-20]. Available at: <https://mention.com/en/>.

the clarification, a closer examination of the groundswell will be possible. To achieve this goal, they set three research questions.

The first research question Q1: ***What are the most used tools for sentiment analysis and visualization?***
A1: An analysis of the tools that can be used to monitor and visualize sentiment has shown that the most appropriate and used tools, according to author Geyser, are Brand24 in first place, BrandMentions in second place, Talkwalker in third place, Keyhole in fourth place and Mention in fifth place. Due to the nature of the evaluation of individual tools, the price of the tool, the possibilities and its use are important factors. Together, all areas form synergies and, in the end, it is a serial evaluation of the tools. At present, it is possible to monitor the generation of new tools, especially in terms of sentiment, as well as the innovation of the original tools that are currently used in practice. The innovation of the original tools is mainly about developing improvements to formulas, analysis and visualization.

The second research question Q2: ***Does sentiment measurement apply within the groundswell?***
A2: Available sources suggest that sentiment is very important in the groundswell study. If researchers want to get relevant quantifiable data in the end, they have to focus on examining sentiment within businesses. If they apply qualitative and quantitative methods, they can get relevant results that can help not only businesses but society as a whole to understand the impacts and patterns that users make on social media.

The third research question Q3: ***Is visualization of sentiment analysis results important?***
A3: Visualization is very important within the groundswell, especially with regard to sentiment. Only through high-quality and efficient visualization can we very easily understand the data that is generated within the groundswell and sentiment. From the available sources, we can conclude that sentiment can be quantified and subsequently visualized, usually with a scale of "positive", "neutral" and "negative" comments or discussion within the total contribution and within individual users.

Answering these questions led the authors to the conclusions that are necessary for further groundswell research. The groundswell can directly affect the business entity in terms of reputation and, ultimately, in terms of the impact on profits. It is therefore essential that sentiment is constantly under the scrutiny of managers, but also of the scientific community in any subject surveyed, not only on social media. The partial research led the authors to important facts on which to build in the future. In conclusion, we can say that the marketing scientific community should definitely pay attention to further research because within the theoretical and practical levels, the groundswell and sentiment is a virtually unexplored environment.

Conclusion

In terms of the results of the analysis of existing tools for sentiment evaluation and visualization, as well as the evaluation of research questions, we came to the following conclusions. Here again, we list the most suitable tools, their possibilities of use in monitoring and visualization of sentiment with a connection to the groundswell. The groundswell can directly affect the business entity in terms of reputation and, ultimately, in terms of the impact on profits. It is therefore essential that sentiment is constantly under the scrutiny of managers, but also of the scientific community. The team of authors, seeing a gap in the observation and visualization of sentiment, decided to carry out this partial research, which led to important findings and facts that need to be built on in the future. The marketing science community should definitely pay attention to further research of the affected areas, because within the theoretical and practical levels, the groundswell and sentiment is a practically unexplored environment.

Acknowledgement: The research was supported by the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences (VEGA No. 1/0458/21) under the project entitled 'Management of the "Groundswell" Concept by Business Entities in Promotion of Environmentally-Friendly Products in Times of Technology Interference'.

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INTEREST AND MOTIVATION FOR THE PAID ONLINE MEDIA SERVICES WITHIN A DEFINED TARGET GROUP

Martin Kuchta – Monika Stanková

Abstract

Internet has historically created an illusion of a free online content consumption. However, production of text, pictures, audio, and video formats mean time and financial costs for a producer and one option how to cover them is the payment from the final content consumers, similar to as in offline media. The main aim of the article is to discover interest and motivators to pay for online media services and content within a defined target group. The research focused on the university students, especially because they represent a new generation of the internet consumers who understand a value of content, however they mostly have only limited financial possibilities due to lack of the income from a regular work. A questionnaire was used as a primary research method. Results of the research show that university students are willing to pay only for selected forms of content on the internet and a decision is determined by several motivators. The findings are useful for the online content producers, who can modify their products and payment options to meet motivators of potential customers and also for the researchers focused on the area.

Key words:

Content distribution. Content monetization. Online content. Paid subscription. Subscription.

Introduction

The beginnings of the Internet date back to the 1950s and 1960s, when computer science began to develop. American and British companies that experimented with interconnecting computers at the time and tried to create networks that would ensure interconnection are considered pioneers. All initial efforts culminated between 1989 and 1990, when the World Wide Web ("www" or "internet") was formed. It is built on connecting hyperlink documents that lead to an information network. You can connect to the network from any access point in the world that can connect. The Internet has revolutionized society since its inception. It has had and still has far-reaching effects on culture, technology, interpersonal communication, the sale of required documents, other interpersonal interaction and society as a whole. Internet serves as a new vehicle for a content, which has been historically distributed through traditional devices such as print, television, radio etc. Due to expansion of the internet and interest of people to use it, traditional distribution of content had to diversify to new online channels. Except computers and laptops there are also smartphones and tablets, which serve as internet consumption vehicles. Use of smartphones and other mobile devices is even so popular people have tendency to loose attention on other, often important, activities.[1] The shift to online environment is forced by demand, however content producers are due to perception of online content by users still very careful. "While consumption of content in offline formats continues to decline, many providers are still struggling to monetize their content online, because consumers' willingness to pay (WTP) for content in online formats is low. The availability of free content on the internet is often considered the primary reason for this issue".[2] Problems with online content monetization force content providers to find new ways how to cover costs connected to content creation.

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[1] MIKUSOVA, M., WACHNICKA, J., ZUKOWSKA, J.: Research on the Use of Mobile Devices and Headphones on Pedestrian Crossings – Pilot Case Study from Slovakia. In *Safety*, 2021, Vol. 7, No. 1, p. 17.

[2] BERGER, B., MATT, Ch., STEININGER, D. M., HESS, T.: It Is Not Just About Competition with "Free": Differences Between Content Formats in Consumer Preferences and Willingness to Pay. In *Journal of Management Information Systems*, 2015, Vol. 32, No. 3, p. 105.

1 Literature review

To extend monetization channels and secure additional income from the content published online, publishers must develop new strategies. There are three most used strategies to monetize content:

1. *A paid content strategy* – publishers generate income from the payments of users and from the advertisement,
2. *a sampling strategy* – publishers offer free content sample, however after test period the content is locked, and users have to pay for it. Publishers in this case generate income from the payments of users and from the advertisement,
3. *a free content strategy* – publishers are dependent on the income from advertisement.

However, digitalization is continually decreasing prices of online ads.[3] Since universal functional model doesn't exists content creators are dependent on testing. "The advertising-based revenue model for journalism is severely challenged due to the effects of digitization. Providers of journalistic content have therefore put increasing emphasis on paid content strategies in recent years."[4] Experimentation with above mentioned strategies is necessary to find proper balance between content creator income and users' tolerance of the amount of ads and payments for a content. Some studies prove, that free sampling is working well. "Surprisingly, we find that it can be optimal for the publisher to generate advertising revenue by offering free samples even when sampling reduces both prior quality expectations and content demand." [5] However, some studies found it is necessary to create content added value for users to effectively implement monetization strategy. Added value can be for example possibility to comment in discussion below the article, or possibility to create engagement with consumed content. "Willingness to pay is more strongly linked to community participation than to the volume of content consumption".[6] Other studies declare its content quality and user experience and interface which serve as crucial factor in content monetization. "The content has to be premium to successfully implement paywall and lock a content on a website." [7] Other strong factor to persuade users to pay for content is to secure positive experience with online purchasing process.[8] Settings of device and in-profile settings within a content website can be also important factor in decision making process of payment for content. "Respondents are more price sensitive in incentive-aligned settings than in non-incentive-aligned settings and the real purchase data setting."[9] Another crucial moment in content monetization is possibility to consume a content on mobile devices, such as smartphones, tablets, etc. "The technological convergence of mobile "phones" and multimedia

[3] HIMMA-KADAKAS, M., KÕUTS, R.: Who Is Willing to Pay for Online Journalistic Content? In *Media and Communication*, 2015, Vol. 3, No. 4, p. 108-110.

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[6] OESTREICHER-SINGER, G., ZALMANSON, L.: Content or Community? A Digital Business Strategy for Content Providers in the Social Age. In *MIS Quarterly*, 2013, Vol. 37, No. 2, p. 591.

[7] BRANDSTETTER, B., SCHMALHOFER, J.: Paid Content. In *Journalism Practice*, 2014, Vol. 8, No. 5, p. 499.

[8] DOU, W.: Will Internet Users Pay for Online Content? In *Journal of Advertising Research*, 2004, Vol. 44, No. 4, p. 348-351.

[9] MILLER, K. M., HOFSTETTER, R., KROHMER, H., ZHANG, J. Z.: How Should Consumers Willingness to Pay Be Measured? An Empirical Comparison of State-of-the-Art Approaches'. In *Journal of Marketing Research*, 2011, Vol. 41, No. 1, p. 172.

has been taking place since the 1990s, but it was not until the commercial birth of touchscreen-enabled mobile devices, offered with flat-rate subscriptions for mobile internet, that widespread production and use of news-related content and services began to flourish. Accessing mobile news has gained traction in the everyday life of the public. In parallel, legacy news media have in recent years developed news provision, by repurposing or customising journalistic content published for mobile sites and/or applications."[10] Since smartphones and mobile internet spread rapidly over the world there is significant trend in content consumption on smartphones. Information can be nowadays accessed through various channels including many kinds of screens: TV, computer, tablet or smartphone.[11] Content creators had to accept new mobile-first approaches, which force content producers and operators to create content fully adapted to mobiles. Even global online services providers insist on content adapted to mobile devices. Google for example punish content providers with non-responsible websites by lowering their position in organic Search results. Thus, smartphones and other easily transportable devices such as tablets caused shift in online content consumption. The three significant changes are:

1. shifts in traditional news flow cycles,
2. heightened accountability,
3. and evolving news values.[12]

Positive impact of content consumption on mobile devices is undeniable. The trend of mobile devices usage is so popular that there are some pioneers on the market, who experience with "mobile-only" strategies, and they don't even count with desktop devices as possible vehicle for content consumption. For every content producer it is necessary to optimize the effectiveness of online advertising systems and modify advertisement formats ratio in favour of those accepted by users. Advertisement and subscription models for users should be considered a strategic approach which can decrease revenues from classical revenue sources while fostering the increase of user-friendly online advertising formats that consider the preferences of users.[13]

2 Methodology

Digitalization and demand of users to consume content online forced content producers to extend their content distribution channels by internet. However, the internet is historically perceived as source of free accessible content despite the fact, content production costs finance and time sources. There are several options how to monetize online content and new strategies are still emerging. The main aim of the article is to discover interest and motivators to pay for online media services and content within a defined target group. University students in all years of study were identified as object of research. Students as respondents were in age from 18 to 25 years old, both genders, from all city sizes and in various financial situations. Students were chosen as respondents especially because they represent a new generation of the internet consumers who understand a value of content, however they mostly have only limited financial possibilities due to lack of the income from a regular work and

[10] WESTLUND, O.: Mobile news. In *Digital Journalism*, 2013, Vol. 1, No. 1, p. 6.
[11] MIKLOSIK, A.: Changes in purchasing decision-making process of consumers in the digital era. In *European Journal Of Science And Theology*, 2015, Vol. 11, No. 6, p. 172-174.
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due to total or partial financial dependency on parents. Due to financial limitations they often have to think carefully in what goods or services they will invest their finance. The population for our research consisted of all university students aged 18 to 25 years. The sample size consists of 244 students. A convenience sample was utilized as a sampling method. A questionnaire was utilized as a primary research method. The questionnaire was created in Microsoft Forms online service and consisted of 20 questions. This article processes seven of them, directly focused on motivators and interest to pay for various forms of content on the internet. Questions were divided into two types. The first type of questions was focused on currently active subscription on some online platform offering particular type of content, the second type of questions asked about motivators and demotivators to active paid subscription on some online platform offering particular type of content. Last question asked, if a student could have only one subscription for content on the internet what type it would be. The whole convenience sample answered all of the questions within the processed part of the questionnaire. Results of the research show that university students are willing to pay for platforms containing online content, however only for particular preferred types of it. A decision about the type is determined by several motivators and demotivators, which are listed and described in the Results and discussion part of the article.

3 Results and discussion

The first question was focused on the content websites. The questions asked whether users have an active paid subscription to any online content website. Majority of respondents answered this question in a negative way (64% of respondents, which in absolute terms represents the number of 156), and thus, they do not have such an active paid subscription. Conversely, 36% of respondents (88) are subscribed to some paid online content website (Chart 1).

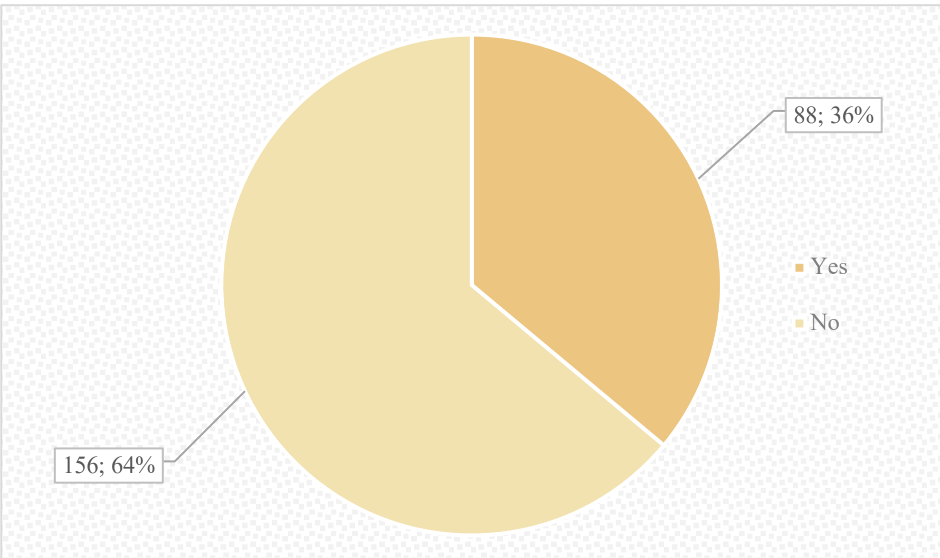

Chart 1: Active subscription to online content website
Source: Own processing.

The second part of the first question was also focused on motivators and demotivators of the active paid subscription to some content website. The results below show all the answers cleared of duplicated answers.

Motivators to have an active paid subscription to any online content website:
1. Demand for serious source of information,
2. demand to see blocked content,
3. education,
4. be informed,
5. discounts,
6. payment is support for redactors,
7. availability of exclusive content.

Demotivators to not have an active paid subscription to any online content website:
1. availability of an information on free websites,
2. availability of an information on foreign websites,
3. availability in print form,
4. unoriginal content,
5. paid subscription for audio platforms, which offer the same information in form of podcasts.

The second question was of a similar focus, however the respondents were asked whether they have an active paid subscription to any online video platform. In this case, the answer of most of the respondents was the opposite, and thus up to 84% (204 respondents in absolute terms) of respondents do pay for subscriptions on some online video platform. On the contrary, the number of respondents who do not pay for such online video content was 40 (16%) (Chart 2).

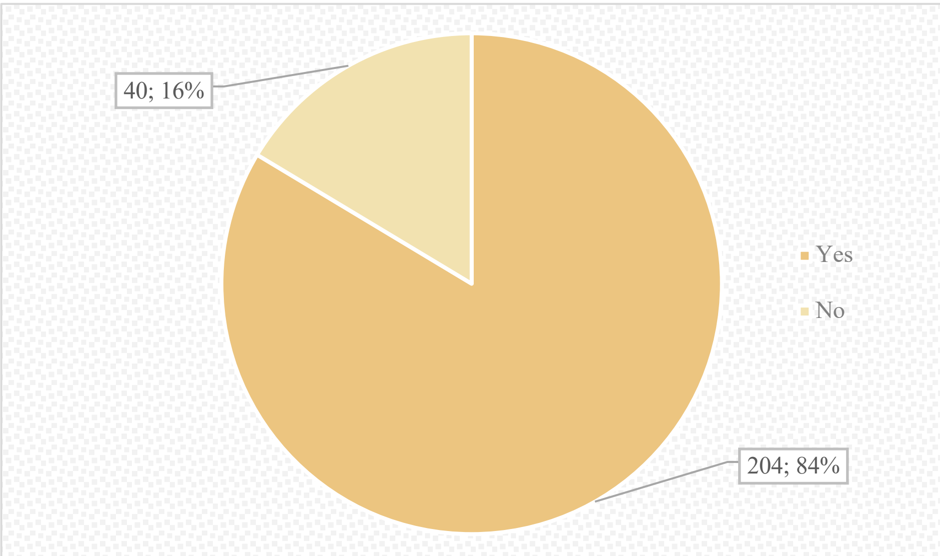

Chart 2: Active paid subscription to online video platform
Source: Own processing.

The second part of the second question also asked about motivators and demotivators of the active paid subscription to some video website or platform. The results below show all the answers cleared of duplicated answers. Motivators to have an active paid subscription to some video website or platform:
- Wide offer of serials,
- option for family subscription,
- cheap subscription,
- no ads,

- good video quality,
- possibility to pause anytime,
- saver in terms of viruses in comparison to other video streaming platforms,
- abstention of competitors,
- availability of new movies and serials,
- possibility to watch in foreign language,
- fluent streaming,
- possibility to download and watch offline,
- watch what I want to, when I want to and how long I want to,
- great user experience,
- I am saving time searching movies,
- comfortability,
- unlimited time to watch video content,
- personalized content,
- support artist, no pirates.

Demotivators to not have an active paid subscription to some video website or platform:
- availability of movies and serials also on free streaming platforms,
- I'm using YouTube for watching video content,
- I watch TV.

The third question was focused on the paid audio content, so the form of the question was as follows: "Do you have an active paid subscription to any online audio platform?" In this case, most responses were positive as well, whereas up to 69% (168 in absolute terms) of the respondents indicated that they do pay for such an audio content and the remaining 31% (76 in absolute terms) are not, on the contrary, paying for the similar content (Chart 3).

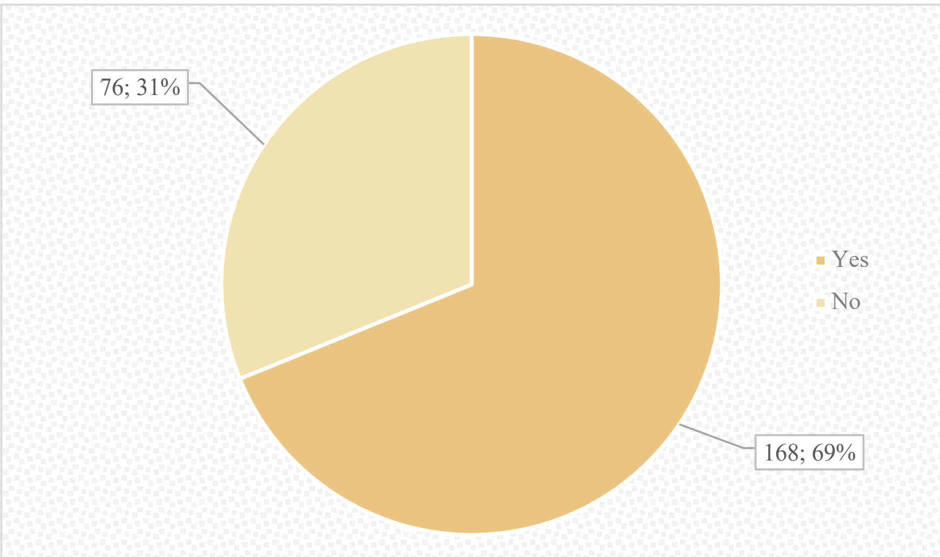

Chart 3: Active paid subscription to online audio platform
Source: Own processing.

The second part of the third question also asked about motivators and demotivators of an active paid subscription to some audio website or platform. The results below show all the answers cleared of duplicated answers.

Motivators to have an active paid subscription to some audio website or platform:
- Wide music selection,
- I don't have to download music into smartphone,
- no advertisement,
- faster than traditional audio formats (such as .mp3, .mp4, etc.),
- safer than download music,
- possibility to save songs,
- possibility to listen offline,
- it doesn't take smartphone memory,
- very good usability,
- easy search,
- possibility to listen to already created music albums,
- I want to support artist,
- It's cheap and comfortable,
- paid versions have no limitations,
- personalized content,
- easy availability of foreign podcasts,
- family subscription,
- great usability,
- I don't have to illegally download music.

Demotivators to not have an active paid subscription to some audio website or platform:
- I use other free music platforms such as YouTube, Soundcloud and similar,
- I listen to radio,
- I only listen to podcast, and they are free on other platforms,
- I collect LP, so I rather buy physical item than virtual subscription,
- it is possible to listen to same or similar content also on free platforms,
- it's very mobile data demanding.

The last question represented a sum of the previous questions and asked the respondents that if they had to choose to pay for only one online platform, which type would it be. More than half of the respondents (53% of all respondents, i.e. 128 respondents in absolute terms) answered that it would be a video content such as Netflix, etc., slightly fewer respondents (34% of respondents, i.e. 84 respondents in absolute terms) chose the option of audio content and the least number of respondents (13% of respondents, i.e. 32 respondents in absolute terms) would choose text content such as news, etc. (Chart 4).

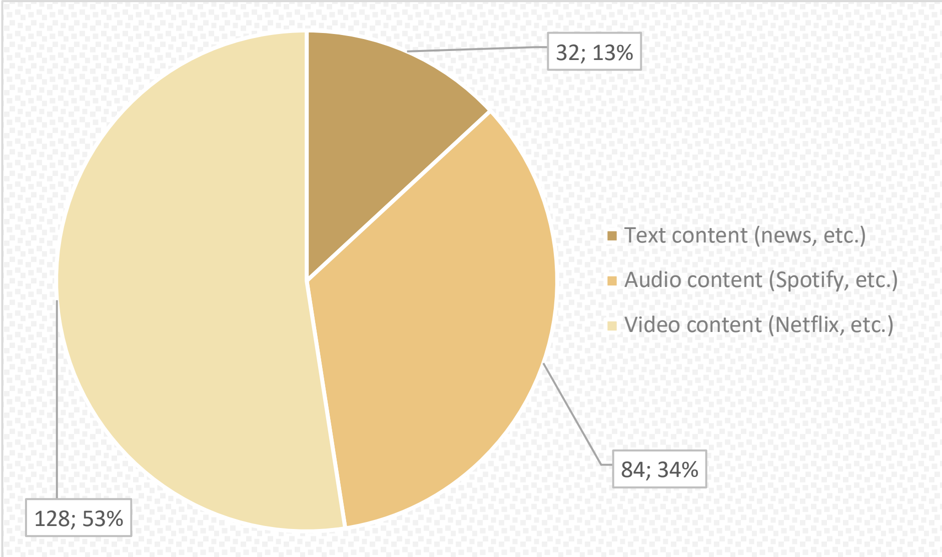

Chart 4: Choice to pay for the one online content only
Source: Own processing.

Conclusion

People, content consumer, gained an option to consume content online, since internet has become a mass medium. Initially, the content was free. However, content producers have significant costs connected to content production and distribution via internet. Thus, it is necessary to create the new monetization strategies, which will cover content production and distribution costs. One of the most spread strategies is a subscription model, which users can use for an access to a content on online website or platform. The article focuses on interest and motivators to subscribe for an online content within a defined target group. The target group was identified as university students. The findings of the paper discovered, that 84% of the respondents currently have the subscription for some website or platform, which offer video content. The most significant motivators to have an active subscription are rich offer of serials and other shows, attractive sharable subscription model, financially effective subscription model, no advertisement, which interrupts watched show and good video quality. In terms of subscription model for audio formats 69% of respondents currently have an active subscription to some website or platform offering audio formats. The most significant motivators are rich offer of audio formats, possibility to listen online, no advertisement, easiness of use, and safe and legal downloading of music and other audio formats. The less respondents have an active subscription for text content on some content website. Only 36% of them have an active subscription to some text content website or platform. Main motivators are demand for serious source of information, curiosity to see blocked content, people's trust to subscription-based website and consider them a tool for education and seek information on these websites. The mist significant demotivators are availability of information in another free websites, availability of information for free on foreign websites and availability in print form. Results of the research show, that university students are willing to pay mostly for entertainment type of content and the best motivators are wide offer of content, lack of advertisement and low fees. However, interest in subscription for more educational and more informative types of content such as audio and text is significantly lower. Reasons are availability of same information on other free accessible websites and availability in print form. The last question confirmed the expected. In case a respondent could choose only from one type of a content for subscription the most of them would choose video. The second was audio and in the last text. To motivate users for the paid subscription content, providers have to create a unique content and offer lucrative subscription model and adequate prices. The findings of the research can serve as useful study for content producers, who utilize also online channels to spread their content. They can modify their products and payment options to meet identified motivators of potential customers and to evoke an interest to apply for paid subscription. The conclusions are also useful for researchers, who can use the paper for next research. The research was limited by thematic focus of convenience sample and also by definition of target group university students. The next research in the area should focus on another target groups and also on the perception of online advertisement by content consumer.

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ANALYSIS OF SHOPPING BEHAVIOR IN THE FURNITURE SEGMENT DURING THE COVID-19

Kukura Marek

Abstract
The arrival of a new pandemic not only affected society from a health point of view, but also affected consumer's shopping behavior. In the last decade, there has been a significant increase in informatization, which has affected behavior in all areas of purchasing, but the furniture segment has shown resistance. The feeling of touch, the ability to perceive colors were factors that were inextricably linked to the purchase of furniture. However, the pandemic did not give consumers a choice and buying furniture online became a reality. In order to be able to set a business strategy, it is necessary to know consumer shopping behavior. In order to correctly identify consumer behavior, we must use statistical methods that point to hidden statistical dependencies and relationships. We use Chi-square analysis for analysis dependence of variable, cluster analysis for summary of online shopping and factor analysis for summarization profile of purchased furniture. Our standardized survey and results of statistical methods prove that Slovak consumer is not more conservative and adapt for the new situation.

Key words:
Consumer Behaviour. Coronavirus. Furniture segment.

Introduction

Before March 2020, everything seemed perfect and I cannot imagine that the development of a consumer society could stop anything. The total expenditure of households in Slovakia has been growing for a long time and there was no furniture industry either. While in 2013 a person spent an average of 2.88 € per month on furniture and home furnishings, in 2019 it was 6.79 €.[1] This increase in consumption has become an attraction for many small investors and entrepreneurs. But no one knew how the way of life could change from month to month. For the first few months, people live in ignorance and manifest themselves in a syndrome of caution and fear. They built up large supplies of food and there is nothing but Covid 19. One lockdown alternating with another caused financial problems for physical stores, which not only brought about a change in our daily lives, but also had to adapt to consumers, manufacturers and also retailers. Monitoring and eliminating costs (employees, energy) was the only solution for many companies, others switched to a new circular model and many small entrepreneurs were forced into the online space. Online space has long been popular for shopping for clothes, drugstores or vacations. In order to deal with the emergence of e-commerce activities, it is necessary to consider online consumers' decision-making styles that influence the willingness of online consumers to purchase products.[2] However, has the furniture segment also created a space in this market or has the Slovak consumer remained conservative?

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1 Consumer Behavior

Consumer behavior is a broad discipline that can be understood by how the consumer behaves at all stages of the consumer's purchasing decision.[3] We currently know 5 basic steps in the consumer's purchasing decision-making process: knowing the problem, finding information, evaluating alternatives, buying and the result.[4] The most important step in the purchasing decision process is the act of purchasing itself, which can also be described as a decision. The decision is an open act of choice that is up to us.[5] Well, it's not quite like that. Purchasing and our decision are influenced by factors that subconsciously affect our decision-making. The first group is represented by cultural factors, which include culture, subculture and the social class. Within social factors, consumer behavior is influenced by the reference group, family and social role and status. Consumers shopping behavior is also influenced by psychological factors, including motivation, perception, learning, beliefs and attitudes. With regard to personal factors, it is stated that the age of the buyer, the current stage of the family life cycle, employment and economic circumstances, his personality and self-image, lifestyle and values significantly influence purchasing decisions.[6]

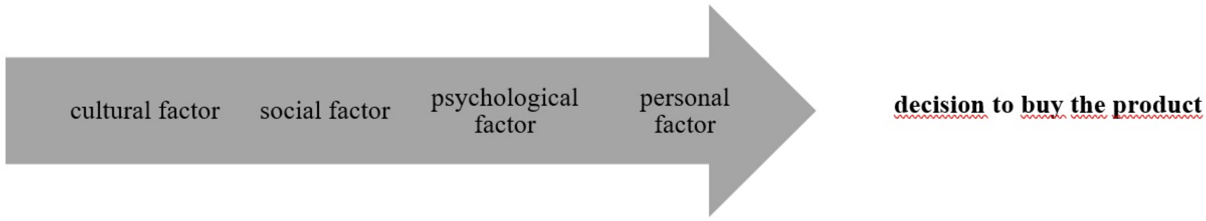

Chart 1: Factors influencing consumer behavior
Source: KULČÁKOVÁ, M., RICHTEROVÁ, K.: *Spotrebiteľ na trhu*. Bratislava : Sprint, 1997, p. 182.

2 Methodology

2.1 Cluster analysis

Cluster analysis is primarily focused on searching for similarities or differences among the examined objects. Cluster analysis provides one, empirically based, means for explicit classifying objects.[7] The best results of hierarchical clustering are provided by the Ward method. N clusters are combined in successive steps to make one cluster containing all investigated objects. At each step, a pair of clusters whose merger minimizes the increase in the total sum of squares within-group error are merged. This increase is expressed as sum of squared differences between means of particular variables for these clusters divided by sum of reciprocal of their cardinalities.[8]

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$$ESS = \sum_{i=1}^{n_h} \sum_{h=1}^{q} (X_{hi} - \bar{X}_{C_h})^2 \quad (1)$$

$\bar{X}_{C_h}$ - the vector of the averages of the values in the cluster,
X_{hi}- vector of values of the character of the i-th object C_h.[9]

2.2 Chi-square analysis

Chi-square analysis is used when a variable is measured at the nominal (also called categorical) level.[10] The Chi-square test shows the relationship between the two variables examined.
H_0: between variables is not statistical significant dependence
H_1: between variables is statistical significant dependence

To accept or reject the null hypothesis, we must calculate test statistics, which we express as:[11]

$$X^2 = \sum \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}} \quad (1)$$

If the calculated statistics are larger than the table value, we reject the null hypothesis and accept the alternative hypothesis.

2.3 Factor analysis

Factor analysis (FA) provides linear factors that describe the relationships between individual variables of a data set.[12] In our research we use PCA (principal compoment analysis) method, which reduces more variables to less while keeping as much information as possible.

3 Results

For processing the results, we used a standardized questionnaire mediated using the CAWI method. The survey was conducted in March 2021, so the possibility of other mediation of the questionnaire was not possible.

Table 1: Information about file

Age	20 and less	20
	21 – 28	251
	29 – 35	234
	36 – 50	141
	viac ako 50	74
Gender	man	256
	woman	464
Place of living	city	344

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	village	376
Region	Bratislava	64
	Trnava	56
	Nitra	60
	Trencin	86
	Zilina	148
	Banska Bystrica	82
	Kosice	142
	Presov	82
Employment status	employment	483
	unemployment	17
	student	183
	self-employed	37
Multigenerational household	yes	112
	no	608

Source: Own processing.

The age groups 21 - 28 years and 29 - 35 years have the most numerous representation in our group. These age categories are important as they are the ones that make the most of online shopping. Women are more numerous in the group. The distribution of regions is relatively even. In terms of employment status, most people in the group are employed. The last 2 variables are housing in the countryside / city, which has an almost identical distribution and housing in multi-generation households, where 15.55% of respondents indicated that they live in multi-generation households.

3.1 Analysis of the dependence of segmentation variables on type of purchases

During the Covid-19 pandemic, buying furniture online became the only possible means of purchasing for a long time, so it is necessary to monitor the factors that may affect the preferences of the respondents' place of purchase. We will use the Chi-square test to determine the dependence.

H_0: there is no dependence between the monitored variables

H_1: there is dependence between the monitored variables

Table 2: Analysis of the dependence of segmentation variables on online purchases

	Chi-square	**p-value**
Age	**15,966**	**0,003**
Gender	1,335	0,248
Place of living	**25,146**	**0,000**
Region	**15,446**	**0,031**
Employment status	**16,829**	**0,001**
Salary	**4,64**	**0,031**
Multigenerational household	0,717	0,397
Square meters of living place	2,774	0,428

Source: Own processing.

Based on $\alpha = 0.05$, we state the statistical significance for the variables Age, Place of living, Region, Employment status and Salary and thus reject the null hypothesis. The variables Gender, Multigenerational household and Square meters of living place did not show a dependence between the variables and thus we accept the null hypothesis. For the age variable, online shopping is preferred by age categories 36-50 and 20 and less. The surprising fact is that people from the countryside shop more online than people from the city. On the other hand, the availability of stores for these respondents more demanding. Within the employment status variable, students and self-employed shop online most often. Within the wage, online shopping is preferred by respondents with a lower wage than the average wage in Slovakia.

3.2 Purchase analysis before and during covid 19

The lockdown period was for many an opportunity for reconstruction, delayed renovations. For many the transition to a home office has literally created an obligation to create a work corner within the household for a long period of time. The percentage increase in online purchases during the Covid 19 period, which was largely accompanied by a lockdown, is at 140%, reflecting a high increase over a period of uncertainty.

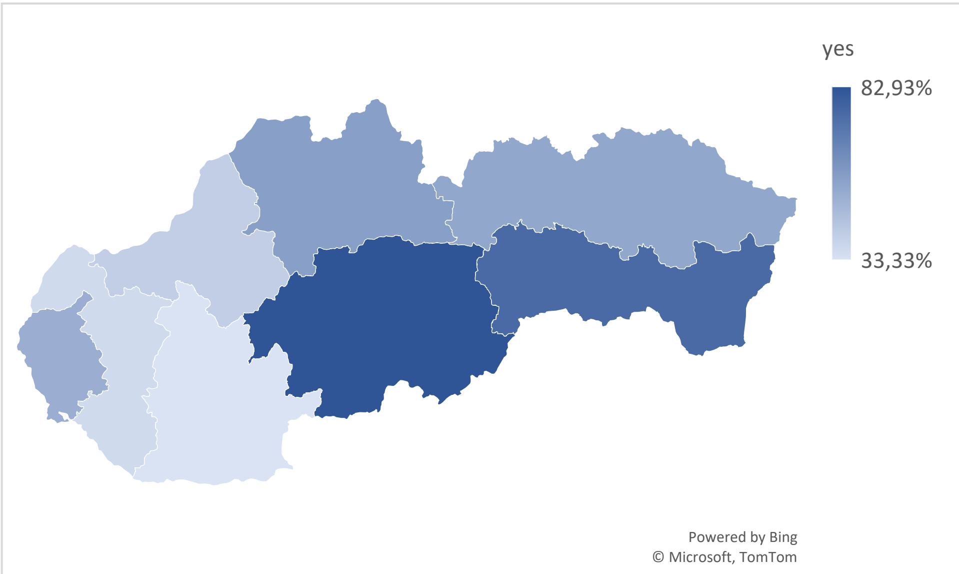


Chart 2: Online shopping before Covid 19 in Region of Slovakia
Source: Own processing.

Chart 2 shows that the Banska Bystrica region and the Kosice region in particular bought the most furniture on the Internet before Covid 19. This fact is, of course, also influenced by the lack of furniture stores compared to western Slovakia, where one has unlimited possibilities of showrooms and stores.

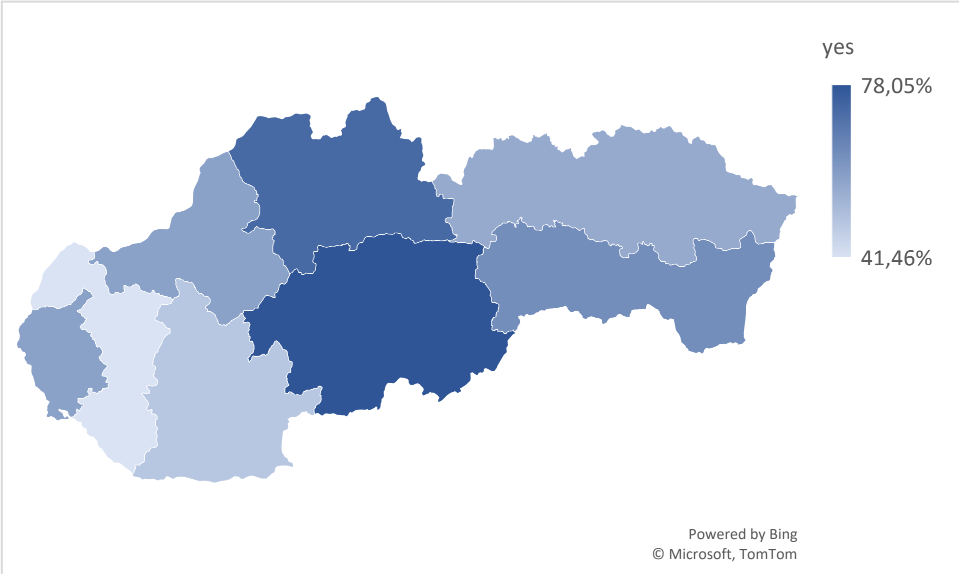
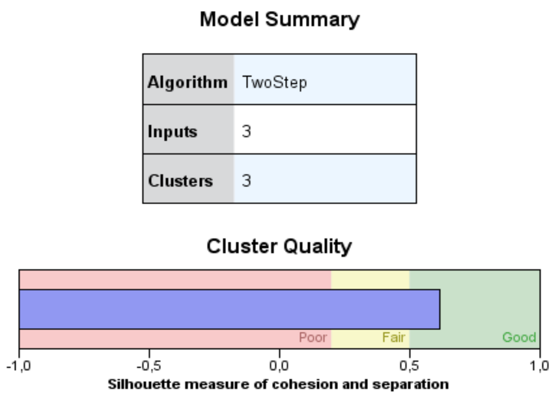


Chart 3: Online shopping during Covid 19 in Region of Slovakia
Source: Own processing.

Chart 3 shows the situation of online shopping in Slovakia during Covid 19. As can be observed on average, we observe an overall darker coloration of the whole of Slovakia. The fact of the increase in online shopping in the Zilina and Trencin region is interesting. This increase was caused by the closure of the border with Poland, from where many people in the region buy furniture.

3.3 Consumer segmentation of online shopping

For segmentation, we will use Ward's clustering method, which redistributes objects into clusters as evenly as possible so that they are as uniform as possible. The variables are included in the cluster analysis: X1- Have you purchased furniture online in the last 12 months? X2- Do "virtual tools" help you make online shopping decisions, where you can independently assemble the required set of furniture? X3- How much do you spend most often when buying furniture online? First, it is important to check the suitability of the data and the recommended number of clusters.



Picture 1: Suitability of variables for cluster analysis
Source: Own processing.

The data is suitable for clustering, so we can proceed to cluster analysis with 3 clusters, which will provide us with an optimal solution. 600 respondents entered the model and those who did not shop online were excluded.

Table 3: Cluster 1

X1	X2	X3
0,698795	0,39759	2,843373

Source: Own processing.

The first group included the respondents who bought the least during the Covid 19 period, while the average amount spent is also the lowest in the range of € 100-250. Respondents are also not helped by online virtual tools when shopping online. The cluster consists of 166 respondents, which represents 27.7%.

Table 4: Cluster 2

X1	X2	X3
0,781991	0,606635	3,07109

Source: Own processing.

Respondents to the second cluster bought more regularly during the pandemic, and virtual instruments are also helpful in this cluster. The average price spent on online furniture purchases is in the range of 251-500 €. The cluster makes up 35.17% of respondents.

Table 5: Cluster 3

X1	X2	X3
0,828829	0,495495	3,135135

Source: Own processing

Despite the fact that the respondents in 3 clusters do not use virtual tools, they made the most online purchases during the pandemic, even on average with the highest expenditure. 3 clusters is the largest and consisted of 222 respondents, which represents 37%.

3.4 Profile of purchased furniture

For the overall furniture segment, it is necessary to know what types of furniture, in which rooms consumers buy online. We will use factor analysis to prove the relationship. The key role in factor analysis is the correlation between the input variables.

Table 6: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,584
Bartlett's Test of Sphericity	Approx. Chi-Square	317,616
	df	21
	Sig.	,000

Source: Own processing

As the KMO test is higher than 0.5, we can work with factor analysis. A value of 0.584 represents the mediocre correlation.

Table 7: New components

	1	2	3
Living room			-,520

Nurseries		,864	
Bathroom	,773		
Work room			,806
Kitchen and dining room	,701		
Cloakroom and hall	,534		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 7 iterations.
Source: Own processing

The factor analysis showed a relationship when buying furniture for the bathroom, hallway and kitchen together with the dining room. Another component is the purchase of furniture for the study and living room. A separate factor is the furniture in the children's room.

Conclusion

The attractiveness of the furniture market is no doubt about the attraction for many investors. However, it needs to adapt to the latest trends. Conservative consumers when buying furniture as we are accustomed are a thing of the past and the transition to online shopping did not take long. Of course, everything was accelerated by Covid 19, which did not give sellers a choice. As our survey showed, 66.39% bought during the Covid 19, which represents two thirds of respondents. The main factors that influence online shopping are Age, Place of living, Region, Employment status and Salary. If we look at the change in online shopping within the regions of Slovakia, we observe the biggest changes in the regions near the Polish border. In the long run, a large share of online shopping is demonstrated by the Banska Bystrica region, where there may be just enough stone shops and people have no choice. Traveling to clasic stores is not worth it financially, so they will at least take advantage of online sales and that is the price. Factors such as auxiliary virtual helper or the feeling of touching the material, rehearsals do not play a role and respondents are able to shop based on the description and pictures. If retailers want to take advantage of product proposals for sale, it would be appropriate to offer consumers products from certain sections for which a relationship has been demonstrated through factor analysis. First factor show relation between furniture for the bathroom, hallway and kitchen together with the dining room. Second factor show relation for living room and work room. The third factor consist of Nurseries, which is a special factor, and many times the largest expenses are spent on children's rooms. Based on the analysis, we state that the Slovak consumer no longer prefers physical purchase but rather online shopping. For large companies, of course, large stores make sense, but for starting producers / retailers it is an unnecessary luxury, only in terms of space, staff and ever-increasing energy prices, it is no longer needed today and these resources can be allocated much better, for example transition to a circular economy.

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A NEW CONCEPT OF THE MARKETING COMMUNICATIONS DIAGNOSTIC AUDIT

Václav Kupec

Abstract
The current economic trend is driven by changes associated with the global pandemic situation. These changes are also new opportunities for business and its constituent parts. One exposed aspect of this pandemic business is modern marketing communication. Audit approaches can be used to bring a standard of due professional care to marketing communications. However, this gives rise to an elementary problem of application – auditing is methodologically demanding and is not commonly used in marketing communications. It is therefore necessary to investigate how auditing can be applied on an interdisciplinary basis in marketing communications. The research objective of the present paper is therefore to construct a specific audit model that verifies the risk processes of marketing communications and proposes solutions to any deficiencies identified. This model takes inspiration from medical science, which uses precisely the methodology of diagnostic points (temperature, pulse, pressure, etc.) in human medical examinations. If the diagnostic points are in order, a positive assurance of human health is issued. If the diagnosis is not in order, a more in-depth approach is taken to the situation. This model can also be effectively applied in the process of marketing communications. The basic approaches of audit diagnostics are based on identified risk points in marketing communications that provide important information about its quality. And once gain, if the diagnostic points are in order, a positive assurance is issued on the health of the marketing communications. If the diagnostics are not in order, the situation is taken to a deeper level by setting audit recommendations. This approach makes available a wide range of audit approaches for the entire topic of marketing communications. A diagnostic audit can thereby help marketing management in these current challenging times, while expanding the possibilities of effective application of marketing, which ultimately can help businesses affected by the pandemic.

Key words:
Audit. Communication. Diagnostic. Management. Marketing. Pandemic.

Motto

"If one truly has an interest in the sciences, the first thing one feels when engaging in them is their interconnectedness, which causes them to attract, support, and clarify each other and means that one cannot do without the other."

Jean Jacques Rousseau

1 Introduction and Review of Literature

"Several changes in the modern technological age of information have made people pay more attention to communication as an important tool in successful management."[1] These changes have been enhanced by the changes associated with the pandemic situation worldwide.[2] The aforementioned changes are associated with new opportunities for the economy, business, and the parts thereof. One of the most significant exposures of pandemic business is modern marketing communications.[3] Marketing communications that worked in an offline

[1] CHATURVEDI, P. D., CHATURVEDI, M.: *Business communication: concepts, cases and application.* New Delhi : Pearson, 2011, p. 11.
[2] JAYASURIYA DALUWATHUMULLAGAMAGE, D., SIMS, A.: Blockchain-Enabled Corporate Governance and Regulation. In *International Journal of Financial Studies*, 2020, Vol. 8, No. 36, p. 1.
[3] BLAKEMAN, R.: *Integrated Marketing Communication: Creative Strategy from Idea to Implementation*. London : Rowman & Littlefield, 2015, p. 32.

environment[4] have now been forced to transform into marketing communications that must work in an online environment.[5] This brings new challenges that need to be adequately addressed. Marketing communications and its definition must be defined iteratively. The author duo Chaturvedi – Chaturvedi approach the definition of communications as follows: *"Marketing communication is information, benefits, attributes, perceptual image/persona, feeling, and attitudes all bundled into one."*[6] Fill,[7] Přikrylová et al.,[8] and Kotler[9] approach the entire issue in a similar way. Hesková's theory of marketing communications summarizes in general and then states that it is the facilitating of information and its contents with the aim of directing consumers' opinions, expectations, and behavior in accordance with specific business objectives.[10] However, the setup and operation of marketing communications need to be attended to. Audit approaches can be used to bring a standard of due professional care to marketing communications.[11] The concept of audit approaches has historically[12] and methodologically[13] been based on the following objectives: *"The aim was that fraud, deceit, and misrepresentation could be discovered, punished, and eventually corrected in order to avoid future fraudulent situations like the ones that had occurred."*[14] The definition of audit, oriented on the internal business environment, is as follows: *"It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes."*[15] Auditing therefore helps businesses manage processes, which also applies to marketing communication. However, based on the above issues and a review of the literature, an elementary application problem arises (P1). The application of auditing is methodologically demanding and is not used in marketing communication. It is therefore necessary to investigate how to apply auditing on an interdisciplinary basis in marketing communications. Therefore, the research objective (A1) of the present paper is to construct a specific audit model that verifies the risk processes of marketing communications and proposes solutions to the identified deficiencies. The presented research outputs are related to the scientific projects *Marketing Communication and Generation Z in the Context of Business Management*[16] and *Marketing Models in the Industry 4.0 Environment*.[17] Symbiotic design results are presented below.

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[4] KARLÍČEK, M. et al.: *Marketingová komunikace: Jak komunikovat na našem trhu*, Praha : Grada Publishing, 2016, p. 23.

[5] PŘIKRYLOVÁ, J.: *Moderní marketingová komunikace*. Praha : Grada Publishing, 2019, p. 169.

[6] CHATURVEDI, P. D., CHATURVEDI, M.: *Business communication: concepts, cases and application.* New Delhi : Pearson, 2011, p. 302.

[7] FILL, CH.: *Simply Marketing Communication.* Harlow : Pearson, 2006, p. 9.

[8] PŘIKRYLOVÁ, J., JAHODOVÁ, H.: *Moderní marketingová komunikace*. Praha : Grada Publishing, 2010, p. 41.

[9] KOTLER, P.: *Management Marketing*. Praha : Victoria Publishing, 1991, p. 121.

[10] HESKOVÁ, M.: *Marketingová komunikace součást marketingového mixu*. Praha : VŠE, 2001, p. 22.

[11] KUPEC, V. et al.: Conceptual Comparison of Internal Audit and Internal Control in the Marketing Environment. In *Sustainability,* 2021, Vol. 13, No. 12, p. 1.

[12] KUPEC, V.: *Audit Essential.* Praha : Vysoká škola finanční a správní, 2021, p. 23.

[13] MOELLER, R. R.: *Brink's Modern Internal Auditing*. New Jersey : John Wiley & Sons, 2005, p. 4.

[14] PETRAŞCU, D., TIEANU, A.: The Role of Internal Audit in Fraud Prevention and Detection. In *Procedia Economics and Finance*, 2014, Vol. 16, p. 491.

[15] RAMAMOORTI, P.: *Internal Auditing: History, Evolution, and Prospect.* Altamonte Springs : The Institute of Internal Auditors, 2003, p. 13.

[16] KUPEC, V.: Marketing Communication and Generation Z in the Context of Business Management. In MAGÁL, P., PETRANOVÁ, D. (eds.): *Megatrends and Media: Critique in Media, Critique of Media*. Trnava : FMK UCM v Trnave, 2016, p. 290.

[17] KUPEC, V.: Audit of a Buyer's Selective Attention in the Online Environment. In PETRANOVÁ, D., ČÁBYOVÁ, L., BEZÁKOVÁ, Z. (eds.): *MARKETING IDENTITY: Online rules – part II.* Trnava : UCM v Trnave, 2017, p. 126.

2 Material and Methodology

The material of the present study is the audit process in a marketing communications environment. At the same time, marketing communications determine the audit process; for this reason, communication is given primary attention. Marketing communications are defined by Lukáč as an elementary tool of business processes,[18] which is verified by Réklaitis – Pileliené,[19] the marketing perspective of Kotler – Keller,[20] and the management perspective of Bednárik.[21] *"Marketing communications should be an audience-centred activity."*[22] The importance of attending to marketing communications is subsequently emphasized by Kitchenko – Kuchina[23] and Kupec, the latter of whom directly investigates the relationship between communication and auditing;[24] its research is defined in the following section.

"It has been claimed that auditing is an old science with well-established principles"[25] The academic realm and Mullerová's theory define auditing as a scientific discipline that observes selected processes, records the results, evaluates them, and draws conclusions.[26] Meoller then adds that the field is primarily a consultancy for stakeholders.[27] Kupec et al. then summarize that auditing provides management with independent assurance (soft consulting).[28] The audit process is primary to fulfilling the research objective of the presented paper. According to Kašparovská et al., the audit process consists of selecting a sample to be audited, determining the state of the business processes, and evaluating these business processes.[29]

"Conducting an audit has its own sequence, i.e. it consists of several successive steps."[30] The audit process differs not only in its objectives but also in its individual stages.[31] The basic stages of the auditing process are preparation, execution, finalization, and post-audit. Synek et al. break down the process in even greater detail: 1. Understanding the object. 2. Setting a goal. 3. Identifying the evidence. 4. Deciding on techniques. 5. Analyzing evidence. 6.

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[18] LUKÁČ, M.: *Koniec neefektívnej marketingovej komunikácie v múzeách*. Trnava : FSV UCM, 2015, p. 32.

[19] RÉKLAITIS, K., PILELIENÉ, L.: Principle Differences between B2B and B2C Marketing Communication Processes. In *Management of Organizations: Systematic Research,* 2019, Vol. 81, p. 75. [online]. [2021-02-04]. Available at: <doi:10.1515/mosr-2019-0005>.

[20] KOTLER, P., KELLER, K. L.: *Marketing management.* Praha : Grada Publishing, 2013, p. 515.

[21] BEDNÁRIK, J.: Change of paradigm in personnel strategy-corporate social responsibility and internal communication. In *Communication Today*, 2019, Vol. 10, No. 2, p. 49. [online]. [2021-02-4]. Available at: <https://www.communicationtoday.sk/wp-content/uploads/04.-BEDNARIK-%E2%80%93-CT-2-2019.pdf>.

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[23] KITCHENKO, O., KUCHINA, P.: Enterprise Communication Policy Indicators Analysis as a Part of Marketing Audit. In *Technology Audit & Production Reserves*, 2019, Vol. 3, No. 4, p. 51. [online]. [2021-02-04]. Available at: <https://doi.org/10.15587/2312-8372.2019.170686>.

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[25] O'REGAN, D.: *Auditor's Dictionary: Terms, Concepts, Processes, and Regulation.* Altamonte Springs : The Institute of Internal Auditors, 2004, p. 28.

[26] MÜLLEROVÁ, L.: *Auditing pro manažery aneb proč a jak se ověřuje účetní závěrka*. Praha : Wolters Kluwer, 2013, p. 11.

[27] MOELLER, R. R.: *Brink's Modern Internal Auditing: A Common Body of Knowledge*. New Jersey : John Wiley & Sons, 2016, p. 9.

[28] KUPEC, V. et al.: Conceptual Comparison of Internal Audit and Internal Control in the Marketing Environment. In *Sustainability,* 2021, Vol. 13, No. 12, p. 12.

[29] KAŠPAROVSKÁ, V. et al.: *Řízení obchodních bank: vybrané kapitoly*. Praha : C. H. Beck, 2006, p. 247.

[30] KUPEC, V.: *Audit*. Praha : Vysoká škola finanční a správní, 2021, p. 57.

[31] KUPEC, V.: *Audit Essential.* Praha : Vysoká škola finanční a správní, 2021, p. 59.

Formulating findings. 7. Preparing the report. 8. Post-audit implementation.[32] It is this specific audit process[33] that can present an application problem (P1) in marketing communications. Indeed, the individual stages represent the burdens in terms of time, technical expertise, and finances.

Therefore, the research objective (A1) of the present paper is to construct a specific audit model that verifies the risk processes of marketing communications and proposes solutions to the identified deficiencies. Methodologically, the research objective has been pursued by conducting a literature review[34] and synthesizing the findings.[35] According to Machi – McEvoy, literature review presents a logically argued case founded on a comprehensive understanding of the current state of knowledge about a topic of study.[36] Its subsequent synthesis, according to the theories of the Bryman – Bell, allows links between the processes under study to be revealed, including their correlations.[37] These methods enable the research objective (A1) to be met.

3 Model and Results

Kupec[38] presents an innovative conception of the audit process, which is then elaborated in an interdisciplinary manner.[39] The innovative concept in question is the diagnostic audit model. This model takes inspiration from medical science, which uses precisely the methodology of diagnostic points[40] in human medical examinations. During regular medical examinations, functions on the human body are checked that provide important information about human health. If the diagnostics are in order, a positive assurance of human health is issued. If the diagnosis is not in order, a more in-depth approach is taken to the situation. This model can also be effectively applied in the process of marketing communications.[41] The developed idea of the diagnostic audit of marketing communications[42] consists of the transfer of methodological knowledge from medical science. Though every patient is unique, universal diagnostic approaches can be applied to them, making regular check-ups more effective. The following universal diagnostic approaches can therefore be proposed for the issue of marketing communications. The basic approaches of auditing diagnosis are thus based on universally defined risk points that provide important information about the quality of

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[32] SYNEK, M. et al.: *Manažerská ekonomika*. Praha : Grada Publishing, 2011, p. 429.
[33] KUPEC, V. et al.: Conceptual Comparison of Internal Audit and Internal Control in the Marketing Environment. In *Sustainability,* 2021, Vol. 13, No. 12, p. 12.
[34] MACHI, L. A., MCEVOY, B. T.: *The Literature Review: Six Steps to Succesp.* California : Corwin, 2012, p. 3.
[35] BRYMAN, A., BELL, E.: *Business Research Methodp.* Oxford : Oxford University Press, 2011, p. 18.
[36] MACHI, L. A., MCEVOY, B. T.: *The Literature Review: Six Steps to Succes.* California : Corwin, 2012, p. 3.
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[40] KUPEC, V.: Diagnostic Audit in the Museum Environment. In *Modern Strategy and Management Challenges in Cultural Organizations,* 2021. Not yet published.
[41] PŘIKRYLOVÁ, J.: *Moderní marketingová komunikace*. Praha : Grada Publishing, 2019, p. 24.
[42] RÉKLAITIS, K., PILELIENÉ, L.: Principle Differences between B2B and B2C Marketing Communication Processes. In *Management of Organizations: Systematic Research,* 2019, Vol. 81, p. 75. [online]. [2021-02-04]. Available at: <doi:10.1515/mosr-2019-0005>.

communication (see below). This concept makes available a wide range of audit approaches in the topic of marketing communications as well.

Some risks can be identified in the communication process that constitute the diagnostic points of the audit. This area is characterized by the following risks (see Table 1): 1.1 Insufficient client's specification; 1.2 Wrong information provided by client; 1.3 Wrong processing by marketers; 2.1 Wrong strategy set-up; 2.2 Obsolete marketing methods application; 2.3 Violation of market rules; 3.1 Wrong strategy implementation; 3.2 Low campaign authenticity; 3.3 Premature campaign ending; 4.1 Breaching marketing strategy; 4.2 Harming campaign by vendors; 4.3 Wrong campaign management; 5.1 Leakage of marketing data; 5.2 Late client's payments; 5.3 Lack of campaign assessment.[43]

Marketing Process				
Create value *for* customers and build customer relationship				**Capture value *from* customers in return**
1. Step	**2. Step**	**3. Step**	**4. Step**	**5. Step**
Potential Risks				
1.1 Insufficient client's specification 1.2 Wrong information provided by client 1.3 Wrong processing by marketers	2.1 Wrong strategy set-up 2.2 Obsolete marketing methods application 2.3 Violation of market rules	3.1 Wrong strategy implementation 3.2 Low campaign authenticity 3.3 Premature campaign ending	4.1 Breaching marketing strategy 4.2 Harming campaign by vendors 4.3 Wrong campaign management	5.1 Leakage of marketing data 5.2 Late client's payments 5.3 Lack of campaign assessment (effectivity and impact including)

Table 1: Marketing Process and Potential Risk

Source: KUPEC, V. First Step of Marketing Audit: Risk Analysis. In ČÁBYOVÁ, L., R. RYBANSKÝ a Z. BEZÁKOVÁ: *Marketing Identity: Digital Mirrors – part I.* Trnava : FMK UCM v Trnave, 2018, p. 375.

The diagnostic points set out above will serve as a universal checklist for a diagnostic audit of the marketing communications of any business.[44] Thus, a diagnostic audit of marketing communications can be based primarily on verification, analysis, and auditing of the above diagnostic points. If any findings are documented in these areas, a secondary, specialized audit of the affected area will be conducted. At the same time, it can be stated that the proposed checklist of potential risks or the diagnostic points of marketing communications identified will enable a diagnostic audit to be carried out by marketing experts and any problems that are identified can be worked on with the audit experts.

[43] KUPEC, V.: First Step of Marketing Audit: Risk Analysis. In ČÁBYOVÁ, L., RYBANSKÝ, R., BEZÁKOVÁ, Z. (eds.): *Marketing Identity: Digital Mirrors – part I.* Trnava : FMK UCM v Trnave, 2018, p. 375.

[44] PETRŮ, N., KRAMOLIŠ, J., STUCHLÍK, P.: Marketing tools in the era of digitization and their use in practice by family and other businesses. In *E & M: Economics and Management*, 2020, Vol. 23, No. 1, p. 199.

Discussion and Conclusion

In conclusion, it is necessary for the thesis presented to be placed into the broader context and among other professional theories.[45] This is particularly relevant to the interdisciplinary approach of the proposed diagnostic audit model. It seeks to find the intersections between marketing communications[46] and audit approaches.[47] In so doing, audit approaches and their applications are subject to disciplinary regulations and professional rules, in this case primarily those of the *International Professional Practices Framework*, which provides a conceptual framework for audit performance.[48] When applying the proposed diagnostic audit model, all professional standards must be observed,[49] which the diagnostic audit model fully respects. Another debatable issue may be the application of the proposed diagnostic audit model in terms of the use of time. The reason is that if a comprehensive audit of marketing communications is carried out,[50] the time required for its implementation may be longer than the time of implementation of the diagnostic audit process based on the proposed checklist, see Formula 1. The proposed diagnostic audit model achieves time savings thanks to the proposed checklist; a comprehensive audit[51] of the entire marketing communications process[52] is carried out only in the case of audit findings for any items on the checklist. Thus, the proposed model contributes to solving the challenges of the pandemic situation[53] and brings more operability to the efficiency of management processes.[54]

$$t_{AK} \geq t_{AD}$$

Where:
t_{AK} = time of comprehensive audit
t_{AD} = time of diagnostic audit
Figure 1: Comparison of efficiency of audits performed
Source: Own processing

[45] KUPEC, V., LUKÁČ, M., PÍSAŘ, P.: Diagnostický audit v rodinném podnikání. In PETRŮ, N., TOMÁŠKOVÁ, A. (eds): *Rodinné podnikání: Mezigenerační milníky a generátory jejich hodnoty.* Sborník z mezinárodní vědecké konference. Praha : Vysoká škola finanční a správní, 2021, p. 36.
[46] AGWU, M. E., ONWUEGBUZIE, H. N.: Effects of international marketing environments on entrepreneurship development. In *Journal of Innovation and Entrepreneurship*, Vol. 7, No. 1, p. 1.
[47] FURTUNA, C., CIUCIOI, A.: Internal Audit in the Era of Continuous Transformation. Survey of Internal Auditors in Romania. In *Audit Financiar*, 2019, Vol. 17, p. 452.
[48] NAZAROVA, K. et al.: Preventional audit: Implementation of SOX control to prevent fraud. In *Business Theory and Practice*, 2020, Vol. 21, p. 293.
[49] RAMAMOORTI, P.: *Internal Auditing: History, Evolution, and Prospectp.* Altamonte Springs : The Institute of Internal Auditors, 2003, p. 13.
[50] KITCHENKO, O., KUCHINA, P.: Enterprise Communication Policy Indicators Analysis as a Part of Marketing Audit. In *Technology Audit & Production Reserves*, 2019, Vol. 3, No. 4, p. 51. [online]. [2021-02-04]. Available at: <https://doi.org/10.15587/2312-8372.2019.170686>.
[51] KUANG, Y. F., LEE, G., QIN, B.: Whistleblowing Allegations, Audit Fees, and Internal Control Deficiencies. In *Contemporary Accounting Research*, 2021, Vol. 38, p. 32.
[52] LUKÁČ, M., MIHÁLIK, J.: Data Envelopment Analysis – a Key to the Museum's 'Secret Chamber' of Marketing? In *Communication Today,* 2018, Vol. 9, No. 2, p. 108. [online]. [2020-10-19]. Available at: <https://www.communicationtoday.sk/download/22018/08.-LUKAC-MIHALIK-E28093-CT-2- 2018.pdf>.
[53] JAYASURIYA DALUWATHUMULLAGAMAGE, D., SIMS, A.: Blockchain-Enabled Corporate Governance and Regulation. In *International Journal of Financial Studies*, 2020, Vol. 8, No. 36, p. 1. [online]. Available at: <https://doi.org/10.3390/ijfs8020036>.
[54] TKACHENKO, V. et al.: Theoretical and Methodical Approaches to the Definition of Marketing Risks Management Concept at Industrial Enterprises. In *Marketing and Management of Innovations*, 2019, Vol. 2, p. 228.

The potential limits of diagnostic auditing can then be discussed as well, along with the potential possibilities of this model. One potential limit may be the aforementioned checklist, whose construction is universal and therefore may not cover all risk areas of marketing communications[55] that have their own specific features. Therefore, the proposed checklist should be applied with expert supervision and its application should be modified to address the unique specificities of marketing communications[56] on a case-by-case basis. The potential possibilities of diagnostic auditing in the future can be seen in visionary terms in a broader connection to the digitization[57] of marketing communication[58] processes, which will add elements of automation to the entire field.

The objective (A1) of the present paper was to construct a specific audit model that verifies the risk processes of marketing communications and proposes solutions to the identified deficiencies. This objective was achieved. At the same time, the proposed model does not have greater ambitions to completely replace auditing techniques in a comprehensive way.[59] The diagnostic audit and its model contribute to a wider application of audit approaches in the marketing field, which either does not use these effective methods at all or does so for the most part only sporadically. A diagnostic audit can thereby help marketing management[60] in challenging times while expanding the possibilities of effective application of marketing, which ultimately can help businesses affected by the pandemic.

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[56] KUPEC, V. et al.: Audit of Museum Marketing Communication in the Modern Management Context. In *International Journal of Financial Studies*, 2020, Vol. 8, No. 3, p. 1. [online]. [2021-02-04]. Available at: <doi:10.3390/ijfs8030039>.

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[58] RÉKLAITIS, K., PILELIENÉ, L.: Principle Differences between B2B and B2C Marketing Communication Processes. In *Management of Organizations: Systematic Research,* 2019, Vol. 81, p. 73. [online]. [2021-02-04]. Available at: <doi:10.1515/mosr-2019-0005>.

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[60] RÉKLAITIS, K., PILELIENÉ, L.: Principle Differences between B2B and B2C Marketing Communication Processes. In *Management of Organizations: Systematic Research,* 2019, Vol. 81, p. 75. [online]. [2021-02-04]. Available at: <doi:10.1515/mosr-2019-0005>.

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CURRENT TRENDS IN MARKETING COMMUNICATION DUE TO CHANGES IN CONSUMER SHOPPING BEHAVIOR GENERATION Z

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Abstract:
The aim of the article is to define and characterize the current trends in the development of marketing communications and their tools due to changes in consumer shopping behavior. In the selected market segment, which is mobile communication, we will analyze the development trends of this segment as a whole and describe the current situation in the marketing environment. For the analysis of the mobile communication segment, we use data obtained by secondary marketing research from available sources and internal materials of mobile operators operating on the market of the Czech Republic. In a selected target group of university students in the Czech Republic aged 18 - 25, which represents the generation Z through marketing research, we find out the key facts on the basis of which the consumer of this generation decides to change mobile operator. By combining these two analytical parts, we define the current form and trends in marketing communications and their tools. We will point out the results of secondary research on marketing communications and consumer behavior of a generational cohort of young people and the impact of marketing communications on their lives. At the same time, with partial results of our own survey, we will point out the preferences of factors in purchasing decisions.

Key words:
Brand. Communication Tools. Consumer. Consumer Behavior. Generation Z. Marketing. Marketing Communications. Marketing Research. Media. Mobile Operators. Social Networks. Strategies. Trends.

Introduction

The target group, which is generation Z, is undoubtedly the last recognizable generation by demographics, and trends point to the fact that consumer behavior will change more and more in this as well as in subsequent generational cohorts that will live in the world of technology and digital work. Generation Z, which we can also associate with the name "Digital Native", is a generation that grew up on the World Wide Web. The timing of generation Z is defined differently according to the sources. According to McCrindel, they are members of a group of people born between 1995 and 2009[1]. A typical feature of the Z generation is that they grow up in a completely digital world. They are no strangers to technology and take the Internet connection for granted. They are taught to be constantly online and to communicate simultaneously on several different communication platforms. Since childhood, they have been globally influenced in the fields of music, film, fashion, lifestyle and even food. They like to use creative thinking, they are also practical and innovative[2]. Generation Z is expected to study longer and live in better living conditions than their parents. They excel in multi-tasking, moving quickly from one thing to another[3]. The strongest motivation of this generation is curiosity, money and also the opportunity to make the world a better place. The balance between work and leisure is also important for them. They are curious, but they are less optimistic than

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[2] BERKUP, S. B.: *Working With Generations X And Y In Generation Z Period: Management Of Different Generations In Business Life*. [online]. [2021-11-02]. Available at: <https://www.mcser.org/journal/index.php/mjss/article/view/4247/4153>.
[3] MCCRINDLE, M.: *The ABC of XYZ: Understanding the Global Generations*. McCrindle Research Pty Ltd, 2014.

generations of millennials[4]. At the same time, they are more empathetic, interested in interpersonal relationships and sexuality. They mostly oppose racism, sexism and support the LGBTQ community. From the research of the news server Aktuálně.cz in cooperation with the research agency Behavio Labs, we can state that they have family and friends in the first place, waste sorting is already automatic for them and they would like to enjoy old age. They are often absorbed by a number of possibilities, jumping from activity to activity and unable to anchor anywhere[5]. As Generation Z is a fully digitized generation accustomed to modern technology, marketing communications will focus primarily on digital tools. Although their average length of attention, according to the survey, has dropped from 12 seconds to 8 seconds[6], it is a great advantage to receive several stimuli at once. As mentioned in the previous chapter, just like the Millennials, they are good at multi-tasking. Berkup also believes that they have "the greatest synchronization of motor skills for the hand, eye and ear in human history."[7] In society, Generation Z is perceived as an accelerated generation in terms of development or education. Surveys Vision Critical (2017) has a Z generation access to an average of five screens - TV, laptop, desktop, tablet and smartphone. They are closest to a mobile phone that allows you to be online anywhere, anytime. This is connected with the negative aspects of today in the form of digital addiction. The urge to be constantly online is becoming more and more a daily problem for many young people. People are often unable to gain control of technology or relax. This can result in mental health problems. The fear of cell phone unavailability is called nomophobia and manifests itself in stress and neurotic reactions[8]. Don Tapscott published his publication Growing Up Digital: The Rise of the Net Generation (1998) on another problem of the young generation. He was one of the first to expand on the idea that traditional family relationships are disrupted by the fact that it is children who teach parents to orient themselves in the digital environment and not the other way around (as was the case with television, for example). According to him, "for the first time in history, children have overtaken their parents in the knowledge, overview and handling of a technological innovation that is crucial for society. And it is through the use of these digital technologies that the N-generation will develop a culture that affects the whole of society. Already, these children are learning, playing, communicating, working and making contacts in a completely different way than their parents. They are the force of fundamental social transformation. "[9]He argues that parents, teachers, marketers and politicians need to start changing their approach to the next generation in order to withstand changing conditions and gain attention and purchasing power. The oldest members of the Z generation are 22-25 years old this year, so they are slowly entering the labor market. This also affects their purchasing power. They start earning their own money and spending on the things they want to own. Young labor is in demand in the market and will represent a much larger purchasing power than previous generations. It is important for this generation that the product and service they buy is in line with their identity and values. Brands should therefore have a broad enough product portfolio to be able to choose what suits them best. They want a

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[4] *7 Things employer should know about the Gen Z workforce*. Released on 13th September 2016. [online]. [2021-11-02]. Available at: <https://www.forbes.com/sites/karstenstrauss/2016/09/13/how-yourmillennial-and-gen-z-employees-are-changing-yourworkplace/#7fd89bd14176>.

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[6] *The Everything Guide to Generation Z*. Released on 14th March 2016. [online]. [2021-11-02]. Available at: <https://cdn2.hubspot.net/hubfs/4976390/Ebooks/English%20ebooks/The%20everything%20guide%20to%20gen%20z/the-everything-guide-to-gen-z.pdf>.

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quality, practical product, at the same time they demand a reasonable price and useful functions. The generation is careful in choosing goods. Before they buy something, they put a lot of emphasis on the recommendations of their friends. So it is, more than appropriate for brands to think about how to use these friendly relationships for the benefit of their marketing. They are also interested in online reviews, whether on YouTube in the form of videos or as recommendations from influencers[10]. When it comes to buying a product, this generation still uses brick-and-mortar stores, but it is true that even the younger generation can still buy goods in a brick-and-mortar store, but purchasing itself has long since moved first to the Internet and then to social media. Companies need to push what they want to sell to their customers on social media - to make a decision on them and then just come to the stone shop to pick up what they used to choose and try. The emphasis on social media is increasing, although the purchase itself still takes place in brick-and-mortar stores. As we have already mentioned, Generation Z tends to look for reviews and recommendations before making a purchase, and that positive or negative evaluation greatly influences the decision itself. It can therefore be concluded that Generation Z behaves specifically in its decision-making process, especially in the second stage - in the survey of information. According to research agencies, Z-marketing marketing communications can be characterized as follows. According to Accenture's consumer research (2017)[11], retailers in particular are expected to develop their digital shopping methods and capabilities. Social networks are slowly becoming a direct shopping channel for the Z generation. More than 69% of respondents were interested in shopping directly through social networks. In addition, 44% mentioned social networks as a source of product information. At the same time, however, research has shown that the complete neglect of store sales is so far pointless. Approximately 60% of Generation Z customers still prefer in-store purchases, and almost half (46%) go to the store to get more information before making an online purchase. An interesting statistic is that Generation Z customers are impulsive and willing to pay for fast delivery. More than a millennial, they buy a product or service just because they just want to buy something. In connection with this, they long for fast delivery and do not mind paying extra. According to Accenture CEO Jill Standish, Generation Z is a promising and large consumer market[12]. It is therefore important to respond appropriately to this target group through digital tools. Given the growing purchasing power of Generation Z, the time is right for companies to start paying attention to this important target group. According to the mentioned research, marketing communications towards the Z generation should be authentic, honest, it should cooperate with its audience and it should also be interested in social issues such as the environment and ecology. They take the Internet for granted, and so, unlike previous generations, they are online and offline, which can be an advantage for effective communication targeting[13]. On the other hand, Generation Z may be more demanding on digital communication than previous generations, precisely because they have been in contact with technology since childhood and are simply more selective. They are, used to constantly receiving various information and their main source is the Internet and social networks such as Instagram, YouTube and Facebook. These platforms have great advertising capabilities, so it may not be

[10] *Generace Z zajímá každého z nás*, *06/2018*. Released on 8th June 2018. [online]. [2021-11-02]. Available at: <https://archiv.press21.cz/retailnews/2018/6/html5/index.html?&pn=29&locale=CSY&archive=http://archiv.press21.cz/retailnews/rip.xml>.

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difficult to reach Generation Z if you know how to communicate with them. Digital marketing and overall new media are the most important pillar of communication with this generation. They are in contact with digital technologies for several hours a day, so the right step for brands will be to focus on this communication. Generation Z needs to feel that they are connected to the brand, so it is, more than important for the brand to be visible on social networks and to be able to interact with Generation Z customers. In this case, content marketing is also effective, where there are many ways to establish a relationship with the customer online. Consumers of this generation like to consume content, so it is, more than a good idea to use this for the benefit of the brand. Research conducted by Google in 2016[14] revealed that up to 70% of Generation Z members identify more with Youtubers than with traditional celebrities. It is not surprising that we have already stated that Generation Z is of a digital nature, so it is appropriate that they have personalities who work mainly on the Internet as role models. However, it is the first generation that openly admits that it will be influenced by influencers if it has built trust in them. Influencer marketing has been evolving for the last few years and has had a big impact on Generation Z. According to surveys, 76% of Generation Z members follow at least one influencer and 45% more than 10 influencers on social networks. About half trust influencers and their advice[15]. Influencer marketing can be linked to affiliate marketing, which often uses celebrities to achieve conversion. The goal should therefore be to create an environment for brands in which Z-generation influencers and customers will feel comfortable consuming advertising content. Instagram is one of the most frequently used platforms. It contains a high number of influencers, and therefore many opportunities for advertising campaigns[16]. Last year, the social network TikTok, on which users watch short videos, increased in influencer marketing and in the use of Generation Z in general. This social network is experiencing a great boom together with China, the USA and other countries, including the Czech Republic[17]. It is slowly but surely becoming an important communication tool for this generation. Another important aspect of the Z generation is appropriate brand branding. Unlike previous millennials, Generation Z is very loyal to brands that share similar values. Generation Z individuals are interested in the purpose, opinions and relevance of the brand. They examine whether the brand addresses important societal issues or is lax. Generation Z is sensitive to topics of gender, ethnicity or sexuality. And because Generation Z has much more access to information than previous generations, it can very easily find out if a brand is behaving ethically[18]. Generation Z is fond of brands with which it feels that it participates in the creation of a product or service. They are interested in the opportunity to personalize the product, they like authenticity, sincerity and they like to get involved, whether it's just competitions or sharing photos. As many as 70% would rather see ordinary people in advertising channels than celebrities with an insincere

[14] *Youtube starts influence*. Released on 7th July 2016. [online]. [2021-11-02]. Available at: <https://www.thinkwithgoogle.com/marketing-strategies/video/youtube-stars-influence/>.

[15] *50 Stats All Marketers Must Know About Gen-Z*. Released on 28th February 2016. [online]. [2021-11-02]. Available at: <https://www.forbes.com/sites/blakemorgan/2020/02/28/50-stats-allmarketers-must-know-about-gen-z/>.

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[18] *How generation Z is shaping todays marketing tactics*. Released on 30th October 2018. [online]. [2021-11-02]. Available at: <https://www.forbes.com/sites/forbesagencycouncil/2018/10/30/how-generation-z-is-shaping-todays-marketing-tactics/?sh=56040bb02bc1>.

story[19]. They don't want to see retouched perfection, on the contrary, they want to know the truth and the story of the brand. As for the more traditional tools of the communication mix, the Z generation will be more interested in the impersonal form of communication that takes place with the help of various means. Internet advertising will be the most effective, but television advertising can also be effective. Generation Z does not watch television as often as their predecessors, but it is still important to them. It is important to realize that offline advertising must always be combined with online communication channels in order for the impact to be as large as possible. At the same time, advertising should be casual and sufficiently expressive, because, as I mentioned in previous chapters, the average attention time for generation Z has significantly decreased. In the traditional form, the press and radio mass media are not very relevant for Generation Z. Rather, they use streaming services to listen to music, podcasts, and follow current news on online news portals. An important aspect of Generation Z is word of mouth marketing. Individuals of this generation place great emphasis on recommendations from friends, peers, family, but also from the already mentioned influencers or brand communications on social networks. Whatever communication tool the brand chooses, it should take into account the visual processing. Growing up with computer games, television and YouTube videos, they pay particular attention to image content. Emoji, gifs, collages, and the images or videos themselves work best. Generation Z is called the first native digital generation, and therefore the main topic of marketing communications will always be their relationship to the Internet and new technologies in general. As for the more traditional tools of the communication mix, the Z generation will be more interested in the impersonal form of communication that takes place with the help of various means. Internet advertising will be the most effective, but television advertising can also be effective. Generation Z does not watch television as often as their predecessors, but it is still important to them. It is important to realize that offline advertising must always be combined with online communication channels in order for the impact to be as large as possible. At the same time, advertising should be casual and sufficiently expressive, because, as I mentioned in previous chapters, the average attention time for generation Z has significantly decreased. In the traditional form, the press and radio mass media are not very relevant for Generation Z. Rather, they use streaming services to listen to music, podcasts, and follow current news on online news portals. An important aspect of Generation Z is word of mouth marketing. Individuals of this generation place great emphasis on recommendations from friends, peers, family, but also from the already mentioned influencers or brand communications on social networks[20]. Whatever communication tool the brand chooses, it should take into account the visual processing. Growing up with computer games, television and YouTube videos, they pay particular attention to image content. Emoji, gifs, collages, and the images or videos themselves work best[21]. Generation Z is called the first native digital generation, and therefore the main topic of marketing communications will always be their relationship to the Internet and new technologies in general.

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[20] *Generace Z k nakupum chce site i kamenne obchody*. Released on 31st March 2017. [online]. [2021-11-02]. Available at: <https://www.mediaguru.cz/clanky/2017/03/generace-z-k-nakupum-chce-site-i-kamenne-obchody/>.

[21] *7 zásad jak oslovit generaci* Z. Released on 8th September 2017. [online]. [2021-11-02]. Available at: <http://www.offrecord.cz/digital/7-zasad-jak-oslovit-generaci-z/>

1 Basic characteristics of realized research

The research carried out for the purpose of this work aims to understand the individuals of generation Z from the perspective of the brand and its communication, especially on social networks. The research part therefore focuses on how the representatives of the Z generation perceive brands, why they pay their attention to them and what is their approach to advertising. The obtained data and their analysis and comparison with the theoretical part will serve to meet the main goal of this bachelor‘s thesis, which is a deeper knowledge of the Z generation of brands that want to target their marketing communications to this target group. The following 4 research questions were defined:

1. What media does the Z generation spend the most time with and what content does it consume the most?
2. How to most effectively engage the Z generation by appearing on social networks?
3. Are recommendations, reviews and social responsibility important for Generation Z?
4. What is the attitude of Generation Z towards mobile operators, what services do they use, what services would they welcome and under what conditions would they change a mobile operator (especially - What services does this group use the most and how much they pay for them ?, Who pays for this expenditure? Should look like the ideal package of services and its price for this target group?)?

1.1 Methodology of data collection

A larger number of respondents is needed to objectively find out the opinions of the current generation, and therefore a quantitative research method was chosen, namely a questionnaire survey. The main advantage of the questionnaire survey is the potential to obtain a large number of respondents in a short period of time for minimal or no funds. There are tools to distribute the questionnaire online, which is another important advantage in today‘s pandemic. In the first phase of the research, we defined a research sample, ie individuals that I will address for research and who must meet certain conditions. The research is aimed at representatives of the Z generation. As mentioned in the theoretical part, the timing of the Z generation differs in many sources. For research purposes, I therefore used the average year of birth 1996. This means that the upper age limit of the respondent is 25 years and the lower age limit is 18 years. In the case where the subject of 6 tis66 tis the generation that moves the most on the Internet, the most appropriate method is electronic inquiry. CAWI is a modern method of querying a web form. The answers are processed in electronic form, thus enabling fast processing and evaluation. To create the questionnaire, we used the Internet service Google Forms, which offers free creation of forms or questionnaires. A structured questionnaire containing 42 questions was used for the research. The content of the first questions of the questionnaire was socio-demographic data of the respondents. The continuation of the questionnaire was accessible only to representatives of the Z generation in the years 18-25. The following questions already sought information about the research part, ie opinions on the issue. The last part of the questionnaire was the issue of mobile operators, ie which mobile operator the respondents use and what tariff the respondents use. At the same time, issues related to services, calls abroad, monthly spending and its relevance, as well as qualitative aspects associated with the factors that decided on the choice of operator and which affect its possible change. Anyone who had a specially generated hyperlink to the Google Forms page had 6 tis6 to the questionnaire. The questionnaire was therefore distributed via the Internet, specifically via the social networks Facebook and Instagram. 6 tis these social networks that are widely used by Generation Z representatives, so the questionnaire was shared among relevant diverse groups. Furthermore, the questionnaire was spread using an influencer on Instagram, which added a link to Instagram Stories, and thus addressed other respondents. There is still a lack of surveys on this issue, which is why we consider this questionnaire survey to be a useful collection of information. The research was conducted in March 2021. A total of 569 respondents participated, of which 91 were excluded using an age-restricted filter question. As a result, 478 relevant responses were processed.

1.2 Analysis of research results

The aim of this part of the research was to approach generation Z and specify appropriate marketing communication. Subsequently, 3 research questions were defined, which helped to create a clearer picture around the Z generation.

1. What media does the Z generation spend the most time with and what content does it consume the most?

The first research question asks what media generation Z uses and in what form. The accumulated results show a fairly clear answer, ie that traditional media and forms of marketing are declining in importance and may not be effective for Generation Z. It is most popular due to the characteristics of the Z generation of the Internet and social networks. He uses Generation Z social networks for more than 6 hours a day, communicates with his peers and spends his free time there. He prefers to consume visually nice content that includes images, videos, and other more creative solutions than plain text. In addition to the Internet and social networks, television is still important for Generation Z. Other traditional media such as print and radio are still ubiquitous, but largely overlooked by this target generation. The press is replaced by online magazines, newspapers and Z-generation radio used in the form of online streaming services such as Spotify or YouTube and others. The Internet helps brands to get as close as possible to this generation and direct their attention towards themselves.

2. How to most effectively engage the Z generation by appearing on social networks?

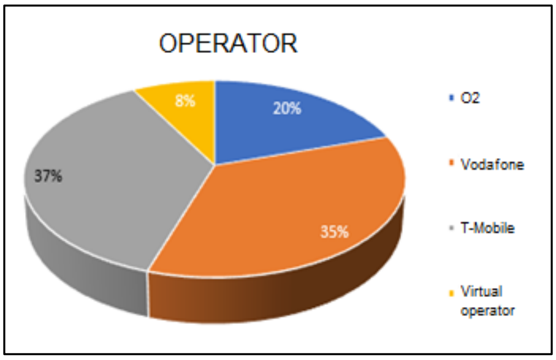
In the previous research question, we defined that brands best form a relationship with Generation Z through social networks. From the results of the questionnaire survey, we can conclude that 76% of representatives of this generation monitor the accounts of various brands, companies and enterprises and like to communicate with them via online platforms. The vast majority of the Z generation admits that they are partly influenced by marketing and place 56% emphasis on brand communication on social networks. The most used is Instagram, followed by YouTube, Facebook and TikTok on the rise. As a result, any brand that wants to target Generation Z should take its place in the world of social networking and establish a relationship of sincerity, naturalness and creativity. An important part of brand communication on social networks is influencer marketing. It is very close to generation Z and is a suitable way to spread brand awareness among this target group. Over 70% of Generation Z representatives monitor more than 6 influencers across different platforms, and most of them are partially aware of their impact on their consumer behavior. Advertising content is growing in popularity if it has audio-visual content in the form of videos and animations, an original idea and a carefully selected face of the campaign. On the other hand, they discourage them if the brand cooperates with too many influencers without a logical connection and if advertising is forcibly imposed on them.

3. Are recommendations, reviews and social responsibility important for Generation Z?

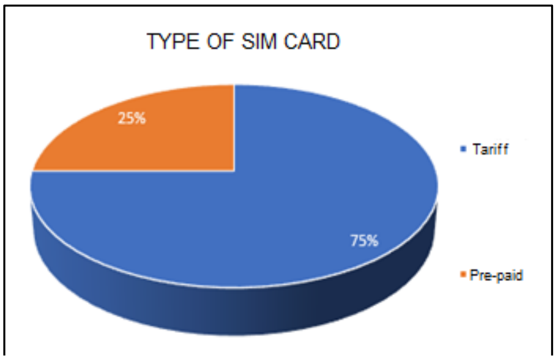
The third research question deals with aspects of recommendations, reviews and social responsibility, which are topics that seem to be important for the Z generation. In terms of recommendations, the representatives of the generation have shown interest in recommendations from their loved ones and friends. As many as 84% of respondents answered that they rather or strongly agree to consult with a circle of friends before buying. The recommendations therefore have a great deal of weight in the decision-making process, but it depends on who exactly the recommendation is from. Recommendations and reviews within influencer marketing, for example, are highly popular, but considerably lower than in the immediate vicinity. According to the results of the survey, we learned that up to 90% of Generation Z read reviews on web portals or watch them in the form of videos. Generation Z is far more interested in current social issues than previous generations, but it is still not a top priority for them, as some media have pointed out in the theoretical part. Generation Z perceives and monitors how brands respond to environmental issues or working conditions, however, what seems to play a bigger role is the price and quality of the product. As many as 87% of Generation Z expects high brand product quality from the brand, followed by a friendly price and social responsibility already mentioned. It is also necessary to mention the interest of the Z generation in discount promotions, which can also be a suitable way to get the attention of existing and potential customers. An important aspect for Generation Z is quality and trust. Trust has proven to be one of the most important features that Generation Z is looking for in relation to the brand. Brands should listen to generation Z and not merge it with the previous generation. An important finding is the awareness that Generation Z wants brands to be interested in social issues, to be open and to create campaigns with an imaginative idea and to be able to differentiate themselves from the competition in a natural and non-violent way.

We will now focus in more detail on the part of the research that deals with aspects related to the mobile operator and its services. The results of this part are the answers to the fourth research question. We choose the most important ones from many questions.

Which operator services do you currently use?
What type of card do you use?
With these questions, we found out which operator university students use and what type of cards they own. Whether they use a so-called flat rate or a prepaid card. The results only confirmed the absolute dominance of the three main mobile service providers. However, a certain surprise for us was the finding that the share of individual operators does not correspond to the overall ranking of the market in the Czech Republic. 72% of interviewed students use the services of T-Mobile and Vodafone, only 20% are with O2 and up to 8% of students have a virtual operator. We attach this fact to greater marketing targeting of both Vodafone and T-Mobile. For virtual operators, it will clearly be the price and simplicity and clarity of their tariffs. Most students use a flat rate. Only 25% of students use a prepaid card.



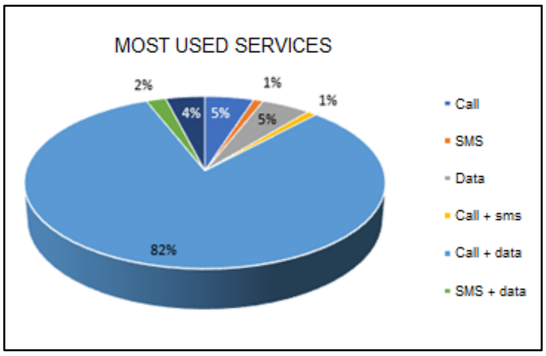
Graph 1: Preferred operator
Source: Own processing.



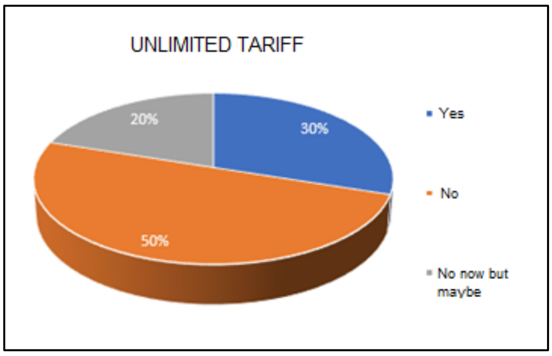
Graph 2: Used Sim cards
Source: Own processing.

What services do you use the most?
Do you use an unlimited tariff?

82% of respondents said they use a combination of calling and mobile data. A slight surprise for us is the decline of interest among students in SMS. Only 3% of respondents mentioned this service. So far, only 30% of students use the unlimited tariff. However, half of the interviewed students who do not currently have an unlimited tariff are considering switching to this type of tariff. It is therefore clear from the research that this type of tariff is interesting for our target group and there is interest in it.

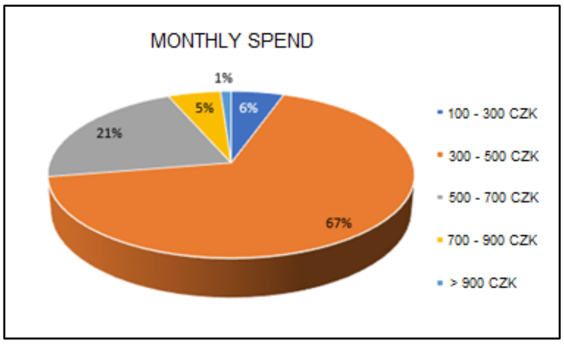


Graph 3: Most used services
Source: Own processing.

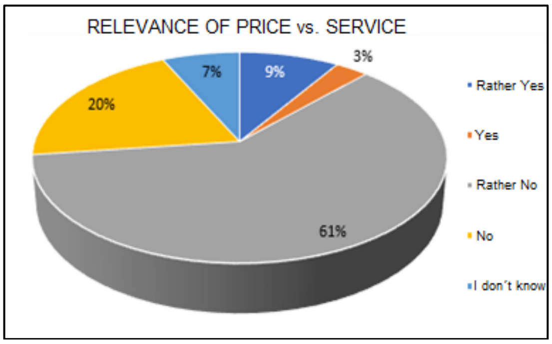


Graph 4: Unlimited tariff
Source: Own processing.

How much do you spend per month on the operator's services?
Will you get the price you pay adequate for the services provided?
Only 6% of respondents spend more than CZK 700 per month on mobile services. 67% do not spend more than CZK 500 on services. Our research showed that the CZK 500 limit will be very important within our target group. For the questions in which we let our respondents express whether the prices correspond to the services provided, the result was relatively predictable for us. Only 11% of students surveyed said that the prices they pay are adequate for the services provided. The rest stated and has the impression that the prices do not correspond to the services provided. We attribute this to the fact that prices in the Czech Republic are high compared to Europe, but also to the fact that it is natural for us to want "a lot of music" from little money.



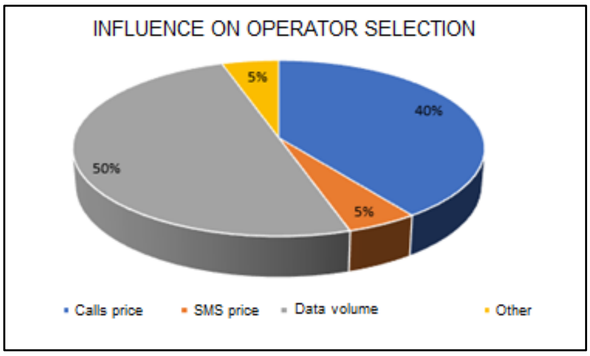
Graph 5: Monthly spend
Source: Own processing.



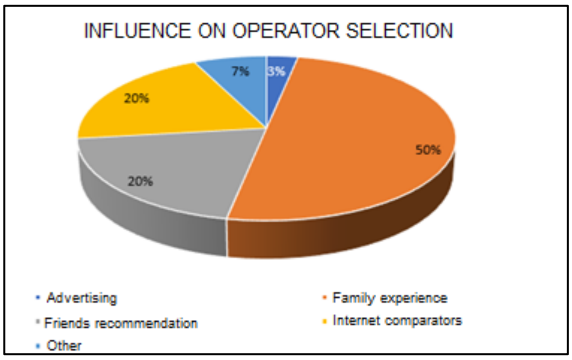
Graph 6: Relevance of price vs. service
Source: Own processing.

What influenced you when choosing an operator?
With this question, we found out what influences our target group when choosing an operator. The questions concerned both the services that students receive for their money and the external influences that can influence their decisions. The research showed that 40% of respondents "hear" about the cost of calls and 50% about the size of the data package. The result thus confirmed the preferences and importance of these two services. At the same time, up to 50% of respondents are influenced by the experience and recommendations of the operator by family

members. 20% then commented on friends' reviews, 20% used one of the online comparators and only 3% mentioned advertising. It is also clear from the result of this question that mobile operators should focus their attention not only on this target group, but also on their parents.



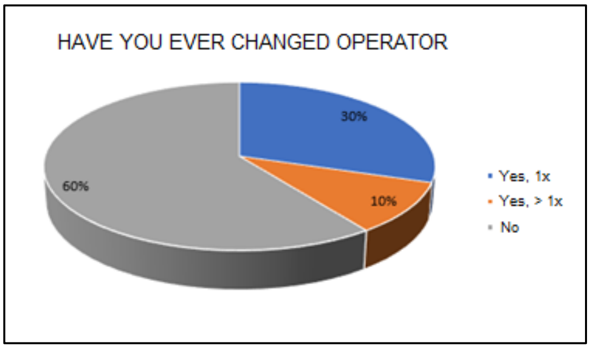
Graph 7: Influence on operator selection
Source: Own processing.



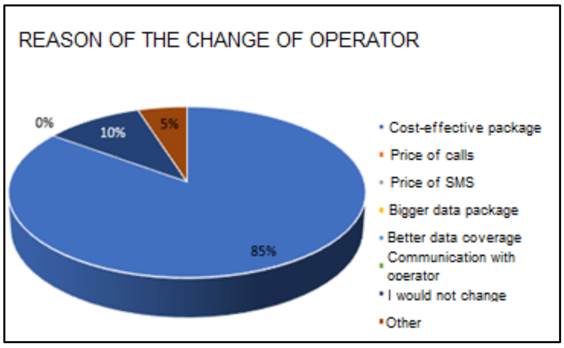
Graph 8: Influence on operator selection
Source: Own processing.

Have you ever changed mobile operator?
What was the reason for the change of mobile operator?

The aim of these questions was to find out how often and under what circumstances our respondents switched or are willing to switch to another operator. As a result, 30% of respondents have changed operators once in the past. 10% changed operators more than once and as many as 60% of respondents never changed operators. Following question found out what (would) be the reason for switching to another operator. As many as 85% of respondents said that it should be an offer of a cost-effective package of mobile services and 10% would not change the operator. The result of these questions shows that only a small part of students have so far used the opportunity to change the operator, but the research also confirmed that the reasons for its change absolutely dominate over other decision factors price cost advantage of services.



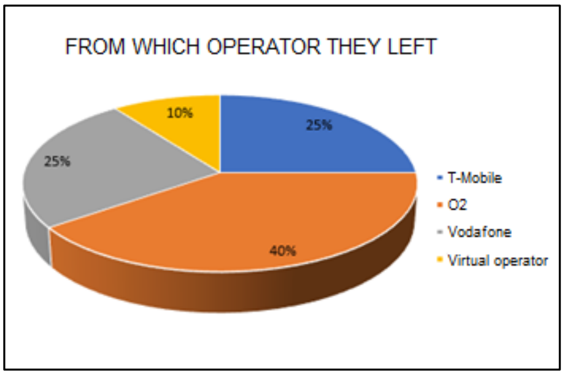
Graph 9: Have you ever changed operator
Source: Own processing.



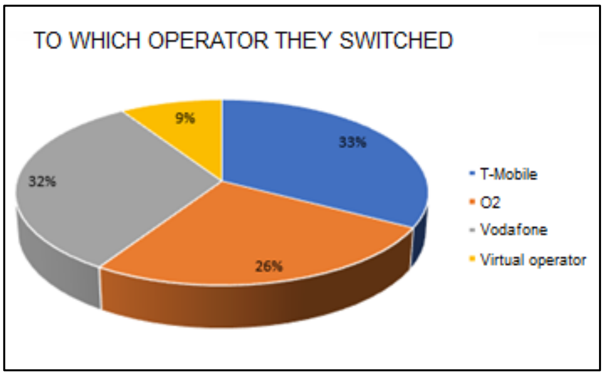
Graf 10: Reason of the change of operator
Source: Own processing.

Which operator did you leave?
Which operator did you switch to?

With the last questions, we wanted to find out from the respondents who have already made the change at least once, from which operator they left and to whom they came. The research showed that most respondents (40%) left the O2 operator. A quarter then from T-Mobile and Vodafone and 10% left one of the virtual operators. The research also showed that most students switched to T-Mobile and Vodafone (32 + 33%), 26% then switched to O2 and 9% to one of the virtual operators. The result confirmed the preference of our target group for T-Mobile and Vodafone operators and the relatively great popularity of using the services of virtual operators.



Graph 11: From which operator they left
Source: Own processing.



Graph 10: To which operator they switched
Source: Own processing.

What do you think the package of services and its prices should look like?
We asked our respondents with the final question to specify what they think the package of services and its price should look like. The answers to this question were surprisingly similar, which we attribute to the relatively narrow profile of the interviewed group. For more than 90% of respondents, the ideal package of telecommunications services should look like this:

- Unlimited calling in the Czech Republic,
- unlimited SMS in the Czech Republic,
- 4-8 GB of data,
- price 450-550 CZK / month,
- contract duration 18 months.

If we needed to address this target group, the package of services and its price should be as close as possible or look like this.

The results of the survey showed relatively clearly what services university students are interested in, which are key for them and what prices they are able to accept for these services. The ideal offer for this target group should look so as to be as close as possible to the respondents' answers to the issue of price vs. services that, above all, the price-to-size ratio of mobile data should be as advantageous as possible. Calling as such is important for respondents, but is perceived more as a benefit to the mobile data package. A substantial part of the respondents are influenced by the experience and recommendations of the family when choosing an operator, and even larger parts of the respondents still pay their expenses for mobile services to their parents. It is therefore likely that it is the parents / family that will have a significant say in the choice of mobile operator and services. Marketing communication should therefore go in this direction as well. We would primarily recommend mobile operators to target their campaigns not only at the target group of university students themselves.

Conclusion

From previous secondary research and also specific surveys conducted by us in the target group Z, we state that the shopping behavior of these consumers has changed, to which digital technologies, the connection between the virtual lifestyle and the real, perception of trends in marketing communications and especially the world of social networks contribute significantly. This so-called connected consumer is characterized by a fast way of life, without perceiving space-time as a problem, creating communities with common interests and preferences, sharing and creating content on social networks, communication without borders and barriers. Other questions arise that need to be considered. What will consumer behavior look like in 5 years? How will marketing and marketing communications change? Concepts can be assumed, but the psychographic characteristics of consumers will continue to influence primary and secondary groups and the market environment. Like marketing, marketing communications are a dynamic field that reflects market developments, consumers, technology developments and other key factors. In this regard, we talk about the so-called tools of marketing communications of the 21st century. With the overall situation, we encounter a significant increase in online marketing communication tools, where the Internet and online as such occupies an important position in the strategies of companies and consumer behavior. The Internet is a medium that can immediately provide information about the effectiveness of the advertising format and can also easily measure where the company receives the most visitors to its website. , online PR, advergaming, search engine marketing, e-mailing campaigns, affiliate marketing, content marketing. The latest trend in the use of AI technologies in the form of chatbots and other tools. The tools of the "classic" communication mix are also being developed, and we are currently encountering tools such as mobile marketing, guerrilla marketing, word of mouth marketing, neuromarketing and product placement. The latest trend in the use of AI technologies in the form of chatbots and other tools. Overall, we are talking about integrated marketing communications as a model that combines both classic and modern tools of marketing communications. It can be said with almost certainty that the integration of marketing communications tools will continue, with a reflection on key changes in company strategies and changes in consumer behavior.

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7 Things employer should know about the Gen Z workforce. Released on 13th September 2016. [online]. [2021-11-02]. Available at: <https://www.forbes.com/sites/karstenstrauss/2016/09/13/how-yourmillennial-and-gen-z-employees-are-changing-yourworkplace/#7fd89bd14176>.
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KOL MARKETING AS A BUSINESS STRATEGY TO PREVENT THE GROUNDSWELL EFFECT ON AN ADVERTISING MESSAGE COMMUNICATED IN THE INTERNATIONAL ENVIRONMENT

Adam Madleňák

Abstract
The author chose to research the issue of KOL marketing mainly due to its rising popularity, especially in Asian countries and the growing public distrust towards traditional marketing strategies and marketing communication. In recent years an increasing number of European business entities have begun to implement KOL marketing elements in their online product promotion strategies. The author pays attention to the character of the person acting as an opinion leader, who is able to arouse interest in the product and increase demand and thus ensure an early return on investment (funds invested in mutual cooperation) and also profit. At the same time, the paper highlights the position of a specialist on product promotion on social media with regard to the presentation of serious and credible information to prevent the emergence and dissemination of various conjectures which are often characteristic of the groundswell effect.

Key words:
FOMO Syndrome. Groundswell. KOL Marketing. Marketing Communication. Shopping Decision Making. Social Media.

Introduction

In the process of making a purchasing decision, the aim of the customer is to selected the best option from a wide range of alternatives to maximize their well-being. In addition to the personal characteristics of the customer, their limited budget can be considered as decisive in satisfying their needs. On the other hand, the role of businesses is to make the most profit by selling goods and services desirable in the consumer market at a reasonable or lowest price.[1] At the same time, the quality of the presented products completes the image of the manufacturer / seller and, in the long run, contributes to brand value-building. In the event of a conflict of interests of the entities concerned, it is extremely important to reach an acceptable agreement in order to conclude a trade. Understanding information provided is crucial. However, understanding the other does not mean that we have to agree with them. Participants share their views and experiences in the discussion, exchange knowledge they gained not only from formal and (usually) official sources confirmed by the manufacturer, but also from informal, often secondary information sources (usually secondary interpretation of previously published content). The aim of these sources is to summarize and filter information while meeting signalling[2], substitution[3] and selective[4] function taking into account the assigned topic, temporal and spatial aspect and the circle of future users.[5] Unfortunately, however, there may be various unverified or misleading reports and conspiracies aimed at damaging the seller's reputation. A special category of informal (unofficial – with regard to their credibility for an individual) sources is information which the communicant acquired following their own primary research. In such a case, however, it is essential to carefully

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[2] Tells of the existence of another more extensive source of information.
[3] Replacement for the second source of information.
[4] Preserves the ability to choose from multiple sources with comparable content and range.
[5] KUMAR, H., SINGH, M. K., GUPTA, M. P.: Socio-Influences of User Generated Content in Emerging Markets. In *Marketing Intelligence & Planning*, 2018, Vol. 36, No. 7, p. 744.

consider the seriousness, expertise and objectivity of the information source before presenting the truth to the public. With regard to the established trend of how people analyse, critically evaluate and share new knowledge with others in the virtual environment, a growing phenomenon known as the groundswell effect comes to the forefront (usually targets business activities).[6] A social media user as a passive recipient of information can easily become another promoter of selected products within a few minutes, thus deliberately influencing others, changing their opinions and decisions. At the same time, we are witnessing a gradual transformation of the original advertising message, whether as a result of our own experience with the product or psychological pressure from the social groups to which a person belongs. Moreover, the massive development of various types of electronic media increases one's dependence on digital technologies. Compulsive behaviour and the need to be constantly online, to actively participate in events taking place in the virtual community and thus gain a sense of false control over the lives of others, as well as the effort to keep track of everything that is happening around us can ultimately trigger the FOMO syndrome[7] - social anxiety and a fear of missing out on events if one attempts to function exclusively in the offline world.[8]

At the same time, it should be noted that with each receipt and transmission of information the value of information for others changes (gets distorted).[9] In particular, an individual's desire to be an opinion leader, to imitate others and to stand up to them often requires the courage not to be afraid to leave one's comfort zone and express one's views on the subject publicly. Sometimes, however it might be better to remain silent, especially when the communicator is not thoroughly familiar with the issues they talk about (this could contribute to the dissemination of false or difficult to verify facts). In principle, if someone has only a minimal knowledge of the matter discussed (that person could be objectively considered incompetent), they cannot adequately estimate and assess their abilities in the given area. Such a person does not know how many things still remain unknown and fails to see shortcomings. For this reason, such a person tends to overestimate the level of their own skills and competencies without proper justification. As a result, such a person may come across as credible and reliable compared to a person who appears to have doubts. However, a person who has doubts may be an experienced expert who is familiar with the overall scope and depth of the analysed problem and who is able to perceive the problem comprehensively in a broader context. Such people usually underestimate themselves as they know how much they do not know. This approach, also known as the Dunning-Kruger effect, is a common cause of cognitive bias in practice. This effect influences how much information and information sources will reach the debate participants, how they will perceive it and further interpret it.[10] The intensity of interactions between the parties is also decisive, as this influences the strength and potential of the groundswell on the activities of market players. In order to reduce the risk of incomprehensible marketing communication and to prevent communication

[6] MADHAVI, C. V., AKBAR, M.: Groundswell Effect Part I: A New Concept Emerging in the World of Social Networks. In *Strategic Change-Briefings in Entrepreneurial Finance*, 2011, Vol. 20, No. 1-2, p. 32.
[7] Fear of missing out.
[8] HLADIKOVA, V., HULAJOVA, L.: The Phenomenon of Internet Addictive Behaviour among Slovak Youth. In *European Journal of Science and Theology*, 2016, Vol. 12, No. 6, p. 150. Also see: HLADIKOVA, V., HURAJOVA, A.: Internet Addiction in the Time of the Covid-19 Pandemic in Young Adults. In KVETANOVA, Z., BEZAKOVA, Z., MADLENAK, A. (eds.): *Marketing Identity: Covid-2.0*. Trnava : FMK UCM in Trnava, 2020, p. 135.
[9] ARAUJO, T.: The Impact of Sharing Brand Messages: How Message, Sender and Receiver Characteristics Influence Brand Attitudes and Information Diffusion on Social Networking Sites. In *Communications – European Journal of Communication Research*, 2019, Vol. 44, No. 2, p. 171.
[10] GLENISTER, G.: *Influencer Marketing Strategy: How to Create Successful Influencer Marketing*. London : Kogan Page, 2021, p. 171-172.

noise, which could possibly devalue an advertising message and cause its distortion (leading to half-truths or even total fabrications), one of the solutions seems to be the so-called KOL[11] marketing in product promotion in national and international context.

1 Aim and methods

The aim of the paper is to point out the specifics of KOL marketing in minimizing the amount of unclear, incomprehensible or inaccurate information when promoting products on the Internet and in moderating decent, rational and fact-based discussion with the audience. The aim is to avoid pseudo-communication, i.e. distortion in the content of the communicated message (loss of information or adding information). The attention is also paid to the social media factors capable of changing the purpose of advertisement, affecting its credibility and perception by potential customers. The paper made use of analytical-synthetic procedures, inductive and deductive reasoning and analogy. These became the basis for comparative arguments. The logical conclusions arrived at based on the analysed data are welded together to make an organic whole. Using scientific abstraction, the paper defines a key terminological apparatus that takes into account the theoretical and practical aspects of social media marketing. The research is based on national and international scientific and professional literature, monographs and peer-reviewed journal articles. In addition, the paper presents author's own views on the issues based on several years of research gained in various scientific projects on digital marketing, including experience from practice – social media management and virtual community building.

2 Results and discussion

Consumer behaviour is the process by which an individual becomes aware of a need and seeks to find more detailed information to meet their need. The process involves getting acquainted with several alternatives in order to make an informed decision, select and purchase a particular product (the consumer then uses / consumes the product or passes it to someone else).[12] The process is therefore not just about acquiring (and consuming) the product, but also about acquiring relevant knowledge about the product based on the promotion of the seller and other user-generated content (satisfaction or dissatisfaction with the product). Such knowledge can serve as a motivating factor in purchasing decisions. It should be noted, however, that information and knowledge (sometimes acquired on the basis of distorted or untrue information) may also discourage a potential consumer from buying quality goods. Therefore, one of the main tasks of business managers should be to define the target group to which the product will be primarily offered. Members of this target group can be expected to spontaneously become bearers of the advertising message. To that end, it is also necessary to find out whether the person is an initiator of the purchasing decision, the one who actually makes a purchase or whether the person uses the product purchased much earlier.[13] Willingness to share one's own experience with others and the content of such message depends on the role the person who shares information assumed. Of course, all these

[11] Key opinion leader.
[12] ŠVEC, M., OLŠOVSKÁ, A., MURA, L.: Protection of an "Average Consumer" in the Digital Society – European Context. In MATÚŠ, J., PETRANOVÁ, D. (eds.): *Marketing Identity: Digital Life – part II.* Trnava : FMK UCM in Trnava, 2015, p. 278.
[13] KUPEC, V., PISAR, P.: Auditing and Controlling as a Tool for SME Marketing Risk Management. In *Marketing and Management of Innovations*, 2021, No. 1, p. 231.

roles could be assigned to one person. On the other hand, competent people have to (in an ideal case) ensure meaningful and constructive product promotion in line with verifiable facts while emphasizing a proactive approach to solving the problems that have arisen.[14] The marketing communication strategy proposed in accordance with the principles of KOL marketing definitely helps to fulfil the above.

KOL marketing owes its growing popularity to the fact that people are losing confidence in the traditional way of product promotion, where paid extras / actors present products to consumers in the media. In the preparation of a communication campaign based on KOL marketing, emphasis is being placed on genuine product promotion – done by a person who is an expert in the field, has several years of experience in the field, is familiar with topics directly related to the product and is able to answer questions, give feedback or manage formal external corporate communication without major problems.[15] Given the results achieved so far, the expert can be expected to have an impact on the part of the public which behaves rationally and pragmatically, and can control their emotions.

The opinion leader could also be described as a person with natural authority, strong professional background, relevant international experience and a high number of loyal supporters who are determined to respect the logical and rational arguments presented by this person.[16] It is not possible to make such an audience out of social media users in a short amount of time, as this KOL marketing usually requires a long-term relationship in which the opinion leader demonstrates their expertise and competence in the chosen field in order to gain trust and stable support of others e.g. by regularly publishing the results of own research (with a wide range of practical applications), commenting on current events in the industry, presenting product innovations, sharing attractive information from everyday life or communicating directly with members of the virtual community via social networks. By default, if an expert is open to discussion with lay people, then the more experience they have, the more followed / popular they become, especially in view of the potential content (common topics) published in the future.[17] Activities could be described as KOL marketing activities when the opinion leader uses their influence to establish (not only business) relationships with manufacturers or sellers of products with a clear aim – shape public opinion in favour of the partner.[18] In order to avoid possible damage to the reputation of the opinion leader in the group of followers (for the sake of a business agreement with the selected business entity), it is very important to behave in line with the brand identity they represent. The opinion leader should not be at odds with long-term attitudes, values and goals of the partner business entity so as not to cause doubts among the followers regarding the previous statements of the participants, whether during uncontrolled (spontaneous) communication of Internet users or when providing feedback to the initiator of the communication. To ensure the authenticity of the opinion leader when communicating with the group, the diversity of products, brands or manufacturers should be considered in advance. In no case should

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[15] HALLANAN, L., DUDARENOK, A.: *Digital China: Working with Bloggers, Influencers and KOLs*. Hong Kong : Alarice International, 2018, p. 88.
[16] ZHAO, YY. et al.: Understanding Influence Power of Opinion Leaders in E-Commerce Networks: An Opinion Dynamics Theory Perspective. In *Information Sciences*, 2018, Vol. 426, p. 137.
[17] LU, Y., JERATH, K., SINGH, P.: The Emergence of Opinion Leaders in a Networked Online Community: A Dyadic Model with Time Dynamics and a Heuristic for Fast Estimation. In *Management Science*, 2013, Vol. 59, No. 8, p. 1790.
[18] CHEN, J. et al.: Influence Identification of Opinion Leaders in Social Networks: An Agent-Based Simulation on Competing Advertisements. In *Information Fusion*, 2021, Vol. 76, p. 236.

followers feel that the opinion leader's expertise and professionalism are compromised due to opinion leader's desire to make quick money at the expense of quality standards set (compared to the content published so far).

A recognized expert in a given segment will become more attractive for business entities when not only they can "deliver" a sufficient number of followers, but also boost interaction on social media (published posts).[19] From the point of view of the manager of the partner business entity, especially in times of global economic crisis, it is necessary to take into account the return on each investment. This can be assessed both in terms of the expected increase in sales as well as the expansion of the network of potential customers who would have information about the quality of the product, its features and performance based on an analysis carried out by an expert who takes closer look at available objective product-related facts, statistics and studies of reputable research organizations. The importance of such a communication is sometimes revealed much later, especially in secondary interpretation of the mediated content – this minimizes the risk of promoting unsubstantiated claims (groundswell is a great example). The effect of a KOL marketing communication campaign could be evaluated on the basis of the number of likes, the number of shares, or any other quantifiable way of involving the public in the promotion of a post (comments or reviews).[20] The options outlined directly or indirectly affect the reach of content on the Internet.

The benefits of KOL marketing can be viewed from the point of view of the opinion leader active on social media as well as that of the advertiser, i.e. manufacturer or seller of the goods. If the product offered to the consumer proves successful, not only will the demand for the company's range increase, but the credibility of the expert's recommendations increases, too. The process of building mutual trust between the opinion leader and their followers usually results in a situation where other arguments and advice of the opinion leader concerning consumer behaviour are also considered true and convincing.[21] When the content shared or promoted by the opinion leader or experienced expert is (constantly) of high quality, they can use their position to re-use information to change the views and attitudes of the public.[22] The changed form of presenting already shared information may remind the persons concerned of characteristics of products which have been subjected to in - depth examination and critical analysis, but also bring interesting facts for those who did not take part in the previous communication. Several mainly foreign researchers[23] distinguish between classical (general) influencer marketing and KOL marketing (as a subset of influencer marketing). Their research showed that KOL marketing activities have the greatest impact on a relatively narrow target group (specific audience). Assuming the presenter identifies with the product they present, it can be expected that the group of presenter's followers consists of existing and potential customers looking for satisfaction of the same need. On the other hand, to gain the attention

[19] SHEINER, D., KOL, O., LEVY, S.: It Makes a Difference! Impact of Social and Personal Message Appeals on Engagement with Sponsored Posts. In *Journal of Research in Interactive Marketing*, 2021, Vol. 15, No. 4, p. 649.
[20] RICHTER, CH.: *E-Commerce Trends in China: Social Commerce, Live-Streaming oder New Retail*. Wiesbaden : Springer Gabler, 2021, p. 32.
[21] TURCOTTE, J. et al.: News Recommendations from Social Media Opinion Leaders: Effects on Media Trust and Information Seeking. In *Journal of Computer-Mediated Communication*, 2015, Vol. 20, No. 5, p. 530.
[22] KUPEC, V. et al.: Conceptual Comparison of Internal Audit and Internal Control in the Marketing Environment. In *Sustainability*, 2021, Vol. 13, No. 12, Art. No. 6691.
[23] CHEUNG, ML. et al.: Investigating the Role of Social Media Marketing on Value Co-Creation and Engagement: An Empirical Study in China and Hong Kong. In *Australasian Marketing Journal*, 2021, Vol. 29, No. 2, p. 125-126.; SISMONDO, S., CHLOUBOVA, Z.: "You're Not Just a Paid Monkey Reading Slides": How Key Opinion Leaders Explain and Justify Their Work. In *Biosocieties*, 2016, Vol. 11, No. 2, p. 211-212.

of a predefined specific audience with the help of e.g. traditional advertising placed in media such as television or the press could be much more demanding and costly, given the structure of the recipients of the message and its relevance to their interests. For this reason, we consider KOL marketing, which works with a relatively stable base of fans of the opinion leader, as a means capable of reaching a selected group of people quickly and effectively. In particular, the impact of KOL marketing on consumer decision-making when it comes to promotion by internationally recognized authorities should be highlighted. The universality of such promotion should also be highlighted, as communication style can remain unchanged in different countries (standardized communication campaign optimizes costs and strengthens the global position of the brand).[24] The following table presents differences between traditional marketing communication tools and elements of KOL marketing (in terms of their use in practice).

Table 1: Differences between traditional marketing communication and KOL marketing

Traditional promotion in media	KOL marketing
Product presented by an actor or media celebrity (a layperson)	Product presented by an experienced expert in the field
Provides, in particular, basic product information intended to the general public	Provides specific information about the product, as a certain level of audience knowledge of the addressed issue is assumed (based on the knowledge of the previous activities of the opinion leader)
Long run investment return due to the fact that people showing no interest in the product are targeted, too	Quick return on investment due to the targeted addressing of those who are interested in the topic
Audience feedback often contains elements of populism	An effort to lead a constructive and facts-based discussion with the audience

Source: Own processing.

With an increasing number of consumers who search for various additional information about the product on the Internet before making a purchase or when using a product (to maximize utilization), as well as those who routinely buy and pay for goods online, new forms of product presentation (digital content) emerged. In KOL marketing, a shift from text and photography to short videos has been recorded in the recent period, while the today's trend is mainly live broadcasting. Activities implemented as part of s-commerce[25] are also popular – various types of social interactions between potential customers, experienced consumers, well-founded statements of opinion leaders as representatives of KOL marketing help others in their purchasing decision-making process. The presence of the expert (as a coordinator) helps maintain the objective and facts-based nature of the discussion. It was proved that a person who finds themselves in a group of people with similar views / convictions tends to adapt their actions and accommodate to the majority, i.e. they are likely to follow "proven" practices presented by others which will become easier to justify.[26] The ideal case would be if a business entity made use of a multi-channel communication program consisting of a combination of audio and visual (textual elements or pictures) elements capable of achieving

[24] BEZÁKOVÁ, Z.: Impact of the Globalization on the Process of Creating Marketing Communication and Its Importance in the Creation of Innovation. In KLIESTIK, T. (ed.): *Globalization and Its Socio-Economic Consequences*. Žilina : ŽU in Žilina, 2016, p. 179.

[25] Social commerce.

[26] LI, CL. et al.: Opinion Community Detection and Opinion Leader Detection Based on Text Information and Network Topology in Cloud Environment. In *Information Sciences*, 2019, Vol. 504, p. 70.

a multiplier effect in communication based on expertise, facts and context instead of promoting misinformation and half-truths in public.

Conclusion

Due to the situation caused by the COVID-19 epidemics, social distancing and activities designed to curb the spread of the virus, the importance of social media in communication has become apparent. Thanks to attractive appearance and simple use, social media, digital platforms and software applications now make information available to the public faster. As people are now spending much more time online than ever before, consumer habits and behaviour changed and shifted towards information and communication technologies. This created a space for business entities to re-evaluate the business models and marketing communication strategies applied so far. The challenge for the coming period seems to be clear – identify and reach those customers who were able to identify (at least partially) with the views of the virtual community represented by the opinion leader (representative of KOL marketing). With regard to attracting and convincing indecisive customers, product promotion comes to the fore. Product promotion is largely based on valuable personal and professional experience and knowledge of the presenter. The product presenter should be an opinion-forming authority and not just an actor / layman with basic information about properties of the product offered. Rising prices of goods and services and declining purchasing power have made the consumer very cautious when shopping. KOL marketing is one of the ways to avoid distorted and unsubstantiated advertising messages and to minimize the risks posed by the groundswell effects.

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ZERO-WASTE, PACKAGE-FREE STORES AND CONSUMER BEHAVIOUR OF Z-GENERATION

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Abstract
The paper deals with the issue of environmentally responsible behavior of the Z generation and their relationship to package-free business in implementing the circular economy principles. The paper aims to present selected results of the primary questionnaire survey focused on information, views on zero waste, and the Z generation's perception of "package-free" business in Slovakia. The paper is part of the VEGA project 1/0705/19. The subject of the research was generation Z, respondents born after 1994. We researched their opinions and attitudes to environmental issues concerning plastic packaging, information and reasons for shopping in package-free stores, previous experience with this type of sales. The results confirmed that in Slovakia, the zero-waste trend influences the behavior of generation Z, which is interested in environmental issues. It is a generation interested in improving the state of the environment by eliminating waste generation and reducing plastic packaging. They know the packaging and the principles of such stores, but they do not buy in them very often because of the high price of products. The results show that it is necessary to increase marketing communication by package-free stores, e.g., social networks, influencers, and podcasts.

Keywords:
Circular economy. Consumer behavior. Package-free stores. Zero waste. Z-Generation.

Introduction

The sustainability is one of the most discussed problems nowadays. To make the world more sustainable participation and cooperation of all market subjects (state, businesses and consumers) is required. New economic model - circular economy is a concept how to achieve goals of the sustainability. Circular economy and its main principles are based on the idea that all material and product flows can be returned to the production cycle (after they have been used) to become new sources for production and service provision. In ideal scenery the waste would not be produced anymore[1]. Recently, waste production has increased significantly, which has an impact on human health but also on the ecosystem. It is up to us to reduce waste production. We can save up to 200 kilos of waste per person per year by shopping in package-free stores. We conclude that we live in a linear economy. The idea is to shift the whole system into a circular economy, which aims to keep things in a constant cycle, as it is in nature. If consumers follow the principles of this system, the need for recycling will be reduced to a minimum. Even with small decisions, we can contribute to significant change. In Slovakia, consumer behavior is changing significantly and people are changing their lifestyles to life without waste. We can consider the emergence of package-free shops as this change, which showed us how to buy without packaging, we can buy better and more ecological products, thus supporting the circular economy. Slovaks and Czechs are primarily focused on package-free stores. People tend to shop responsibly and focus more on the environment. That is why everyone needs to realize that we must prevent waste. Few consumers in Slovakia realize that packaging can be recycled before throwing it in the trash. On the other hand, the number of ecological customers is constantly increasing. If the customer is sufficiently informed about environmental issues, he can make the right decision when choosing the purchased goods. Ecological awareness of customers is becoming one of the essential factors in shopping

[1] POLIAČIKOVÁ, E., MUSOVÁ, Z., DRUGDOVÁ, J. : Perception of package free shops as a partof the circular economyprinciplesimplementation by generations X and Y. In KVETANOVÁ, Z., BEZÁKOVÁ, Z., MADLEŇÁK, A. (eds.): *Marketing identity Covid - 2.0.* Trnava : FMK, 2020, p. 482. [online]. [2021-09-22]. Available at: <https://fmk.sk/download/Marketing-Identity-2020-eng.pdf>.

behavior.[2] The survey aimed to find out information, opinions on the issue of zero waste, and the perception of "package-free" business in Slovakia by the Z generation. It is generation, which is full of activism and is identified with the climate movement. Due to the researched issues, we focused on respondents from 18 years 1994 to 2003. A total size of sample was 857 respondents.

1 Summary of previous knowledge on the researched issues

Consumer behavior is evolving and advancing. It responds to changes in society, for example, to the adverse state of the environment, while shopping is easier than ever before. New trends and innovations are introduced to society every day. Consumer behavior and customer satisfaction are a constant subject of interest for academics and companies themselves. Consumer behavior is understood as the behavior that consumers show when searching for, purchasing, using, evaluating and disposing of products and services that they expect to meet their needs and requirements.[3] Consumer behavior is determined by several external and internal factors, with businesses also seeking to influence consumers through a range of marketing stimuli.[4] Recently, we can see that consumers are also affected by the environmental trend associated with the principle of zero waste (life without packaging). It is a lifestyle that aims to reduce the amount of waste in households, businesses and the country. This trend aims to reuse resources, materials without waste generation, landfilling, or incineration. In recent years, this lifestyle has affected individuals themselves and grocery stores, drugstores, and clothing.[5] Zero waste represents the possibility of neutralizing the negative impact on the environment while combining rational management with ecological goals.[6] It is possible to complete the so-called zero-waste strategy by applying five R - Refuse, Reduce, Reuse, Recycle and Rot. The first two principles - refuse and reduce - are based on a simple idea. Refuse to create more waste generation opportunities unnecessarily. Do not buy unnecessarily new things that we will not use. Another alternative is the possibility of package-free shopping in markets or stores that offer it specifically. We can also include carrying your shopping bag here, which also reduces the packaging used. Another principle is the reuse of things (Reuse). For example, we can mention shopping second-hand or in shops that deal with slow fashion (in Slovakia it is, for example, the Nosene project). Recycle and Rot finally conclude the fifth principle, i.e., waste sorting and composting. Waste sorting is known to almost everyone; less widespread is the existence of special small composters suitable for apartments. In Slovakia, small composters in various variants are offered, e.g., company JRK Slovensko, s.r.o. We often encounter the question of the extent to which it is possible to apply the zero waste trend in the conditions of the Slovak Republic. Although the conditions are not ideal, waste-free activity has recently moved forward in the Slovak Republic (several free-packaging stores have been established in most larger cities, chains, gradually adding sales in returnable packaging, the Ministry of Environment of the Slovak Republic plans to back up plastic bottles from 1.1.2022, regular

[2] PALUCHOVÁ, J., PROKEINOVÁ, B. R.: *Udržateľné tendencie v spotrebiteľskom správaní: asociačné pravidlá, udržateľný marketing a zodpovedná spotreb*a. Nitra : Slovenská poľnohospodárska univerzita. 2013, p. 112.

[3] SCHIFFMAN, L. G., KANUK, L. L.: *Nákupní chování*. Brno : Computer Press, 2004, p. 696.

[4] MUSOVÁ, Z., MUSA, H., LUDHOVA, L.: Environmentally responsible purchasing in Slovakia. In *Economics and Sociology*, 2018, Vol. 11, No. 4, p. 291.

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swaps and lectures on the topic are organized). [7] In Slovakia, consumer behavior is changing significantly and people are changing their lifestyles to life without waste. We can consider the emergence of free-packaging stores as this change, which showed us how to buy without packaging, we can buy better and more environmentally friendly products, thus supporting the circular economy. The circular economy is a closed circle, wherein at the beginning, there are resources, production and consumption, waste and recycling so that it can be reused in the production process. There are eco-innovations in the middle of the circle, which are oriented, e.g., for the efficient use of natural resources, environmental pollution (environment), economic growth and competitiveness, or consumers' orientation towards organic products.[8] The circular economy, on the other hand, from the linear economy, perceives waste as a resource. It minimizes the extraction of minerals on the one hand and reduces waste generation on the other. The circular economy or the green economy consists of three parts - product (eco) design, responsible consumption and, last but not least, recycling.[9] The current system is based on the principle of "take - make - throw away". It means that we discard minerals after use and they will decompose for many years. According to recent statistics, global production ofgarments has duplicated in the last 15 years, and the number of timesan item is used before it is discarded by the user has dropped by 36 % and reuse of clothes globally is below 15 %.[10] On the contrary, the circular economy works in two circles: biological and technical. The materials move in these circles; thus, no waste is generated because waste is perceived as a source in this system. The circular economy represents a business opportunity and can bring certain benefits, even differentiating itself from its competition and innovating. Applying the circular economy principles in companies brings economic benefits, reduces the dependence of raw materials and the environmental footprint of products, which makes companies behave more responsibly, and creates a competitive advantage and a path to business sustainability. [11] [12] Slovaks and Czechs are primarily focused on package-free stores. People tend to shop responsibly and focus more on the environment. That is why everyone needs to know that we must prevent waste.[13] In recent years, package-free stores have become a trend in the world. Their main goal is to sell food, drugstores and cosmetics so that no unnecessary waste is generated. Such shops allow consumers to buy products in their containers. As a result, they try to minimize the consumption of plastics, which pollute the environment in large quantities. In the past, it was common to buy food in glass or cloth containers. Package-free stores currently offer their customers the highest quality raw materials, especially from local farmers and growers. Package-free stores operate on the principle that the customer brings their containers for the purchase of goods. They also have containers available in the store, in case the customer does not bring them. The advantage of these stores is the purchase of tailor-made products and prices compared to packaged products. In the unwrapped shop, we can find vegetables, fruit cuts and slices, cereals, pasta,

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[7] *Slovakia going zero waste*. [online]. [202-09-21] Available at: <http://zero-waste.sk/slovakia-going-zero-waste/>.

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[13] RÁŠOVÁ, D.: *Ľudia musia vedieť, že najdôležitejšie je vzniku odpadu predchádzať*. [online]. [2021-09-20]. Available at: <https://www.zemito.sk/blog/denisa-rasova---ludia-musia-vediet--ze-najdolezitejsie-je-vzniku-odpadu-predchadzat/>.

salt, sugar, biscuits, bakery products, butter, flour, juices, nuts and dried fruits, coffee and tea, spices, soaps and shampoos, powder, gels for washing or detergents, etc. These companies are setting an example with the problem of environmental pollution, and as they become a current trend, their number is growing.[14] Paper bags or cloth bags can be used instead of plastic packaging. Organic food or package-free stores are most often visited by genuine green customers interested in the environment and can sacrifice their shopping comfort within the ecology. If the buyer is sufficiently informed about environmental issues, he can make the right decision when choosing the purchased goods. Ecological awareness of customers is becoming one of the essential factors in shopping behavior.[15] The legislation of the Slovak Republic does not specify strictly which foods could be sold in package-free stores, but the operator must ensure that the food is not hazardous to health. Package-free stores are recommended to sell raw materials, e.g., dry foods (legumes, dried fruits, nuts). Oil cannot be put up for sale to prevent adulteration or food that spoils quickly due to hygiene. From a hygienic point of view, the sellers are responsible for the packaging that customers bring.[16] If one buys without packaging and ecologically, one can eliminate almost all plastic packaging - for food, cosmetics and drugstores. At present, we can buy them in package-free stores or markets. The only problem with food sales is that chilled products such as cheese, ham, or meat are perishable, so few are sold in such stores. You can bring any suitable and clean packaging for purchase in such stores. The best packaging is plastic zip pockets that can be washed and reused, a cotton bag or glass containers. The most significant advantage of package-free stores is buying the quantity we need. In addition, it involves the sale of quality and healthy raw materials from local farmers and growers. Shopping in package-free stores is one of the ways people can help reduce packaging overproduction.

2 Methodology of research

In order to fulfill the set goal of the submitted paper, we decided to carry out a questionnaire survey. We surveyed Generation Z. Generation Z (abbreviated as gen Z) was born between 1995 and 2010 and is the successor generation of generation Y (Millennials). Due to the researched issues, we focused on respondents from 18 years 1994 to 2003. Gen Z is also known as the “smartphone” generation and actively uses social networks. It is full of activism and is identified with the climate movement. In Generation Z, we may notice an individual approach to work or self-education. Representatives of this generation are team-oriented; they like to communicate with others and find out their opinions. They want to live in a world where human rights and anti-discrimination laws are natural. They recognize the importance of protecting the environment and see global warming as a real threat. They are culturally, philanthropically and environmentally socially responsible. They are also called the silent generation or “net generation”, related to the need to be constantly online. The Internet is a source of communication and entertainment for them. They make friends through social networks, thanks to which they can meet people from all over the world. The positives of the Generation Z

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[14] MINÁROVÁ, M., MUSOVÁ, Z., POLIČIKOVÁ, E.: Uplatňovanie princípov kruhovej ekonomiky ako konkurenčná výhoda bezobalových podnikov. In FIALA, R., ČINČALOVÁ, S., SLABÁ, M., POSPÍŠIL ZÁVODNÝ, J. (eds).: *Konkurence. Sborník příspěvků z 12. ročníku mezinárodní vědecké konference KONKURENCE.* Jihlava : VŠP v Jihlave, 2020, p. 438. [online]. [2021-09-20]. Available at: <https://konference.vspj.cz/konference/61/196>.

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[16] ANDRAŠIOVÁ, V.: *Bezobalové obchody (zerowaste) - aké majú povinnosti?* [online]. [2021-09-19]. Available at: <https://www.podnikajte.sk/zakonne-povinnosti-podnikatela/bezobalove-zero-waste-obchody-povinnosti>.

representatives include courage, accepting challenges and the need for self-realization. They are technologically advanced and can find and process a lot of information in a short time. In the work environment, their great advantage is adapting to innovations or even being their initiators.[17] [18] To obtain information about the researched issue, we used the method of questioning in a questionnaire. The questionnaire was made available through a web browser application - Google Docs- and distributed only electronically. To get respondents, we used social networks for their reach - Facebook and Instagram. The questionnaire was shared within the Facebook platform in a Faculty of Economics of Matej Bel University group. The sample in the form of 857 respondents is not representative; therefore, it does not generalize the findings from the questionnaire survey results to the whole basic set. The survey aimed to find out information, opinions on the issue of zero waste, and the perception of "package-free" business in Slovakia by the Z generation. We set several research questions, for which we used the software SPSS Statistics. In this paper, we present the selected results of the survey. Of the total number of respondents of generation Z, the largest group consisted of women aged 19 to 25 years. It is 47% of the researched sample, which represents 402 respondents. Of the total number of men (382), most were aged 18 to 23 (221). As the largest segment, we identified the segment of university students, which was mentioned by up to 454 respondents (53%). According to completed university education, 45% with a university education of 2nd degree, 37% of university education of first degree. The smallest segment in terms of education is a higher education of 3rd degree with a response rate of 18%. Secondary school education with a high school diploma was reported by 34% of respondents.

3 Results and discussion

In the introductory part of the questionnaire, we were interested in whether the respondents had already heard about the zero waste trend and whether they applied it in practice. The majority answered positively; specifically, 438 respondents know and also apply this principle in practice. Respondents who know the concept but do not apply it in practice - 261. In our sample set, for the first time, the term zero waste was heard by 158 respondents. This result was quite surprising for us, given that our respondents belong to the net generation, spend a lot of time on social networks, and could hear about this trend from this source. However, on the other hand, respondents may have heard of such an idea, they may have applied it in practice, but they have no idea that it is so-called, so "without being aware of this fact," they support zero waste. For this reason, we asked another question again to all respondents. Respondents had a choice of several answers, as not everyone has to apply only one activity in practice to support the idea of Zero waste. Some activities may be performed in daily life without knowing the Zero waste principle at all. Most respondents carry their own bags to stores (471), which we consider is the beginning of the elimination of plastics and a step towards environmental protection. I do not use the offer of plastic bags in stores, which 386 respondents mentioned. 166 respondents prefer the support and purchase of local products. Only 134 respondents carry their packaging to purchase fruit and vegetables, and 257 respondents bring their coffee cups. The planned purchase of products without packaging, I am looking for recyclable packaging, I upcycle only – all these statements were mentioned by 111 respondents, which is very little of

[17] DOLOT, A.: The characteristic of Generation . In *e-mentor*, 2018, Vol. 74, No. 2, p. 92. [online]. [2021-09-22]. Available at: <http://www.e-mentor.edu.pl/artykul/index/numer/74/id/1351>.
[18] FRANCIS, T., HOEFEL, F.: *TrueGen: Generation Z and it simplications for companies*. [online]. [2021-09-22]. Available at: <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/true-gen-generation-z-and-its-implications-for-companies>.

the addressed sample of generation Z. Respondents who stated that they do not apply the principle of zero waste, even if they know it, had the opportunity to state the primary reason for their disinterest. The most common reasons for disinterest were: financial demands (121), lack of time (57), hygienic reasons (products without packaging have a little hygienic effect on me), said 39 respondents, it bothers me to carry my packaging (29), it is impossible to achieve zero waste, it simply does not make sense (19).

They added: at the moment, they do not feel that way; I do not care what I buy groceries in. We believe that society's idea circulates that everyone interested in this lifestyle must be perfect in it. A certain pressure makes people think that it makes no sense to try if they throw away all the plastic things and do not live in complete harmony with nature. Such thoughts need to be eliminated through proper and targeted education among people, and especially young people. It is important to emphasize that we do not have to do strenuous and complicated activities that take us much time to become people who help minimize environmental pollution. We were also interested in the issue of waste separation. In order, the most frequent respondents separate plastic (796 respondents). Paper separates up to 612 respondents and 365 respondents separate glass. Less than half of the respondents separate biowaste. We also asked about the separation of electronics (only 150 respondents), given that it is known about Generation Z that they prefer to sell electronics on bazaars and portals designed for that particular purpose. Textiles are separated by 170 from the addressed respondents. A minimum of respondents separates metal (42), tetra packs (28) and oil (12). Even such a small step is the right decision of respondents to improve the environment in which we live. An essential step in the zero waste trend is buying food without unnecessary packaging, i.e., buying in package-free stores. In stores of this type, food is packaged in reusable bags or other, more ecological packaging, which you bring yourself or buy directly in the store. The great advantage of these stores is that they offer fresh organic food and various types of food that we do not find in regular food chains. The first package-free store in Slovakia was founded in 2015. The Fekiač family lives in the village of Stožok near Detva; they first established an e-shop, opening the brick and mortar shop only later. They promoted and sold products from local farmers and producers. The inspiration for opening the e-shop was permaculture; its basic principle is caring for people and the Earth. When ordering on their e-shop, the customer can choose a reusable package that can be returned or used at home for food storage. Where food packaging cannot be reused or the nature of the food does not allow it, they offer the possibility of recyclable paper packaging.[19] Package-free stores are not always focused only on food. An example is the Delizia store. It is a network of stores with Italian cosmetics, and this store was opened in 2015 in Žilina. Most of their products are purely natural products that have not been tested on animals and up to 90% of their products are biodegradable[20]. Today, we have approximately 36 package-free stores in Slovakia. For the above reasons, we focused on whether the respondents in the sample shop in package-free stores. Almost half of the respondents, in particular 434 respondents, visited the package-free store but did not shop there regularly. As many as 355 responses confirmed that respondents had never visited the package-free store. There are only 68 respondents in the sample who visit the package-free store and regularly buy products there. Respondents who answered that they regularly visit package-free stores come from the Bratislava municipality region (46), from the Banská Bystrica region (13); the remaining 9 respondents are from the Žilina municipality region. Customers mainly buy groceries (flour, pasta, rice, oils, spices, nuts, sweets ...), drugstores/cosmetics (shampoos, shower gels, creams, soaps ...), various household aids and equipment (fruit and vegetable nets, shopping bags, thermo-mug, water bottle) within the

[19] *Bezodpadu.* [online]. [2021-09-19]. Available at: <https://bezodpadu.sk/o-nas>.
[20] *Delizia.* [online]. [2021-09-19]. Available at: <https://deliziasr.sk/sk/content/4-o-nas>.

package-free stores. We were interested in whether there was a package-free store directly in the place of living of respondents. The questionnaire survey results showed that such a shop is located in the place of residence (67% of respondents who have already visited a package-free shop). They do not have a store near the residence but are willing to travel further (neighboring city), as 33% mentioned. As many as 291 respondents from those who have never visited the package-free store at the residence did not hear this information (355). This finding is again surprising given that the generation under research is considered the net generation, a generation that is always online. They are not located in their vicinity and therefore do not visit the given type of shop, 48 respondents said. Other respondents mentioned the possibility of I do not want to comment. An essential part of the questionnaire was identifying the main reasons respondents visited the package-free store. The question was open. Based on the answers obtained, we divided the respondents into two groups. The first group of respondents visited the package-free store for the first time out of curiosity. This answer is mentioned up to 428 times. The respondents wanted to know what such a shop looks like, how it works in it, what they can buy there, or whether they have all the food there as in a regular store. The second group of people visit package-free stores to support the idea of zero waste, i.e., the intention is clear in advance. 334 respondents expressed interest in minimizing the waste that people produce in their homes. The effort to contribute to a cleaner and better environment has been mentioned 279 times. Do not buy unnecessarily disposable packaging and one will no longer use it; this answer has been mentioned up to 223 times. Looking at our planet, the lifestyle change was the reason for visiting the store for 176 respondents. Live more eco-friendly and buy and support local businesses; 156 respondents provided this reason. In addition to motives, we were also interested in barriers to why respondents do not regularly buy (434), or not at all in any package-free store (355) and which factors discourage them from buying. The most frequently cited reason was the high price of package-free products (573). A limited assortment of package-free products compared to the selection in the supermarket, especially as far as food is concerned, was stated by 294 respondents. Also, most respondents mention the store’s location, do not have it nearby or near home and do not want to travel for shopping, as the regular store is closer (269). Due to the lack of information, 245 respondents do not visit the package-free store. 154 respondents expressed concerns about the insufficient hygiene of package-free products. Based on the questionnaire survey results, we also focused on verifying the established hypotheses, two of which we present in the paper.

We assume that more than 40% of respondents know the concept of zero waste.
We used a nonparametric binomial test to verify the established hypothesis. This is mainly due to the denomination sign, which does not have a normal distribution. The application of the test is shown in Table 1. Based on the output of the SPSS program, we first accept or reject the established statistical hypothesis while then interpreting the result to the hypothesis.

Table 1: Output of the SPSS program for the 1st hypothesis

Binomial Test							
		Category	N	Observed Prop.	Test Prop.	Exact Sig. (1-tailed)	Exact Sig. (1-tailed)
Do you know the term“zero waste”?	Yes	1	699	,8	,4	,000	,000
	No	0	158	,2			
	Total		857	1,0			

Source: Own processing.

H_0: 40% of respondents of generation Z know the term zero waste.
H_1: More than 40% of Generation Z respondents know the term zero waste.

P value = 0,000 < α = 0,05
Based on the relationship between the value of p and the level of significance of α, we reject the null hypothesis. With 95% reliability, we accept that more than 40% of respondents know the term zero waste. Based on the implemented test, we accept the hypothesis that more than 40% of respondents know the concept of zero waste. As can be seen from the test output of Table 1, up to 80% of the sample researched provided a positive response. We can state this fact as positive. The mere knowledge of the word can evoke respect for the respondents with respect for the environment. From the survey's presented results, it is clear that the addressed respondents of generation Z in Slovakia know the trend of zero waste come into contact with various aspects of the trend and can interpret this phrase in the correct way sense. They see in it the motive of saving the environment.

We assume that the most decisive factor in Z-generation consumer behavior when shopping for package-free stores is the price.
Before applying the test itself, we adjusted the data to the required form; in particular, we recoded them and divided the numbers into categories. The nominal character does not have a normal distribution, and we, therefore, used a nonparametric Friedman test of agreement of all categories.

Test Statistics[a]

N	227
Chi-Square	310,581
Df	6
Asymp. Sig.	,000

a. Friedman Test

Based on its output, we identified that individual factors influence consumer behavior to varying degrees. Based on the above, we arranged the individual categories in order according to Mean Rank - average value: price (6.96), quality of package-free products (6.63), assortment (6.05), environmental aspect (5.79), availability (4,83), information on package-free products (3.82), hygiene (3.74), support for local producers (3.73), other factors (3.45). Finally, we researched the significance of the differences between the created pairs using the Wilcoxon test to compile the order of influence of individual factors.

Test Statistics[a]

	Kvalita - Cena	Sortiment - Kvalita	Environmentálny aspekt - Sortiment	Dostupnosť – Environmentálny aspekt
Z	-3,345[b]	-5,275[b]	-2,243[b]	-8,523[b]
Asymp. Sig. (2-tailed)	,001	,000	,025	,000

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

Test Statistics[a]

	Informácie - Dostupnosť	**Hygiena - Informácie**	**Podpora lokálnych výrobcov - Hygiena**	**Iné – Podpora lokálnych výrobcov**

Z	$-10,870^{b}$	$-1,209^{b}$	$-,296^{b}$	$-6,040^{b}$
Asymp. Sig. (2-tailed)	,000	,227	,768	,000

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

Based on the findings, we interpret the established hypothesis. Order of categories compiled based on the Wilcoxon test: price, quality, assortment, environmental aspect, availability, information, product hygiene, support of local producers, others. Based on the order found based on statistical processing, we can accept the hypothesis that the most decisive influencing factor on the consumer behavior of the Z generation when buying package-free products is the price. The price aspect is at the top of the rankings, making it clear that it is the most substantial incentive to influence the behavior of Generation Z consumers. The fact is also documented by the results, where 20% of respondents admitted the most crucial aspect. Similarly, however, most respondents stated (76%) that they consider the price but it is not a decisive factor for them. It is clear that price plays an essential role in the decision-making phase of purchasing non-packaging goods, but other factors from the ranking also enter into this process, while the degree of their influence varies. Every consumer has his preferences in deciding according to the preference of his values and the perception of added value from the purchase of goods in unpackaged goods.

Conclusion

Global-minded businesses must strive to show their customers that they are socially responsible, that the circular economy principles are part of their business strategy, where the priority is to save and use limited natural resources. Undoubtedly, such entities also include package-free shops. In the paper, we presented results of the primary questionnaire survey focused on information, views on zero waste, and the Z generation's perception of "package-free" business in Slovakia. The results confirmed that generation Z vs. the philosophy of zero waste and the principles of package-free shops are not foreign to the studied generation and are interested in environmental issues (438 respondents know and also apply this principle; 261 respondents know the concept but do not apply it in practice). Most respondents carry their own bags to stores (471), which we consider is the beginning of the elimination of plastics and a step towards environmental protection. Even though it is the net generation, the results paradoxically confirm the lack of information of the surveyed generation Z about the availability of package-free stores (245 respondents) as well as lack of interest due to high product prices (573 respondents), as well as fears of poor hygiene (154 respondents), again based on inconsistent knowledge. The planned purchase of products without packaging, I am looking for recyclable packaging, I upcycle only – all these statements were mentioned by 111 respondents, which is very little of the addressed sample of generation Z. As entrepreneurs within the package free business care about our planet through the way they are offered, by changing their lifestyle, which is in symbiosis with nature, it is necessary to start using more influencers in online marketing to reach the Z generation. It is necessary to connect ecology with Instagram. For more young people to deal with educational issues, a suitable tool for reaching the young generation for package-free shops is those influencers known for their ecological thinking (# Dobrožrúti, #Tina Nasté, #Zero Waste Slovakia, #Rogue Minimal and others). The greatest strength of influencers lies in that many can consider them their friends via social networks. They get to know their lives, let them get close to them, they know practically everything about them. People have the opportunity to communicate, comment on their photos, express their opinion or admiration, and unlike a television program, they can also receive feedback from them. Another critical communication tool in the media environment is podcasts. Podcasts offer new possibilities for reaching the target groups, which can be the Z generation. Podcasts can be listened to anywhere, allowing them to spend time productively, which is one of the characteristics of the researched generation. If the interest in package free shopping and environmentally responsible behaviour will be only one of the actual trends or it will become new, responsible and sustainable life-style, only future will show. The most significant limitations of the research are the unrepresentative sample of respondents, as a result of which the survey results could not be generalized to the whole basic set. The study's limitations create opportunities for future research, within which it is then possible to perform in-depth statistical analyses.

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SELECTED ASPECTS OF ECO-DESIGN IMPLEMENTATION IN COMPANIES IN SLOVAKIA

Zdenka Musová – Eva Poliačiková – Martina Minárová

Abstract
An integral part of the new circular economic model is eco-design, focused on reducing the product's adverse effects throughout its life cycle. Its successful implementation is a current challenge for companies to implement essential changes in business processes. On the other hand, changes in environmental awareness and consumer behavior and increasing environmental responsibility are also driving companies. In this context, the paper aims at researching selected aspects of the eco-design implementation in industrial companies in Slovakia, the implementation of related activities, the perception of barriers, or expected benefits to its implementation. The selected results of the primary research from March 2021 are presented, focused on the opinions of 75 companies´ representatives in Slovakia on the issue of eco-design.

Keywords:
Circular economic. Eco-design. Environmental responsibility. Implementation.

Introduction

Global issues nowadays include the constant growth of the amount of waste, issues with its disposal, the overuse of resources (often non-renewable), and other environmental issues. The circular economy is currently a promising way to mitigate or solve growing environmental issues. The circular economy model is a sustainable development strategy, creating functional and healthy relationships between human society and nature[1]. The circular economy (CE) represents an alternative model where the values of products, materials and resources are kept for as long as possible. Waste and resource utilization is minimized, especially in the last phase of the product life cycle. After its completion, this product is reused in order to create an entirely new value[2]. According to Ruiz-Real et al.[3], the circular economy is the production system and consumption with minimal material and energy losses through large-scale reuse, recycling, and recovery. The transition to a circular economy requires the cooperation of various market players - consumers, developers and designers, companies, the state or local governments or municipalities. Business entities that have already realized the need to behave in an environmentally responsible manner and respond adequately to the requirements of consumers and other interest groups can play an important role. One of the areas that contribute to the fulfillment of the goals of the circular economy is eco-design. Its application aims to reduce the high volume of waste produced, which often ends up in landfills. The vast majority of resources available for industrial production are not unlimited, so the current model cannot remain sustainable for a long time without a change in attitudes towards the environment. The application of eco-design principles can significantly reduce the negative impacts of products on the environment throughout the life cycle. From the selection of raw materials, their suppliers or customers to the subsequent disposal or reuse in a circular model. In this context,

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the paper focuses on researching selected aspects of the eco-design implementation in industrial companies in Slovakia, the implementation of related activities, the perception of barriers or expected benefits to its implementation. After the theoretical definition of the subject matter, the partial results of the primary research from March 2021 are presented, in which the opinions of 75 companies´ representatives on the issue of eco-design were researched further.

1 Literature review

For quite a long time in Europe, there has been an initiative that the circular economy (CE) will strengthen environmental sustainability and economic prosperity. As a new economic model, the circular economy essentially requires a reassessment of both sides/aspects/views of the linear and fossil-based economy - both supply and demand [4]. Such a significant change requires the transformation of both the production and consumption systems and the active involvement of all market players. Opposite to the linear system, the concept of CE is regarded as an alternative that may give rise to economic and ecological benefits. In today's globalized environment, the principles of CE as part of social responsibility are considered a tool for creating a competitive advantage. The "circular economy" concept becomes a strong point by which a company can differentiate itself from competing entities that are far behind in its implementation.

There are various definitions and characteristics of the circular economy. According to Ghisellini et al.[5], CE is an industrial economy targeting enriched sustainability through restorative objects and design. Ashby[6] stated that the core of CE is recovering value from tangible commodities through a narrower closed-loop of reuse and restoration, which could increase economic and environmental performance to recycling and energy recovering. Kusa et al.[7] add that the circular economy concept aims at creating a new innovative process or a business model where already used materials or spare parts are returned into the production process to avoid wasting valuable materials in economies. Ungermann & Dedkova[8] believe that in a CE, materials and products should be reused, recycled, and recovered instead of discarded, if not reduced. Businesses aiming at becoming circular should offer solutions based on such activities.

Product design is an integral part of the circular economy model, as the utility value is formulated in the initial stages of its design. When creating a product design, it is necessary to consider several factors, such as the function it should perform, the environment in which it will be used, the demands placed on the design of the product, or the technological possibilities of its production. It is at the design stage that is most important for determining the environmental performance of a product that it is possible to prevent various environmental

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risks that could reduce the utility value of the product and its success on the market. Producers are under pressure to reduce the negative environmental impacts of their products, caused not only by production processes but also by the characteristics of products at all stages of their life cycle. The application of eco-design principles brings the possibility to reduce these adverse effects significantly[9].

The gradual change of the current economic system also changes the direct relationship between the consumption of material resources, energy and man. At the same time, however, the impact of industrial production on the planet's ecosystem is significantly increasing. The need to assess the environmental impact after it has been placed on the market is linked to the goal of sustainable development in connection with design. This assessment includes the implementation of environmentally sustainable practices in production processes, in the products themselves and at the same time in consumer behavior concerning their use. Therefore, quality design is expected to be functional and aesthetic in appearance and be environmentally friendly[10] . Badida and Muransky[11] mention three reasons for applying the main principles of designing environmental elements - eco-design. The first is the excessive use of natural resources - an ecological reason. The economic reasons for the application of eco-design are the motivation of the company to achieve higher customer satisfaction, better image, or reduction of input costs. Social stability or a better quality of life of the population are social reasons for involvement in the circular economy through the application of eco-design in practice. Chovan and Toncikova[12] also draw attention to other reasons - consumer requirements for adequate environmental properties of products, valid environmental legislation (valid law on eco-design from 2010), as well as requirements of foreign investors for the application of environmental measures. The authors[13] mentioned above define eco-design as "an internationally recognized procedure for improving the environmental performance of buildings during their life cycle, including their design and development, production, marketing and distribution, use and disposal after their expiration". The philosophy of eco-design is based on a reasonably understandable and straightforward idea that the environment is an equal factor in the development of a new product and traditional factors such as function, aesthetics, price, or overall quality of the product. Eco-design shall consider environmental aspects at every stage of product development, aiming at a product that has the least possible negative impact on the environment throughout its life cycle. In the Circular Economic Action Plan, the European Commission[14] underlines that „better design can make products more durable or easier to repair, upgrade or remanufacture. It can help recyclers disassemble products to recover valuable materials and components". Although eco-design is constantly evolving, its guiding principles, first published in 1992 in the American Magazine Innovation, have remained the same. Specifically, (1) promoting safe products and services, (2) protecting the biosphere, (3) sustainable use of natural resources, (4) reducing waste and increasing recycling, (5) wise

[9] BOSAK, M. et al.: *Udržateľný rozvoj – rozvojové koncepty*. Košice : OZ Gamajun, 2018, p. 126.

[10] CHOVAN, M., TONCIKOVA, Z.: *Kroky pre implementáciu ekodizajnu do procesu navrhovania výrobkov.* Zvolen : Technická univerzita vo Zvolene, 2013, p. 34.

[11] BADIDA, M., MURANSKY, J.: *Ekodizajn v strojárstve – základy metodiky.* Prešov : Vydavateľstvo Michala Vaška, 2005, p. 19-20.

[12] CHOVAN, M., TONCIKOVA, Z.: *Kroky pre implementáciu ekodizajnu do procesu navrhovania výrobkov.* Zvolen : Technická univerzita vo Zvolene, 2013, p. 36.

[13] BADIDA, M., MURANSKY, J.: *Ekodizajn v strojárstve – základy metodiky.* Prešov : Vydavateľstvo Michala Vaška, 2005, p. 19.

[14] *The Ecodesign Directive (2009/125/EC): European Implementation Assessment. European Union*, 2017. [online]. [2021-10-20]. Available at: <https://www.europarl.europa.eu/RegData/etudes/STUD/2017/611015/EPRS_STU(2017)611015_EN.pdf>.

energy consumption, (6) reducing risk, and (7) shifting information between designers[15]. According to these principles, eco-design aims to reduce energy consumption, reduce the production of greenhouse gases, systematically protect the environment and at the same time increase the quality of products placed on the market. Emphasis is also placed on increasing product safety and reducing wastage of raw materials. Requirements for environmental design and use of products are set by Act 529/2010 Coll.[16] - Act on the Environmental Design and Use of Products (also known as the Eco-design Act). The requirements for the products are set so that the products can be placed on the market or put into service to ensure the free movement of these products in the internal market of the European Union. According to this Act, the manufacturer or his authorized representative is obliged to assess the conformity of the product properties with the technical requirements before placing the product on the market or before putting the product into operation. If the product's characteristics comply with the technical requirements, it shall issue a declaration of conformity and affix the CE marking to the product. The law specifies the environmental aspects that are assessed at each stage of the product life cycle, in particular, the regular consumption of materials, energy and other resources; anticipated emissions to air, water or soil; anticipated pollution due to physical effects such as noise, vibration or radiation; anticipated waste generation; the possibility of reuse, recycling and recovery of materials or energy.

2 Aim and data

The paper focuses on eco-design as part of the circular economy, as an opportunity to show greater environmental responsibility in enterprises and to contribute to environmental sustainability. The aim is to present selected primary research results focused on examining selected aspects of eco-design in the practice of industrial companies. The application of eco-design was investigated through established business processes (selection of raw materials, selected production processes and technologies, energy consumption, waste recovery, reuse, recycling, transport and packaging). The research object was eco-design as a part of the circular economy, its perception and implementation by companies in Slovakia. The subject of the research was 75 Slovak industrial companies of various sizes and operating in various industries.

A questionnaire survey was used to collect data. The questionnaire was composed of questions focused on eco-design. The introductory questions (4) were general, focused on the circular economy; the other 20 questions already concerned eco-design, activities related to it, barriers that limit its implementation, as well as the benefits that result from its implementation. The questionnaire also included four identification questions (size of the company, industry in which the company operates, number of years of operation on the market and function of the person completing the questionnaire). The questionnaire was distributed to respondents via e-mail (sent initially to almost 1.500 companies) in March 2021. A total of 75 companies participated in the questionnaire survey. In terms of size (according to the number of employees), there were 4 micro-enterprises (less than 10 employees), 15 small companies (10 - 49 employees), 37 medium-sized companies (50 - 249 employees) and 19 large companies (250 and more employees). Most of the respondents came from the engineering sector (15 companies), 10 companies, in the same way, worked in the food sector or construction. 6 were

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[15] CHOVAN, M., TONCIKOVA, Z.: *Kroky pre implementáciu ekodizajnu do procesu navrhovania výrobkov.* Zvolen : Technická univerzita vo Zvolene, 2013, p. 48.

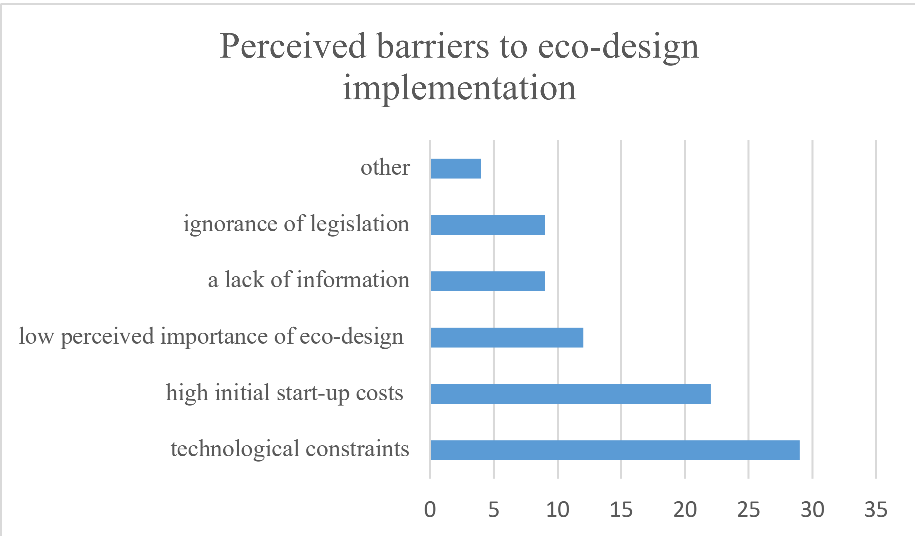
[16] *Zákon č. 529/2010 Z.z. – Zákon o environmentálnom navrhovaní a používaní výrobkov.* [online]. [2021-10-20]. Available at: <https://www.epi.sk/zz/2010-529>.

wood processing companies, 5 from the agriculture field and 5 representatives of the chemical industry. Three companies were from the automotive industry and three were from the textile industry. The remaining companies represented the pharmaceutical industry, electrical engineering, leather industry and others. The questionnaires were filled in mainly by managers, general managers, business or financial managers, and environmental specialists from the analyzed companies.

3 Research results

In the first part of the survey, almost half of the respondents indicated that eco-design is an important (20 + 14) aspect of the circular economy. When defining eco-design, most companies (27) agreed that eco-design is “an effort to minimize waste and therefore emphasize products should be placed on durability, resilience, repairability and recyclability”. One third of companies (25) perceive eco-design as the production of products that have the least possible negative impact on the environment throughout the life cycle of the product. We also researched in which specific activities or processes, the use of eco-design in business practice is reflected. By far, the most common response was compliance with environmental legislation (53 companies). As many as 37 of the companies in our sample are trying to increase the environmental awareness of employees; in 30 companies, they are trying to introduce innovations in connection with the implementation of eco-design. Ecological purchasing, environmental communication and recyclability of products also appeared several times in the answers.

In connection with eco-design, companies perceive several barriers that limit them in implementing eco-design in practice. An overview of the answers represents Graph 1.



Graph 1: Perceived barriers to eco-design implementation
Source: Own processing.

According to 29 respondents, *technological constraints* are the biggest barrier. However, technological innovation represents a significant investment in the future, which may reflect greater competitiveness or reduced negative environmental impact. If businesses cannot afford such investments, they need to reconsider making more efficient use of the facilities and resources at their disposal. The second most significant barrier is the *high initial start-up costs*

(22 responses). Despite the higher initial costs of implementing the CE principles, savings can be made in the future, especially on raw materials and, in the case of efficient energy consumption, operating costs. The same applies to the implementation of eco-design. Companies can reduce production costs and extend the product life cycle by creating products in line with its philosophy. Businesses can also focus on activities that do not require high financial capital. They can start by analyzing business processes and finding out which ones can be run more environmentally friendly to minimize waste generation. Furthermore, it must be stated that the barrier is also the *low perceived importance of eco-design* as part of the implementation of the principles of the circular economy. Managers of some companies often do not realize that the product design phase is the most important in determining the environmental characteristics of the product and processes. In this context, a way to prevent environmental risks could be, for example, to employ the own designer or the collaboration of several experts (for example, a designer and process analysts). Businesses perceive *a lack of information,* especially when analyzing the product life cycle. Existing information on the product life cycle should be analyzed and recorded at each relevant department and each stage of its life cycle to be used as a starting point for future decisions. Some companies also felt the lack of information in the case of environmental laws, but it can be stated that all relevant information is commonly available and relatively easy to find. 10 companies stated that the barrier to implementing eco-design is a lack of financial resources; for 9 companies, it was ignorance of legislation.

Another question focused on the benefits that companies perceive in the implementation of eco-design. Respondents could comment on possible benefits on a 5-point scale of significance (from 1 - least significant to 5 - most significant). We perceive the perceived significance of individual benefits by respondents in Table 1.

Table 1: Significance of benefits of eco-design implementation in companies

Implementation eco-design benefits	1	2	3	4	5
Better company image	5	1	23	**24**	22
Reduction of environmental impact	2	5	10	27	**31**
Reduction of resource consumption	3	2	15	23	**32**
Customer satisfaction	3	6	15	13	**38**
Market differentiation	4	10	21	**23**	17
Improving product quality	7	5	18	18	**27**
Contribution to global sustainability	2	8	19	19	**27**
Increase efficiency	5	6	22	14	**28**

Source: Own processing.

The results declare that most of the benefits of implementing eco-design are given high importance by companies. Most respondents (38) identified customer satisfaction as the most significant benefit. Considering environmental protection, we evaluate positively the identified benefits - reduction of environmental impact (31 responses), reduction of resource consumption (32) and contribution to global sustainability (27). We also consider the improvement of product quality to be significant (27 responses).

An essential part of creating a new product, or the process of transforming an old product, is creating a detailed description of the product, including its environmental parameters. 21 companies make this description by analyzing the strengths and weaknesses of the product, the same number of companies by describing the product's characteristics. Another 20 respondents stated that they are processing the product description based on comparing the properties of the new or redesigned older production with a competing product with similar characteristics. 19

respondents use the evaluation by the potential customer to the proposed parameters. 17 respondents stated that they process the product description by analyzing the expected impact of the product on the environment. Some companies (6) stated that, although they process a detailed description of the new product, they do not consider its environmental parameters. A positive finding is that companies apply several procedures to create a detailed product description. On the contrary, it is not processed by only 12 (i.e., 16%) companies from our research sample. The reason is mainly the time and administrative complexity of the process. When creating a new product, it is important to pay attention to the requirements of the interest groups for which the product is intended. On the positive side, 20 (26.6%) respondents confirmed permanent cooperation with interest groups. The same part researches also expected requirements of interest groups. In terms of forms, questionnaires focused on requirements, surveys among interest groups, organization of joint workshops and seminars are used. 8 respondents stated that they ignore the requirements of interest groups. Product life cycle analysis is critical throughout its life. We asked respondents which phases of the life cycle they analyze and which they do not.

Table 2: Significance of benefits of eco-design implementation in companies

	Companies	
Product life cycle phase	**analyze**	**do not analyze**
Selection and use of materials	62	13
Production	61	14
Packaging, transport and distribution	54	21
Installation and maintenance	48	27
Use	55	20
End of using phase	41	34
Post-completion phase / feedback	38	37

Source: Own processing.

Most companies pay attention to the analysis, especially in the early stages of the product's life. However, after the production phase, the share of analyzing companies starts to decrease slightly. The smallest share of the researched companies pays attention to these activities in the last phase of the product's life (38). The most frequently cited reasons for not conducting the analysis were lack of information and time.

Conclusion

Enormous environmental pollution, depletable raw material resources and increasing amounts of waste result from the current linear economic model, which is no longer sufficient for the current needs of society. Without fundamental changes in the behavior of businesses and consumers, the current method of production cannot continue. To ensure sustainable development on a global scale, it is essential to use available resources more innovatively. The model of the circular economy seems to be the right solution to the mentioned problems. The circular economy seeks to care for the environment, respect environmental boundaries, and increase the share of resources in the economy that are renewable and recyclable, which leads to a reduction in the consumption of raw materials. Eco-design is also based on the principles of circular economics. The application of eco-design principles offers the possibility of significantly reducing a product's negative impacts on the environment throughout its life cycle. We asked representatives of 75 companies of various sizes and industries about selected aspects of eco-design and its implementation in an online questionnaire survey conducted in February and March 2021. As many as 45% of surveyed companies stated that they consider eco-design essential to the circular economy. The use of eco-design in business practice is most often reflected in compliance with environmental legislation. The most significant barriers to implementation are technological constraints and higher start-up costs. According to companies, the benefits are significant, customer satisfaction dominated, and the environmental benefits (reduction of the environmental impact, lower consumption of resources) were marked as positive. Although eco-design is still a relatively new concept in our conditions, it is becoming more and more known, especially to companies and their various interest groups. Its application in companies of various sizes and industries was also confirmed by the presented results of the questionnaire survey. In connection with the transition of companies to a circular economic model and to do business sustainably, we consider the behavior of most of the surveyed companies to be significant for the future and we evaluate them positively.

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VELENTURF, A. P. M., JOPSON, J. S.: Making the business case for resource recovery. In *Science of the Total Environment*, 2018, No. 648, p. 1031-1041. ISSN 0048-9697.
Zákon č. 529/2010 Z.z. – Zákon o environmentálnom navrhovaní a používaní výrobkov. [online]. [2021-10-20]. Available at: <https://www.epi.sk/zz/2010-529>.

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VISUAL DECEPTION: IMPACT, INTERPRETATION, AND CATEGORIZATION OF THE PICTORIAL PARTS OF A HOAX

Ján Paukovic

Abstract
This article aims to gain understanding of the use of the visual communication behind, or rather beside hoax messages spread around social media and internet. Misinformation circulating around our newsfeeds are often accompanied by pictures, some taken out of context, some manipulated by graphic software, but always with the same ambition as the written content that they escort, such as fearmongering, hate spreading or furthering various political intents. By interpretation of the pictorial content and its subsequent categorization, we can better understand the notion behind the less explored parts of a hoax message and gain more convenient position to push against misinformation. We will investigate the most shared hoaxes and what portion of them is accompanied by pictorial complements, increasing the potency of perceived misinformation. Further, by dividing those pictures into distinct categories, we can find different ways to unveil possible threat hidden behind picture or behind the whole hoax.

Key words:
Hoax. Interpretation. Picture. Social Media. Visual communication.

1 Introduction

Advent of the more accessible technology brought increase in both, creators and consumers of shared information circulating around us. Number of social media users soared from 2,86 billion in 20217 to current nearly 3,8 billion as of the end of 2021. Further increase is expected up to 4,4 billion during the year 2025.[1] Such massive increase of active users invites production of large amounts of different contents, which understandably becomes harder to inspect. For example, during 2009 Facebook employed only 12 content moderators for at that time 120 million active users. As the amount of active monthly users rose to 2,3 billion in 2018, amount of Facebook content moderators increased too, to 15 000.[2] We can see similar growing trend in the number of people using licensed software tools for content creation. Before launch of the Adobe Creative Cloud subscription model in 2013, mentioned company estimated sold copies of various software to be around 12.8 million. At the end of 2017 number the of active monthly or yearly subscribers was 12 million, further rising quarterly by 1 million to over 22 million at the end of 2020.[3] Considering the content production and software, there are many more options to choose from than just Adobe, and taking the fact that not everyone producing content uses licensed program into account, we can assume that the amount of content produced is increasing day by day. With increased amount of produced content resources needed to moderate and check the information increases too, what in turn enables more misinformation to slip through. Many of those misinformation, or hoaxes are made that way people will help their circulation voluntarily by sharing them knowingly and willingly, often not understanding real threat behind their action.

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[1] *Number of social network users worldwide from 2017 to 2025*. Realeased on July 2020. [online]. [2021-10-27]. Available at: <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>.

[2] FELDMAN, S.: *How Does Facebook Moderate Content.* Released on 13th March 2019. [online]. [2021-10-27]. Available at: <https://www.statista.com/chart/17302/facebookcontent-moderator/>.

[3] *Adobe Creative Cloud Adoption Grows to 22 Million Paid Members*. Released on 20th December 2020. [online]. [2021-10-27]. Available at: <https://prodesigntools.com/number-of-creative-cloud-subscribers.html>.

Pictures accompanying hoaxes are culprits not to be omitted in thought process of sharing a hoax. Person encountering misinformation can perceive pictorial addition to textual information as another impulse, furthering one's belief. Despite possible alteration or fabrication of visual content, its combination with already untruthfully written information creates a mutually empowered pair leading to a stronger statement, where one serves as the proof of the latter and vice versa.

2 Object of research and methodology

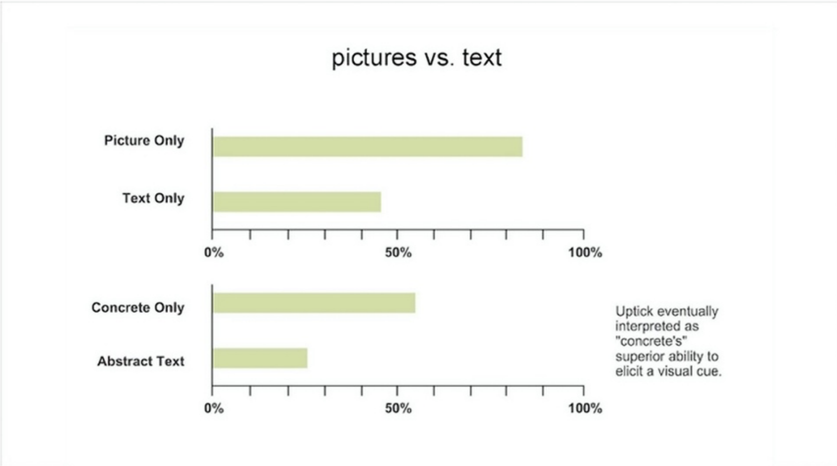
The main objective of the research is to understand the impact of a pictorial part of a hoax on the perception of a whole information, the link between a text and a picture which accompanies mentioned textual message, and further comparison of behaviour in sharing hoaxes either with, or without an illustrative addition to a written misinformation. In the first part of the paper, we focus on the comparative analysis of four different groups, based on the characteristic of the origin of a shared misinformation. Based on the place of origin, groups are divided into domestic (Slovak) and foreign. Based on the entity of origin, we further divide groups into entities posing as a single person (can be a real person, or an organized group falsely posing as single real person) or a media outlet. Aim of this analysis is to find patterns, similarities, or differences in the process of sharing hoaxes across and between chosen groups. To prevent bias, examined hoaxes were chosen randomly from articles of various opinionated and nonopinionated media outlets, websites, and Facebook groups (table 1). In the second part, we discuss the visual methodology of interpretation applied to pictorial content, polysemy of pictures and the bilateral relationship of picture and text based on the theory proposed by Roland Barthes. Applying this theory of mutual relationship on hoaxes, we outline relation between a text and a picture, and the way they affect each other in context of perception and interpretation of a false message. Lastly, we aim to categorize hoaxes into groups, according to the way they have been produced, or used.

3 Empowering visuals

Adding pictures to posts or text-based content shared through social media became standard, and today we can hardly encounter information that would appear on our news feed consisting only out of plain text without any embellishment. This necessarily doesn't apply to voicing one's personal opinions and or stories, but rather post shared by media outlets, groups, advertisement, or even thoughtfully forged and aimed misinformation. There are more reasons behind this mixing of pictorial and textual content than simple aesthetics. During an experiment a team of neuroscientists at MIT found out, that human brain can identify and process whole image seen for as short as only 13 milliseconds. Speed that topped previously suggested 100 milliseconds from study in journal *Attention, Perception and Psychophysics.*[4] Including picture in shared post thus increases possible interaction with or reception of information when encountered during scrolling through news feed. Also, while we look at a picture, even if it is composited from several other pictures, photographs or illustration, we eventually perceive it as single item. That doesn't apply to text. "*Pictures beat text by a mile. That's partly because reading is so inefficient for us. Our brain sees words as a lots of tiny*

[4] TRAFTON, A.: *In the blink of an eye.* Realeased on 16th January 2014. [online]. [2021-10-27]. Available at: <https://news.mit.edu/2014/in-the-blink-of-an-eye-0116>.

pictures and we have to identify certain features in letters to be able to read them. That takes time."[5]



Picture 1: Pictures vs. text
Source: MEDINA, J.: *Brain rule rundown. Rule #10: vision trumps all other senses*. In *Vimeo*. [online]. [2021-11-27]. Available at: <http://brainrules.net/vision/>.

On picture 1. we can see comparison of the abilities to immediately remember shown information of pictorial and textual origin. Human ability to recall pictorial content is higher between 80 and 90 percent, meanwhile textual information tends to be in bracket between 40 and 50 percent. What furthermore increases the chance of recalling information is strength of a presented visual. An experiment done by Department of Computer Science in Saskatchewan University shown, that participants preferred embellished visuals of presented charts over simple and plain ones. Also, people included in the experiment were able to remember significantly more information from the embellished charts after a 12-day gap.[6] Outcome similarly in favour of inclusion of pictures can be found in article *Effects of text illustrations: A review of research*, published in ECJT [Education communication and technology journal]. One from conclusions made in the article was: "*When illustrations provide text-redundant information, learning information in the text that is also shown in pictures will be facilitated. In 46 experimental comparisons of reading with and without pictures, the presence of relevant illustrations helped the learning of illustrated text information in all but one case. In 85% of the cases, the improvement was statistically significant. On the average, groups reading with pictures learned one third more, an improvement equal to one half a standard deviation of groups reading without pictures.* "[7]

Different studies have demonstrated, that including pictures with textual message increases human ability to perceive and remember shown information. These findings can be applied to any shared information might it be true, false, or out of context. For reasons state above we can expect that hoaxes made to be easily spotted, believed, and shared, will be accompanied by diverse kinds of visuals.

[5] MEDINA, J.: *Brain rule rundown. Rule #10: vision trumps all other senses.* [online]. [2021-10-27]. Available at: <http://brainrules.net/vision/>.
[6] TOMBOC, K.: *Text vs. Images: Which Content Format is Effective?* Released on 30th May 2019. [online]. [2021-10-27]. Available at: <https://www.easel.ly/blog/text-vs-images-which-content-format-effective/>.
[7] LEVIE, W. H., LENTZ, R.: Effects of text illustrations: A review of research. In *ECTJ*, 1982, Vol. 30, No. 4, p. 225.

3.2 Proportion of pictorial use in shared hoaxes

To prove our assumption, that in most cases hoaxes will be accompanied by pictures, illustrations, charts, or visuals of a similar kind - ones that would increase message's persuasive potency, we study different articles about hoaxes, fake news, and fabricated information to investigate the most circulated posts proven untruthful, and whether they were escorted by visual content. As a target of our analysis, we chose several different randomly selected and publicly accessible articles and posts from diverse media outlets, which content revolves around most shared and proven hoaxes. Examined hoaxes are differentiated into several groups. Depending on the origin or source i.e., who originally published the hoax. In this case if it was an entity presented as a group or as a community (social media group, account of opinionated or nonopinionated media company, or other kind of journalistic media outlet), or an individual (an account presented as a single person). Second differentiation is based on area and language of spread. While domestic misinformation written in Slovak language have smaller chance to spread far beyond geographic and cultural borders because of the language barrier, the same doesn't necessarily apply to larger scale hoaxes coming from outside. By comparing groups to individuals, we can find difference in accessible resources such as manpower, skills, or available software and computing power to create visual addition. While comparing domestic and foreign spread of hoaxes, we can find similar or different trends in circulating misinformation.

Sources of articles we analysed were as follows:

- Articles of nonopinionated/objective journalism media [both foreign and domestic].
- Articles of opinionated media and or i.e., oriented on lifestyle, sport, culture etc. [both foreign and domestic].
- Articles shared on social media [both foreign and domestic].
- Social media accounts of groups fighting against disinformation [domestic group only].

Table 1: List of visited media outlets

Name of the source	Type of the source / media outlet	Group
Hoaxy a podvody - Polícia SR	SR Police Facebook group	Domestic
Aktuality.sk	Media website	Domestic
Konspiratori.sk	Website – controversial websites list	Domestic
HNonline.sk	Media company/newspaper website	Domestic
Sme.sk	Media company/newspaper website	Domestic
Refresher.sk	Lifestyle/opinionated media website	Domestic
Dezinformácie Hoaxy Propaganda	Social media group	Domestic
Denník N	Media company/newspaper website	Domestic
AFP Fakty - FB	Fact checking agency Facebook group	Domestic
The Guardian - FB	Media company Facebook group	Foreign
CNN [edition.cnn.com]	Media company website	Foreign
BBC [www.bbc.com]	Media company website	Foreign
buzzfeednews.com	Lifestyle/opinionated media website	Foreign
The Economist [www.economist.com]	Media company website	Foreign
Washington Post - FB	Media company Facebook group	Foreign
EUvsDisinfo [euvsdisinfo.eu]	Website listing shared disinformation	Foreign

Source: Own processing.

From each chosen media outlet, we examined at least one article mentioning one or more hoax or misinformation, that have been proven as a lie and have been shared through social media significantly enough to accumulate traction, which eventually led to its inspection, report, ban, or other kind of countermeasure. We reviewed articles on 16 diverse media outlets, including 9 domestic and 7 foreign, leading to survey of 112 posts containing information proven false and shared either by an individual, or by an entity representing a group or a company. Results are shown in chart 1., 2. and 3.

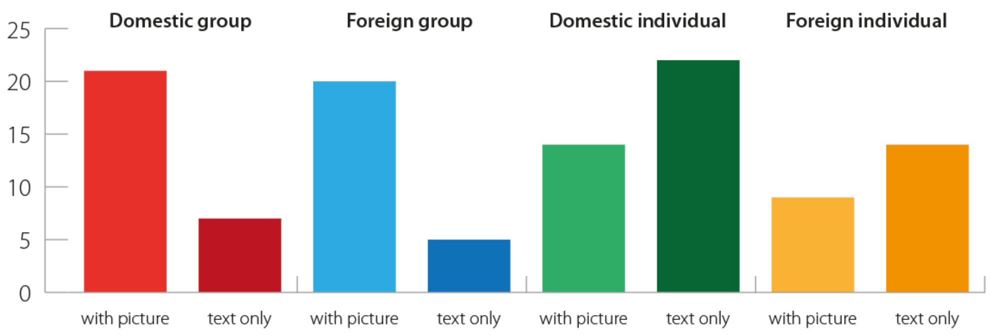


Chart 1: Amounts of examined hoaxes structured into groups
Source: Own processing.

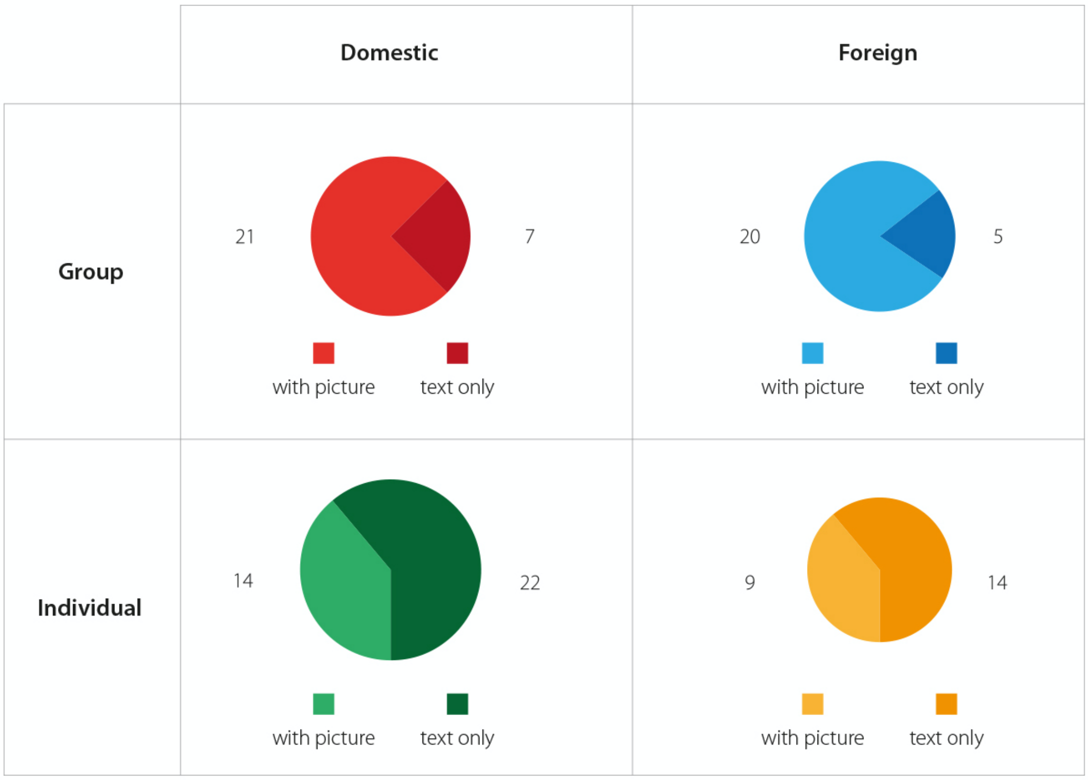


Chart 2: Comparison of defined groups
Source: Own processing.

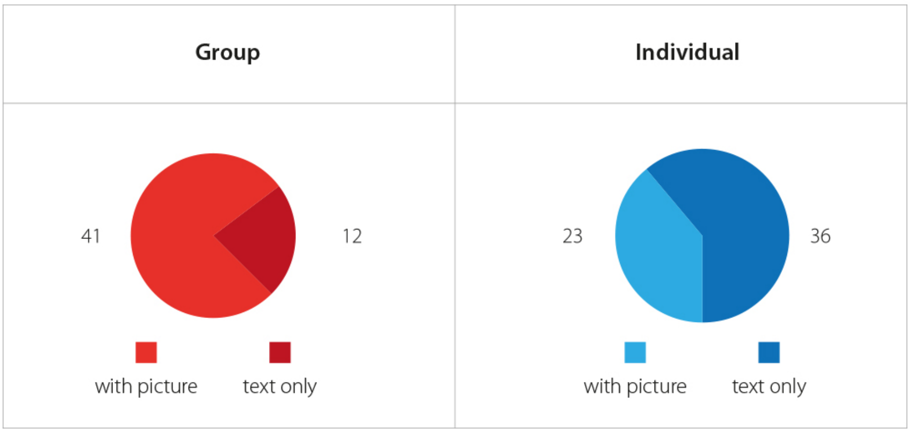


Chart 2: Comparison of hoaxes shared by group and by individuals
Domestic and foreign groups are merged into single group to compare behaviour between individuals and groups only.
Source: Own processing.

There are possible trends and visible differences in the process of sharing a hoax by individuals and that of sharing a hoax by an entity representing group, company, or media. However, although articles were selected randomly, considering the sample size in comparison to the number of hoaxes produced and shared daily, this sample should be considered rather non-representative, and further rigorous investigation would be needed to prove this assumption as ultimately true.

In charts 1., 2. and 3., we can see that hoaxes shared with pictorial addition of some kind are more prevalent in the group sample in both domestic and foreign hoaxes (compared to individual sample). In randomly picked domestic group sample they take 75 percent while in randomly picked articles of foreign origin the proportion of group shared hoaxes including visuals rose even higher to 80 percent. Hoaxes and misinformation shared by individuals in Slovak language contained picture in 38,89 percent and individually shared hoaxes in foreign languages contained pictures in 39,13 percent of investigated cases.

This difference in the process of creating and sharing false information can be caused by availability, or rather unavailability of certain resources to an individual. We can assume that media outlet, or company does have better equipment in both personal and technical terms. Individual without technical skills and proper technology is resorted to either post information without visual addition or must download it. We can make an assumption, that there might be different motivation behind sharing a message, affecting the way misinformation in spread in case of an individual and that of a group. While individuals who are presented as themselves on social media can share misinformation out of belief, fear, spite, agreement, or disagreement, in which case they voice mainly their opinion or one that they align with, subsurface pushing of particular agenda could be reserved for more organized groups. As the evidence in chapter one stated that pictures, illustrations, and other kind of visuals are very helpful in possible interaction with information and human ability to remember it, this fact could be applied in more thought through process driven by an interest or agenda, rather than a less complex and emotion driven process of an individual.

Picture 2: Example of misinformation spread by individual
Picture shows example of misinformation made from text only, without any pictorial addition. Text itself is embellished, what does increase the chance of some interaction with post, however this colour and size change does not support the content of message in other way and doesn't try to change its false nature to seemingly true by providing another false support.
Source: *Facebook: Hoaxy a podvody – Polícia SR.* Released on 3rd May 2021. [online]. [2021-10-27]. Available at: <https://www.facebook.com/hoaxPZ/photos/958570368304164/>.

4 Interpretation and categorization of pictorial escort

Interpretation can help us understand what something is and what it means. Through process of semiosis, we can unveil different connotations of a sign – in this case of a picture or illustration, depending on a space in which is the sign decoded. Based on John Stuart Mills' differentiation we can compare denotation – literal meaning of a sign, and connotation – secondary information about an object, which can be individual, sociocultural, and can change depending on context.[8] Considering Barthes' theory of semiotics, that states, that every image is polysemic – open to endless different interpretations, and thus its meaning is uncertain,[9] we can decode this image a specific context to reduce the amount of possible meanings. In our case, context of interpretation for sought meaning is the pair in which chosen picture escorts textual message. Further in Barthes' theory we can find two different relationships between an image and a text. Anchorage and Relay. In anchorage text serves an anchor to an image, it binds the boundaries of possible meanings, narrowing down the number of different connotations. In second relationship, Relay, both text and visual complement each other while the text is intended to extend reading of the picture.[10] When looking into examples of pictures we found during examination of different shared hoaxes, we cand find parts of both relationships. As Barthes stated, both linguistic functions can coexist in one iconic whole, but one or the other will necessarily be dominant.[11] Example of an anchor would be a headline on an advertisement pamphlet telling us what the product is. In that case Barthes' *floating chain* of possible interpretations is anchored, aiding us in recognition and making us omit interpretation that would be deemed inappropriate in such context. Example of a Relay would be a text, or a text bubble in comic strip, or dialogue in a movie. It furthers the meaning of a seen image by information that are not necessarily present in the image

[8] DOUBRAVOVÁ, J.: *Sémiotika v teorii a praxi*. Prague : Portál, 2008, p. 44, 45.
[9] NOBLE, I., BESTLEY, R.: *Visual research: An introduction to research methods in graphic design.* London : Bloomsbury Publishing Plc., 2018, p. 70.
[10] Ibidem.
[11] BARTHES, R., HEATH, S.: *Image, Music, Text*. New York : Hill & Wang, 1978.

itself. In both cases the combination of text and image amplify strength of a reader's perception. In the relationship between pictures accompanying shared hoaxes, we can expect the Anchor to be more dominant. Presented pictures are often visually repeating the same content as text in what we could call an interform tautology [needless repeating synonyms to signify meaning], but this repetition becomes noticeable only after the interpretation became anchored by text itself. Because of the polysemy of an image, we can look at a picture with many interpretations in our mind, but when the chain of meanings gets anchored, out of the sudden we can see the same meaning as the anchor states. Of course, that is in the case if both text and image are created either in harmony, or at least not in a dissonance (picture 3) of meaning. If more specific pictures, albeit false, are combined with a textual misinformation with the same message they disguise themselves as a proof of truth. Such representational pictures present us with a severe problem because they often appear real, caused by real events, even thou they could have been, or have been faked (picture 4).[12]

Picture 3: Dissonance of meaning
Text, that should serve as anchor for interpretation creates confusion instead. Based on our accepted sign systems, interpretation of meaning of the anchor and of the object, or the signifier and the signified dissonates.
Source: CROW, D.: *Visible sign. An Introduction to Semiotics in the Visual Arts*. New York : Bloomsbury Publishing Plc, 2016, p. 86.

Picture 4: Photo by Cindy Sherman: Untitled #153
The woman in this photograph by Cindy Sherman looks as if she is dead.
Source: HALL, S.: This means this, this means that. A user's guide to semiotics. London : Laurence King Publishing Ltd, 2012, p. 29.

[12] HALL, S.: *This means this, this means that. A user's guide to semiotics.* London : Laurence King Publishing Ltd, 2012, p. 30.

"*This photograph* [picture 4] *highlights the very real and disturbing difference between how we might feel about an image of an actual death as opposed to its mere simulation. The photograph also raises the question of how we would be able to tell the difference between the two in certain cases.*"[13] When encountering a hoax, it is exactly the danger of not being able to tell the difference between whether it is true or false, and that can create all the damage. By categorizing encountered images, we can better understand them and find reasonable countermeasures to press against the spread of misinformation.

2.1 Categorization of visual falsehoods

Depending on different kinds of pictures we encountered during our examination of shared hoaxes, we propose their categorisation into classes as follows:

- **Use out of context or in a false context.** Pictures, that hold information which is, or was true at the point of the pictures creation and neutral images put into false context, ultimately skewing the original meaning, or creating a new, often false one.
- **Abstract images.** Polysemic images that gain meaning depending on the context. Context itself doesn't change their nature, since they haven't been neither true, nor false.
- **Tampered or retouched images and photomontages.** Pictures or photographs that had part of their content transformed. Adding, deleting, or transforming a part of an image can create a different, new meaning.
- **Composited images and collages.** Images visibly made of several other images to create a collage, empowering the signified meaning of the text it accompanies.
- **Images made for a comedic or humorous relief.** Not necessarily meant as a misinformation to be spread. However often created in form of a Relay carrying a false information, that if shared can be harmful for less medially educated people.
- **Images that are false in their nature.** Pictures, that cannot be decoded as true in given sign system (For example picture depicting people living under water without technology. This kind of picture can become a truth when transferred to a different sign system, such as science fiction or fantasy).

Picture 5: Use in the false context
(left side original, right side translation) Picture of Queen of England used with a hoax that England recognized Crimea as a part of Russia.
Source: *Fr News Front: La cour royale britannique a « reconnu » la crimée comme faisant partie de la russie.* Released on 14th October 2021. [online]. [2021-11-30]. Available at: <https://fr.news-front.info/2021/10/14/la-cour-royale-britannique-a-reconnu-la-crimee-comme-faisant-partie-de-la-russie/>.

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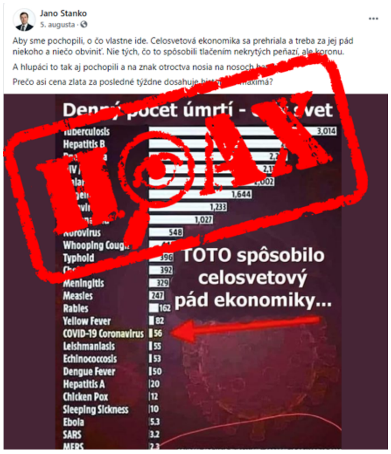
[13] HALL, S.: *This means this, this means that. A user's guide to semiotics*. London : Laurence King Publishing Ltd, 2012, p. 30.

Picture 6: Use in the false context
Hoax shared by an individual informing about protest against lockdown on Bondi beach in Australia. The picture was originally taken in Brazil as people greeted the Pope.
Source: *AFP*. Released on 24th August 2021. [online]. [2021-11-30]. Available at: <https://fakty.afp.com/http%253A%252F%252Fdoc.afp.com%252F9LK234-1>.



Picture 7: Use in the false context
Statistics of the dead toll caused by Covid-19 in Slovak republic from the beginning of the year, shared several months later at the end causes underestimation of the severity of situation.
Source: *Facebook Hoaxy a podovdy – Polícia SR*. Released on 23rd September 2020. [online]. [2021-11-30] Available at: <https://www.facebook.com/hoaxPZ/photos/800990737395462>.

Picture 8: Tampered image, fotomontage
In this case there are two possibilities, either there was change made to facial expression of Slovak president with the help of retouching processes, or this part of picture could have been taken out of other media such as certain video frame. Interpretation of this kind of facial expression could indicate negative attitude towards Czech president in the foreground, while in fact there was no such sentiment.
Source: *AFP*. Released on 16th February 2021. [online]. [2021-11-30]. Available at: <https://fakty.afp.com/tisice-ludi-zdielali-zmanipulovanu-fotografiu-prezidentky-caputovej-prezidenta-zemana-na-socialnych>.

Picture 9: Questionable picture made probably for a comedic relief [their first injection was vaccine]
This picture carries elements of a youth subcultural trend called *meme*. Picture supplemented by text inside the format (such as Barthes' Relay) often combined in funny or witty manner, but sporadically crossing barriers of what would be considered funny, appropriate, or even acceptable by majority. This picture signifying transformation from vaccinated person to heroin addict could have been created as a joke, however in less medially educated people it could create real concern. This particular case carries misinformation accompanied by picture, and has been shared across social sites, therefore it matches description of a hoax and we can categorize it.
Source: *Instagram: Zdyelaj_kim_nesmazu.* [online]. [2021-11-30]. Available at: <https://www.instagram.com/zdyelaj_kim_nesmazu>.

3 Impact of a visual

Both in accepted theory model of Roland Barthes that we outlined and in provided examples of visuals that accompany hoaxes we can see that relationship between image and text in misinformation is mutual and bilateral. Text anchors the interpretation of image and image strengthens believability of the text. The first giving the latter a stamp of credibility and vice versa, even thou both might be fabricated information and lies. Further as we stated in the first chapter, based on several different science articles and experiments, pictures increase potential of the information to be seen, interpreted, and remembered by humans. If we consider the fact, that hoaxes are mostly created with intention to be spread, we can expect misinformation to be accompanied by pictures which increases the negative potency of a shared hoax.

4 Countermeasures against hoaxes

We can fight against the spread of hoaxes in two different ways. More global approach is to precede it. This countermeasure would mainly consist of introducing basic media education and increasing global media literacy. We can assume that as the understanding of negative effect of sharing misinformation would increase, while teaching and employing processes such as fact checking and checking of information sources, would lead to overall decrease of hoax spreading. For more local approach, when the information has been already shared, we can use technology, employ people or combination of both. Major software and social media companies are developing various software that helps uncover hoaxes, manipulated photos and videos such as deep fake videos. Microsoft offers two different software, Microsoft Video Authenticator which evaluate videos with artificial intelligence or second software which is part of Azure cloud service.[14] Employing people, creating groups or agencies is another way to fight against hoaxes. People can selectively check information and use not AI driven software or tools to check whether a picture was tampered with, or reverse search for picture if it was used prior this shared post and within another context. Most effective procedure against the spread of hoaxes is to employ both education and technology.

Conclusion

Misinformation spread through social media and internet are often accompanied by visual escort in the form of pictures, photographs, charts, and similar kind of pictorial material. This trend is more prevalent in cases when hoaxes are spread by entity posing as group, media outlet, or company, rather than an individual in which case simple or embellished text without picture dominates. This trend should be object of further study however, since bigger sample would be necessary to accept it as representative. Disparity between the amount of images shared with hoaxes by individuals and groups can be caused by difference in accessible resources. Media outlets and organized groups sharing hoaxes would have more combined resources in form of software, computing power and manpower, and possible skills. Also, there might be possible differences behind the reason of spread of misinformation. Organized groups can propagate information for various reasons such as personal and monetary gains, political agenda, fearmongering etc. While individuals posing as themselves can have the same reason for sharing a misinformation, other more emotional aspects may also take role within this process. Such as fear, spite, anger, agreement, or disagreement. As we stated in chapter one, information composed with, or including pictures are much more effective. What can be taken advantage to maximize the spread of misinformation. Further in chapter two, we discussed the relationship between the text and image which accompanies it. Based on Barthes' theory and interpretation of pictorial examples, we came to conclusion that relationship is mutual and bilateral. Despite the claim that two lies don't make one truth, two lies in form of a text and image supplementing each other are much harder to perceive or identify as false. Text within hoax serves to image as an anchor to *the floating chain* of possible interpretations, while the image reversely acts as a proof of truth for the text. As of now, our best protection against hoaxes, is combination of technology, education and human effort.

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Facebook: Na sociálnych sieťach cirkulujú nepravdivé štatistiky o obetiach ochorenia COVID-19. Released on 23rd September 2020. [online]. [2021-11-30]. Available at: <https://www.facebook.com/hoaxPZ/photos/800990737395462>.
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Facebook: Zlé správy pre andreja: jeho hoax o (ne)darovaní krvi očkovanými ľuďmi sme vďaka country spevákovi vyvrátili už pred dvoma týždňam. Source: *Facebook Hoaxy a podvody – Polícia SR.* Released on 3rd May 2021. [online]. [2021-10-27]. Available at: <https://www.facebook.com/hoaxPZ/photos/958570368304164/>.
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USE OF NEW NEUROMARKETING TECHNOLOGIES IN BOOK MARKETING COMMUNICATION

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Abstract
Book covers are important in promotional campaigns and the sale of books on the Slovak market. Often, customers decide to read the annotation on the basis of a visual appeal and interest in a particular book cover that is on display in bookstores or their e-shops. In this paper, we focus on the potential of book covers in the promotion of books on the Slovak book market. Using neuromarketing research and individual interviews with selected respondents, we try to answer which book covers of Slovak books most interested the research sample, i.e. why and which attributes of the book cover caught their eye. In neuromarketing research, we rely on respondents' unconscious reactions, specifically on the analysis of facial expressions and emotional reactions, recording of fixation and point of view, heat maps, areas of interest, fixation sequences, fixation time and galvanic resistance of the skin. We then compare the obtained results with the conscious answers of the second sample from individual interviews. The results of the research should serve bookstores in making more effective decisions when planning and creating potentially published books to be intended for the Slovak reader. In the research, we included book covers in both the paper and electronic formats.

Key words:
Book covers. Book Marketing Communication. E-book Covers. Neuromarketing. Slovak Book Market.

1 Book cover as a marketing tool

Graphic designers are guided by several factors when creating a book cover which then influences the overall design of the book publication. The result will not only affect the packaging of the product but may affect its sales and the overall perception of the potential reader of the product. Bhaskaranová[1] claims that the design of the book should not exceed its content. Baloghová[2] puts it this way: *"The book must be taken as a whole, we do not separate the cover and the inside content, it must correspond to each other (not only the front, but also the back, stickers, bookmarks, etc.). The cover must be based on the content, genre as well as the possibilities that the title and the publisher offer us."* However, we cannot completely agree with this statement as it is the book cover that actually sells the book many times, especially in the target group which is not fully decided which title to buy. The same works in case of electronic publications where the cover per se is what a potential reader sees at first, even though they just browse the books on the Internet. Only later do they get to the annotation and other important parts of the book and its marketing. Wlodarczyk[3] claims that the cover serves as a tool for self-promotion of books and can thus decide not only on its individual sale but also on the number of pieces sold. Krátky[4] agrees with these words because, according to him, the book cover is the main eye-catcher in the sale and promotion of the book title. The cover itself will also be affected by whether the book is printed in softcover or hardcover. However, this rule does not apply to e-books where it is necessary to use colors that do not blend and attract the potential reader when designing and producing the covers. The quality of the graphics is also important. It is the colors on the cover that can easily make the book stand out on the shelves of bookstores. The individual mix should stand

[1] BHASKARANOVÁ, L.: *Design publikací*. Praha : Slovart, 2007, p. 8.
[2] BUNO, M.: *Dizajnérka kníh: Knihy kupujeme podľa obalu. Na trhu je ich však až príliš veľa.* [online]. [2021-11-22]. Available at: <https://www.dobrenoviny.sk/c/186172/dizajnerka-knih-knihy-kupujeme-podla-obalu-na-trhu-je-ich-vsak-az-prilis-vela->.
[3] WLODARCZYK, J.: *Marketing vo vydavateľstve*. Praha : Sofa, 2002, p. 54.
[4] KRÁTKY, Ľ.: *Knižné obálky.* [online]. [2021-11-22]. Available at: <http://lubomirkratky.sk/knizne-obalky/>.

out and look attractive and aesthetically pleasing to the potential reader. Typography is another important part of the cover because its choice can affect the whole perception of the book cover.[5] The book cover should be attractive, logical, engaging and memorable for the target group. The following steps must be followed when designing a cover according to the Publico[6] portal: research, template selection, template editing, final editing. We would like to supplement their approach by verifying the cover in the pilot study - for example through neuromarketing research, questionnaire research or AB testing, so that the publisher verifies that the book cover will actually achieve the desired success for the target group.
In the paper, we analyze selected book covers of e-books, which, however, readers can also know from printed books. We clarify the methods used in the chapter named Research Methodology.

2 Research Methodology

The aim of this research is to shed new light on the visual effectiveness of different types of e-book covers by measuring and jointly specifying emotions and emotional engagement through facial expression analysis, engagement and attention indicators obtained through vision analysis as well as galvanic skin resistance data.

Based on the set aim, we propose a set of three hypotheses:

- Assumption 1 (A1): There is a measurable difference in valence in time corresponding to the monitoring of the stimulus section belonging to a certain type of e-book cover
- Assumption 2 (A2): There is a measurable difference in attention over time corresponding to the monitoring of the stimulus section belonging to a certain type of e-book cover
- Assumption 3 (A3): There is a difference in the time of the first observation and the return of visual observation depending on the type of e-book cover

Hypothesis 1 (H1): There is no statistically significant difference between the average valence values of the observed levels.
Hypothesis 2 (H2): There is no statistically significant difference between the average values of attention of the observed levels.

2.1 Methods of obtaining, processing and displaying implicit information

- Analysis of facial expressions and emotional reactions

Facial expressions are the gateway to the human mind, emotions and identity. Facial expressions are a way of demonstrating a relationship with others, sharing understanding and compassion[7]. Facial reactions are also a way of expressing joy, pain, sadness, regret and lack of understanding. These characteristics can be crucial in capturing the key features of a video or image stimulus. An individual face recording while watching a computer screen is compared to a biometric database which represents "real" emotional faces, looking for similarities or even possible matches. Therefore, facial recognition is used to measure and analyze the emotional responses of subjects to a given stimulus. A biometric measurement

[5] BHASKARANOVÁ, L.: *Design publikací*. Praha : Slovart, 2007, p. 68.
[6] ZBÍNOVÁ, M.: *Ako vytvoriť obálku knihy?* [online]. [2021-11-22]. Available at: <https://www.publico.sk/navody/ako-vytvorit-obalku-knihy/>.
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software platform called iMotions was used to perform emotional measurements in this study. The company states that its software can combine "eye tracking, facial expression analysis, EEG, GSR, EMG, ECG and surveys"[8]. The platform is used for various types of academic and business research. The 9.0 version was used in this research. The software records several raw indicators in the image based on biometric measurements or units of action, while the experimental subject watches the stimulus on a computer screen. The recorded values for the raw indicators are then transformed by software base models into seven basic Ekman emotions. The indicator for each emotion is provided based on the probability of the emotion occurring, so the range of values for each of them is from 0 to 100. After combining the gross values, three involvement indicators are also calculated. Attention is calculated from the position of the head and indicates the focus of the individual. Attention ranges from 0 to 100, although this is not a probability. The engagement or response level also ranges from 0 to 100. Finally, the valence range is from -100 to 100, which means a positive, neutral or negative experience. Based on the work of Otamendi and Sutil, we can consider the stimulus to be effective if the average level of attention is high (≥50) and the average level of valence is positive (≥50).[9]

- Fixation and point of view recording

When we talk about eye tracking, fixations and points of view are basic output measures of interest and often the most used terms. The points of view show what the eyes are looking at. If the series of viewpoints is very close - in time and / or space - this cluster of views represents a fixation that indicates the period when the eyes are fixed on the object. Fixations are an excellent measure of visual attention and research in this area is constantly growing. Eye movements between fixations are generally referred to as saccades. The number of fixations or points of view that are directed to a certain part of the image (compared to other parts) indicates that more visual attention has been directed there. The reasons for this may be more difficult to decipher, but it provides a starting point for understanding which aspects of the scene best capture and retain that attention.

- Heat maps

Heat maps are visualizations that show the general distribution of viewpoints. They are usually displayed as an overlay with a color gradient on the presented image or stimulus. The red, yellow, and green colors represent, in descending order, the number of viewpoints that pointed to parts of the image. The use of a heat map is a direct method for quickly visualizing which elements attract more attention than others. Heat maps can be compared between respondents as well as groups of participants, which can be useful in understanding how different populations may perceive the stimulus in alternative ways.

- Areas of interest

This is a procedure in which a certain area of the displayed stimulus is selected, and metrics are obtained specifically for these areas. Although not a strict metric per se, it defines the area by which other metrics are calculated. These metrics are useful for evaluating the performance of two or more areas in the same video, image, website, or program interface.

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[8] TAGGART, R. W., DRESSLER, M., KUMAR, P., KHAN S., COPPOLA, J. F.: *Determining Emotions via Facial Expression Analysis Software* [online]. [2021-11-22]. Available at: <http://csis.pace.edu/~ctappert/srd2016/2016PDF/c2.pdf/>.

[9] OTAMENDI, F. J, SUTIL MARTÍN, D. L: The emotional effectiveness of advertisement. In *Frontiers in Psychology*, 2020, Vol. 11, No. 2088, p. 10. [online]. [2021-11-11]. Available at: <https://doi.org/10.3389/fpsyg.2020.02088>.

- Fixation sequences

Fixation sequences are based on spatial and temporal information - when and where the participant looked. This allows you to create an image of what the participant prefers when seeing the visual scene. This often starts in the middle of the image due to the distortion of the central fixation, but the following components shown will represent what is most motivating for the participant(s).

- Fixation time

The fixation time indicates the time it takes for the respondent (or all respondents on average) to look at a certain point. This method is a basic but very valuable metric for eye tracking as it can provide information on how certain aspects of the visual scene are prioritized.

- Galvanic skin resistance - GSR

Our level of emotional excitement changes in response to the environment we are in - if something is scary, threatening, joyful or otherwise emotionally relevant, then the subsequent change in the emotional response we experience also increases the activity of the eccrine sweat glands. This is exactly what EDA/GSR devices monitor when placed on hands or feet. Skin conductivity is regulated by the autonomic nervous system which controls a number of bodily processes that can affect cognitive and emotional behavior. The EDA/GSR serves as a valuable index of emotional excitement because it offers an insight into the basic physiological and psychological processes of the respondent.

2.2 Analyzed stimulus

The research stimulus was a video sequence composed of various images which depicted the graphic processing of e-book covers. The research stimulus consisted of four categories of e-book covers:

1. (V1) Book cover containing the title of the book with minimal graphic design of the cover,
2. (V2) Book cover containing a facial image by means of a photograph as a central element, complemented by the title,
3. (V3) Book cover containing a full figure by means of a photograph as a central element, complemented by the title,
4. (V4) Book cover containing a depiction of a drawn scene as a central element, complemented by the title.

Each type of cover was represented by three 5-second previews, with 5-second book-themed images placed between sequences containing groups of related books to attract or distract the participant, such as a random photo of an open book. Samples of book covers were associated to romantic female prose in the Slovak language. During the experiment, different variants of the video previews were used in order to eliminate the preference of the first choice. The conditions for the selection of book covers were the following: it is the cover of e-books, it is the cover of a Slovak publication.

2.3 Experiment

The recruitment for respondents took place through a snowball sampling. The snowball sampling is traditionally used whenever the topic of study is relatively new[10] and for which it

[10] STRYDOM, H., DELPORT, C. S. L.: *Sampling and pilot study in qualitative research in Research at grass roots: For the social sciences and human service professions.* 3rd. Pretoria : Van Schaik, 2001, p. 332.

is difficult to find participants[11]. This type of sampling is mainly used to influence the course of the purchasing process by consumers[12] and non-consumers[13]. This experiment did not require a narrow specification of selection criteria. The research focused mainly on potential consumers of romantic women's literature distributed through e-books. The research involved 19 participants, with an average age of 24 years. Five men were also included in the researched sample in order to reveal differences in the perception of e-book covers between men and women. The sample size can be considered significant for a given length of the research stimulus, based on studies that have confirmed the relevance of the sample in similar studies[14,15]. The experiment took place in the NEUROLAB laboratory at the Faculty of Mass Media Communication of the University of St. Cyril and Methodius in Trnava, Slovakia, on October 26, 2021. During the experiment, the room was kept at a constant temperature of 23 °C. The room was insulated from the outside using a soundproof system. We also used the same indirect lighting system for all participants, so the emotional comparison between groups of subjects was relevant. Participants were scheduled at 15-minute intervals and watched the video alone. The test subjects entered the room where they sat in front of a 27-inch monitor on which the spot was projected, sitting 70 cm from the screen. At the top of the screen was a Logitech HD recording camera. iMotions was then calibrated to ensure that the facial micro expression detection program captured the entire face of the subjects. Participants were informed about the purpose of the research as well as the legal impact of their participation. All subjects have signed an a priori consent form that takes into account all aspects of data protection. This consent ensures that participants are not identified or that personal data of a personal nature are not disseminated.

2.4 Statistical Methods

Emotion analysis

Based on the experiment, we generated a database with 12 indicators representing implicit emotions based on the movement of muscles on the face. Each indicator is between 0 and 100, which indicates the probability of the presence of emotion (0 = absent, 100 = present). Therefore, the higher the values recorded, the higher the emotional levels displayed. First, a descriptive analysis was performed to get an overall picture of the emotional response to the spot. An inference analysis was then performed to compare the average values of the different levels of control variables. The general linear analysis of variance (ANOVA) model was used to capture the differences between the levels of the relevant variables for each variation over time. A series of F tests (one for each of the 12 emotional indicators) was used to statistically reject (or accept) the null hypothesis of average values across levels. A significance value of 5 % was used as the rejection threshold. Corresponding p values were calculated highlighting those below 5 % to demonstrate which variables significantly affect emotional responses by group and/or scene. Regarding which levels of the variable are significantly different from the others, we performed a series of t-tests, maintaining the level of significance at 5 %. The p values are highlighted with those below 5 % to demonstrate which levels of variables significantly affect emotions. The "+" sign was used to show higher than average values and

[11] BABBIE, E.: *The basics of social research*. California, Belmont : Thomson/Whatsworth, 2008, p. 550.

[12] VOICU, M. C; BABONEA, A. M.:. Using the snowball method in marketing research on hidden populations. In *Social Problems*, 1997, Vol. 44, No. 2, p. 1348.

[13] VENTER, K. et al.: Consumers' perceptions of food packaging: an exploratory investigation in Potchefstroom, South Africa. In *International Journal of Consumer Studies*, 2010, Vol. 35, No. 3, p. 283.

[14] BERNS, G. S., MOORE, S. E.: *A neural predictor of cultural popularity*, 2012, p. 22, p. 160.

[15] RAMSØY, T. Z.: Building a foundation for neuromarketing and consumer neuroscience research: how researchers can apply academic rigor to the neuroscientific study of advertising effects. In *Journal of Advertising Research*, 2019, Vol. 59, No. 3, p 290.

"-" to show lower than average values. Since this spot was only a sequence of static images of book covers without sound, we focused mainly on evaluating the results of emotional valence which can be understood as excitement and is objectively measurable as activation of the sympathetic nervous system in the positive, neutral or negative spectrum. We complemented the research with individual interviews with 15 respondents. The sample consisted of e-book readers. The aim of the interviews was to find out opinions about the importance of the book cover as well as the choice of the preferred type of covers together with the emotions that the book cover evoked in them.

3 Results and Discussion

Valence analysis

Valence, or hedonic tone, is an affective quality related to the inner attraction / "goodness" (positive valence) or aversion / "badness" (negative valence) of an event, object or situation[16]. The term also characterizes and categorizes specific emotions. For example, emotions that are commonly referred to as "negative," such as anger and fear, have a negative valence. Joy has a positive value. Positively evaluated emotions are evoked by positively evaluated events, objects or situations. Valence therefore testifies to the positive, neutral or negative attitude of the participant while following the research stimulus. It can range from -100 to 100.

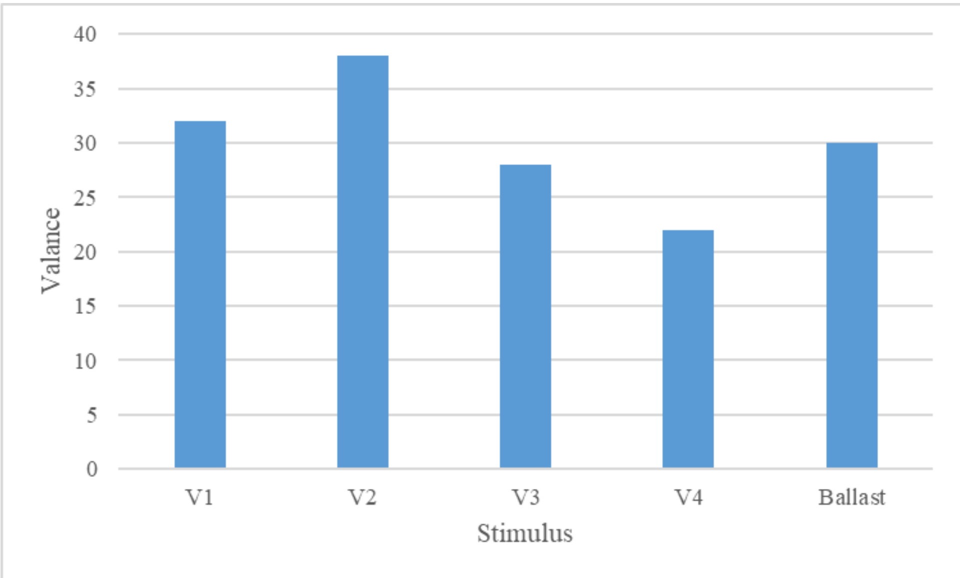


Chart 1: Valence during the experiment
Source: Own processing.

The analyzed values of valence indicate that all variants of e-book covers evoke at first sight (in the first 5 seconds of interaction) neutral emotions in the positive spectrum. The same results are achieved by the elements placed during the course of the video, called ballast, whose purpose was to separate the individual scenes and disrupt the harmony of the stimulus.

[16] NICO H. F.: *The Emotions*. Cambridge : Cambridge University Press, 1986, p. 207.

Attention analysis
Based on the same metrics applied to another type of data obtained as well as Oliveira's[17] work, we also evaluated the attention of the participants in the individual types of e-book covers.

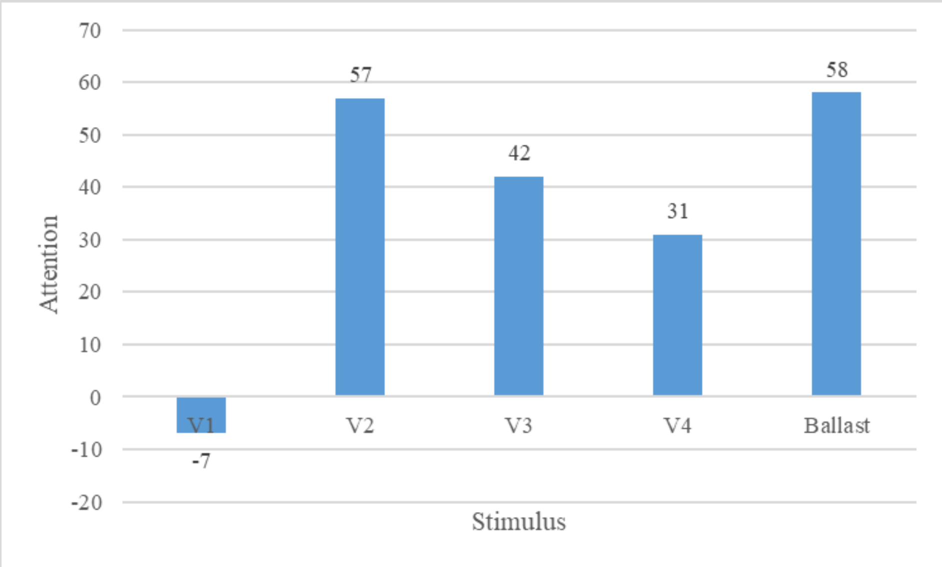


Chart 2: Attention during the experiment
Source: Own processing.

The data obtained indicate a slight increase in attention to stimuli representing the types of e-book covers on which the face is depicted, as well as to stimuli used to diversify the researched stimulus. The second finding may be due to the difference between balast images and others. The 3 remaining e-book cover variants show attention below 50, which is low attention.

Inference analysis
Based on statistical testing, we can say with 95 % probability that there are no differences in the average values of valence and therefore we reject Assumption 1 (A1) as well as Hypothesis 1 (H1). However, based on the t-test performed, we can say with 95 % probability that there is a difference between V2 and the other types of e-book covers examined in the area of attention, and thus we accept Assumption 2 (A1) and reject Hypothesis 2 (H2).

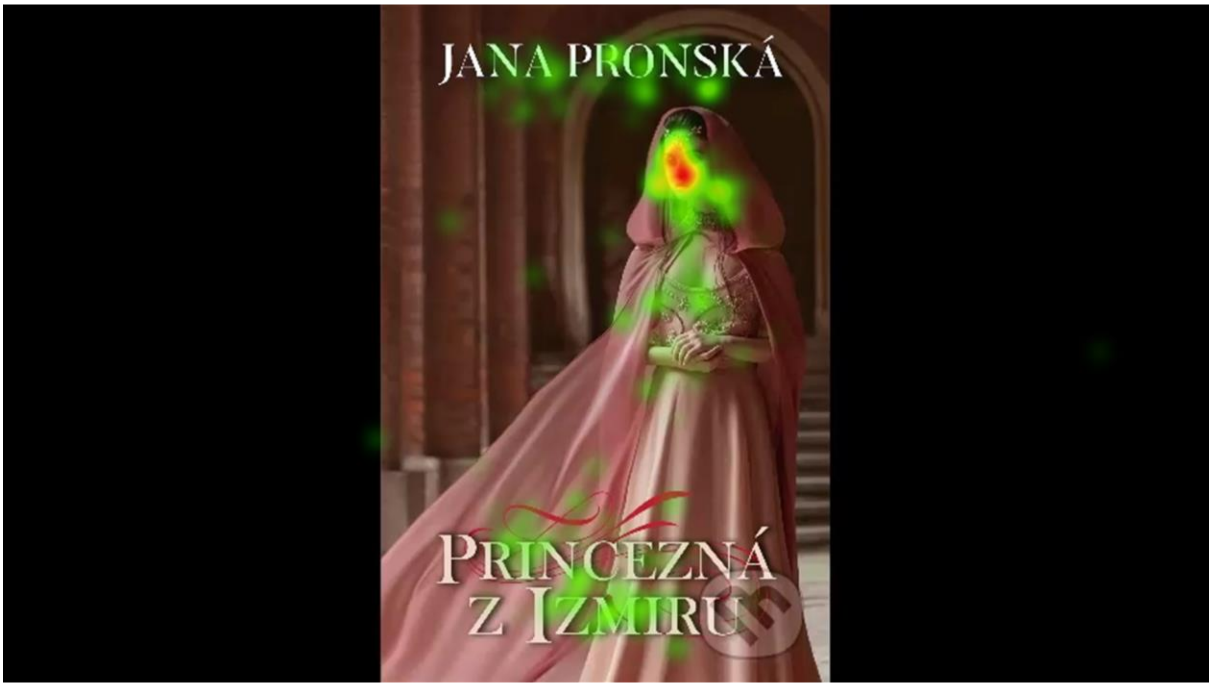
Vision trajectory analysis
Based on the vision trajectory analysis through several methods, we can say that the subjects most often focused their eyes on the faces of the people depicted on the covers of e-books. The focus on faces is in line with previous findings, based on the fact that participants showed most attention for the type of book cover on which the face is depicted. The course of the sight attention in this type of cover mostly corresponded to the fact that the participant looked at the face, read the title of the book or other information, and looked back at the face (Picture 1). We were able to capture this course in case of the covers on which the whole character was depicted as well as on those on which the characters were drawn (Picture 2). On all these covers the participants were most attracted by the faces. Type V1, on which the face was not depicted, first attracted attention with the title, but after reading it, the participants' view

[17] OLIVEIRA, L. et al.: Emotion and attention interaction: a trade-off between stimuli relevance, motivation and individual differences. In *Frontiers in Human Neuroscience*, 2013, No. 7, p. 364.

focused on various details of the cover and then they literally looked for what they could focus on (Picture 3). We could observe this algorithm in both men and women.

Picture 1: Heatmap showing the most interesting places on the type of book cover with a face
Source: Own processing.

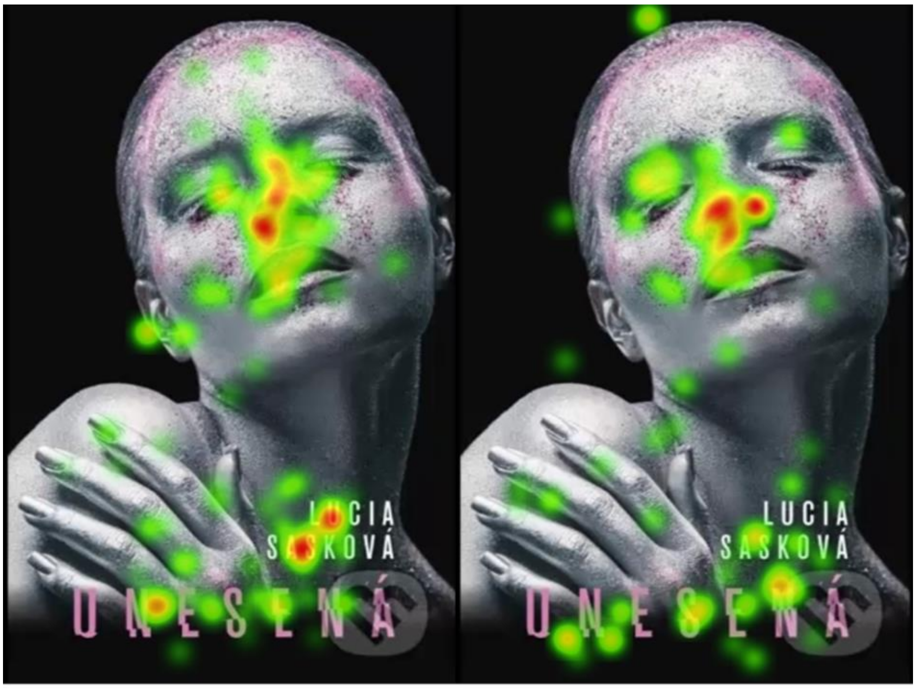
Picture 1 shows an example of the participants' aggregated view of book cover type 2 (V2).



Picture 2: Heatmap showing the most interesting places on the type of book cover with a full body
Source: Own processing.

Picture 3: heatmap showing the most interesting places on the type of book cover with primary a text
Source: Own processing.

When analyzing the difference between the views of men and women, Picture 4 indicates that there is no significant qualitative difference in the views of men and women on the same stimulus, although in a more detailed analysis we find that men are slightly less interested in the author's name but even more so in depicted face.



Picture 4: Heatmap showing the most interesting places on the type of book cover with a face (Comparison of women (right) and men (left))
Source: Own processing.

Based on the t-tests and f-tests performed, we can say with 95 % probability that there is generally no difference in the perceived text and face between men and women, although this is possible in individual cases. An example of this is the analysis of the exact points of view in Picture 5. The picture shows the specific area of the video sequence analyzed, based on which we found statistically relevant differences in the time spent examining the various aspects of the stimulus between men and women.

Hit time parent (ms)	26080.4	25138.3
Dwell time (%)	34.2	56.8
Fixation based metrics		
Respondent count	18	17
Revisit count	0.6	1.1
TTFF AOI (ms)	1103.6	226.8
TTFF parent (ms)	26128.6	25250.9
Dwell time (%)	24.9	42.3
Saccade based metrics		
Respondent count	14	17

Picture 5: Comparison of AOi according to selected fields of interest
Source: Own processing.

A total of 15 respondents took part in the individual survey. The survey took place from 27 to 30 October 2021 online and offline and we addressed respondents who are readers of e-books. The sex of the respondents was as follows: 8 women (53.3 %) and 7 men (46.7 %) aged 21 to 35 years. The respondents most often came from western Slovakia. In the interviews, 8 respondents stated that the cover of the book is important for them when deciding to buy such book and we can deduce from the answers that it is important for them that the cover of the book is identical to the content, otherwise, the cover can have a counterproductive effect and make them not buy such a book. A total of 2 respondents stated that the cover is extremely important for them, especially in the composition of colors and the first look at the originality of the book cover. When choosing an e-book, the cover of the book is important for only one respondent whereas most respondents agreed that the price of the e-book is decisive for them and the cover is less important. The covers of purchased books should be eye-catching and colorful for respondents at first sight, while the overall design should be in harmony with the choice of typography. They prefer a simple and clean design, and if the cover contains an image, it should be of good quality, original and unobtrusive. However, according to the respondents, the cover itself should stimulate their imagination in reading the story, but not disturb their own imagination in visualizing the content. On the contrary, respondents are discouraged by too many stimuli on the cover, inconsistencies of individual elements, devastated photography, boring or far too exaggerated typography. A total of 6 respondents stated that they are most interested in the book cover with the whole figure. Then also 3 respondents answered that they would be interested in a drawn cover and other 3 said that they would only be interested in a simple graphic cover. The remaining 3 respondents stated that they would be interested in a cover depicting a face.

Conclusion

A big challenge for the entire book marketplace is its constant growth. According to Nougat[18] (2014), a new book title appears on the marketplace every 5 minutes. A year later, he found out that there were more than 3.9 million of book titles on the Amazon Kindly store. The massive growth in the number of titles suggests that a lot of books will remain unknown because an insufficient number of people that read them.[19] This oversaturation of market forces publishers to think about using different marketing strategies to attract customers attention, so that it would lead to them buying the book. It is important for them to find out, what role in this decision making process does the cover of the book play. According to Gudinavičius, A. and Šuminas, A.[20] there is multiple evidence, that readers choose their books by their respective covers and that a book, that has a more attractive cover is better sold. For marketers the unanswered question remains, how can the cover of a book communicate with the reader, so that it would lead to better sales. They found out, that the cover is in fact the second most important factor in the decision making process. They recorded the answers from the respondents in the following order: attractive title (54 %), pretty cover (25 %), known author (8 %), advertising (4 %), recommendation by a relative (1 %). Authors analyzed the decision making process of 180 respondents in relation to selection of a book based on the colour of a cover. It has been confirmed, that in all female age categories, females prefer cool colour covers. In male categories, significant differences can be registered between individual age categories. In lower age groups the ratio of cool and warm colour is 52 % to 58 %, in the category of older men above 56 %, the preferencies are more clearer – 31 % for cool colour and 69 % for warm colour. More accurate results during the research of which factors and criteria affect the book selection based on the cover can be achieved by neuromarketing research, by which we can measure what impact does the cover on the readers make and what emotion does the cover evoke. We used this also in our study. The results of this study show, that the most interesting cover for the reader is a cover that shows the face of a woman. The deliberately selected covers were those types, that are used the most often – just the book title with minimal graphic, face of a woman, figure and a drawing. Our findings confirm the results of multiple studies that state, that faces are considered to be uniquely potent stimuli for attracting visual attention owing to their social importance for understanding others' characteristics, personalities, intentions, and emotions.[21] The cover with the face of a woman also achieved the best result in the valence analysis and the attention analysis. This type of cover recorded the most positive emotions (value of 57) and the highest attention (value of 57 – high attention), negative emotions weren't recorded in any type of cover. It is understandable, that the cover that showcases the face of a person also achieved the best result during the vision trajectory analysis. Eyesight first aims on the face and after on the book title. We can observe differences between men and women during a more detailed analysis. Men, compared to women, focus less attention on the book title. Faces play an important role in human sexual attraction, which has been linked to face averageness, symmetry, and sexual

[18] NOUGAT, C.: *To self-publish and perish: buried under 3.4 million E-books", Claude Forthomme – Nougat's Blog*. [online]. [2021-10-15]. Available at: <https://claudenougat.wordpress.com/2014/08/19/to-self-publish-andperish-buried-under-3-4-million-e-books>.

[19] DIXON, P., BORTOLUSSI, M., MULLINS, B.: Judging a book by its cover, In *Scientific Study of Literature*, Vol. 5, No. 1, 2015, p. 48.

[20] GUDINAVIČIUS, A., ŠUMINAS, A.: Choosing a book by its cover: analysis of a reader's choice." In *Journal of Documentation,* Vol. 74, No. 2, 2017, p. 446.

[21] EMERY, N. J.: The eyes have it: the neuroethology, function and evolution of social gaze. In *Neuroscience and Biobehavioral Reviews*, Vol. 24, No. 6, 2000, p. 604.

dimorphism (masculinity in male faces, femininity in female faces)[22] (Rhodes & Simmons, 2007). Other research analyzing other types of envelopes could provide interesting findings. The question is whether the successful results of the envelope with a woman's face would also be achieved with a man's face and whether the differences between the behavior of men and women would be confirmed.

Data availability statement
Raw data supporting the conclusions of this paper will be made available by the authors without undue reservations.

Ethical statement
Studies involving human participants have been reviewed and approved by the Ethics Committee. Participants provided their written informed consent to participate in this study.

Conflict of interest
The authors declare that the research was conducted without any business or financial relationships that could be perceived as a potential conflict of interest.

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COMMUNICATION FROM THE ASPECT OF INTERDISCIPLINARY APPROACHES

Hana Pravdová – Andrea Imrecze

Abstract
The study examines communication from the perspective of different approaches - psychology, sociology and the mass media. Although it may seem there is only one way of defining the communication at first glance and one point of view of which we look at it, this is not quite the case in science or in a practice. On the one hand, the authors of the study aim to identify different approaches of scientific disciplines to the study of the communication process. On the other hand, authors define common intersections of approaches of scientific disciplines to the communication practices. Based on a comparative analysis and an inductive procedure, it is possible to confirm the predicted premises about the specific approaches of individual scientific disciplines in relation to the study of the communication process. The objective of the study is to point out a relatively high degree of interdisciplinarity and common denominators in research of communication practices.

Key words:
Communication Process. Interdisciplinarity. Media Studies. Psychology. Sociology.

Introduction

In recent years, interdisciplinary approaches have been preferred in scientific research in the social sciences and humanities. It is known that each area of research has its own, typical research methodology, including common terminology. It is also indisputable that the field of communication research in media studies prefers interdisciplinary approaches. From this point of view, in our opinion, it is necessary to define the basic terminology. One of the key terms in media studies is the term "communication". In a broader sense, we currently perceive communication as communication, exchange, or just the flow of information. We believe that within the field of media studies, it is possible to monitor and define the specific intersections of individual communication situations and communication practices that are inherent in other scientific disciplines. On the other hand, in our opinion, the special determination of communication, its purpose and mission within traditional scientific disciplines, such as sociology and psychology and their research perspectives is also clear.

1 Communication: Definition

Lasswell, now notorious, states the basic framework for the definition of communication, or thus the act of communication itself, in the form of questions that should be able to prove the definition or basic framing of communication. Communication must therefore answer the questions: "Who? What is he saying? Through what? Whom? And with what impact?" In examining whether defining communication as well as other processes, Lasswell suggests two aspects from which we can examine communication processes: structure and function. In his work, he focuses primarily on the function of communication, thus providing the very concept for its definition. It records three primary functions of communication: control, environmental supervision; coherence of individual elements of society in response to the environment; the transfer of social heritage from one generation to another.[1]

[1] LASSWELL, D. H.: The structure and function of communication in society. In BRYSON, L. (ed.): *The Communication of Ideas*. New York : Harper and Row, 1948, p. 216-217.

After analysing Lasswell's functions, it is clear that communication permeates every aspect of life, at every level, from simple organisms to complex civilizations. Cobley, in his historical analysis of the concept of communication, dates back to ancient Greece, a society dominated by the oral form of communication. Cobley, in the context of ancient Greece, states the basic premise of the definition and at the same time the function of communication, building on the psychological as well as sociological communication tradition. He understands communication as a process intended to bring together individuals with the intention of sharing a common reality, an understanding that stems from ancient Greek texts.[2]

At the same time, he distinguishes between communication as a process and communication as a product. In the procedural framework, it builds on the functions of communication as defined by Lasswell, especially the transfer of cultural elements to the younger generations. Thus, we can perceive communication not only as a time-framed transmission of information, but above all as a basic building block, a mediator of society and culture, and thus the basic elements of social, human life. Communication becomes a product only after the arrival of a literate society, when communication, especially the written word, began to be stored, distributed and used for the purposes of scientific analysis, politics, criticism, philosophical reasoning and the like.[3] However, by dividing communication into process and product, Cobley moved away from academics in the 1940s and 1950s, one of whom was Lasswell. The popularity of radio, combined with the catastrophic events of the first half of the 20th century, aroused the academy's interest in the impact of communication styles, such as propaganda, on media audiences. From this interest, the first, more important works were born, such as Lasswell's framing of communication through his set of questions. At this time, the communication has been conceptualised within the flow: Sender - Message - Recipient. The emphasis was therefore on the product, and thus the message itself, but also on the process by which the message went from the sender to the recipient, by what channels, by what harm and by what impact. It is worth asking what kind of harm it is that the academy at the time emphasized the unreliability of communication. Each message is encrypted and then the recipient must decrypt it within his capabilities, making the content of the message unreliable.[4] Psychology deals with the subjectivity or loss of the original meaning of the message, through the study of the inner world of the sender and the receiver. In the following sections, we will deal with specific views on communication, which we will frame within the division of process and product. Psychology is primarily concerned with the product. On the other hand, the study of mass communication in the context of sociology also takes into account communication as a product, more than psychology.

2 Psychological perspective

According to Z. Vybíral, it was originally defined much more socially or even community-wise. "Communicatio originally meant 'joint participation' and communicare 'to do something in common, to share something in common.' Thus, it is not just about the flow of information, but the joint participation in activities in mutual contact."[5] Psychology is interested in human

[2] COBLEY, P.: Communication: Definitions and Concepts. In DONSBACH, W. (ed.): *The International Encyclopedia of Communication*. London : London Metropolitan University, 2008, p. 1.
[3] COBLEY, P.: Communication: Definitions and Concepts. In DONSBACH, W. (ed.): *The International Encyclopedia of Communication*. London : London Metropolitan University, 2008, p. 2.
[4] COBLEY, P.: Communication: Definitions and Concepts. In DONSBACH, W. (ed.): *The International Encyclopedia of Communication*. London : London Metropolitan University, 2008, p. 3.
[5] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál, 2000, p. 25.

communication mainly in terms of the intentions and impacts of communicators and recipients, “the function of their communication, motivation for it, understanding and misunderstanding in the communication process and the effects on the psyche of both the recipient and the producer, which occur or when sharing the situation together.”[6]

As we can see, it is not just the quality and comprehensibility of the information that determines whether the information is received and with what result. The inner world of both sides also comes into play. All our life experiences, which create so-called brain maps, have a significant impact on communication. “In the inner mental context of each communicator, there are a number of ideas and categories that independently affect his understanding and use of communication tools, organize his world.”[7] Therefore, everyone can perceive the same information differently and can assign a completely different content and emotion. People perceive information according to how they are accustomed to approaching the world, but also according to “what the word or context connects in our minds, according to how we are currently set up, whether we are tired or alert, and the other in advance we suspect of malicious intent. While on the one hand there is a "producer" who can automatically rely on "they will understand what I mean" on the other, we are the recipients, who are also involuntarily sure: "we know what he means and what by that he means: We are often wrong.”[8]

According to Z. Vybíral, there are several functions of communication: to inform, instruct, persuade to change, manipulate, influence and entertain. There is not too much in the first two in normal situations. Mostly it is about briefing or persuasion. This is often the case with the so-called "biased" news from television stations or news agencies and newsrooms, where information is accompanied by manipulation. The manipulator implicitly delivers what the recipient should deduce from the information, what to think, etc. [9]

Therefore, when we take into account that the same information can be interpreted completely differently for each person, it is necessary to take into account the internal and external context of communication. The internal context consists of “all the stimuli coming from the past and the present, which convey to us our information about the world, including possible knowledge about us.”[10] “Our communication partner, whom we want to convince of something, for example, is never an 'unwritten sheet of paper.' He has a wealth of knowledge about the world, but also about us.” [11] According to Vybíral this fact, this data stored in each one of us can greatly affect communication between people. Otherwise, people are talking to someone they do not know or know. Whom they like or do not like.

It is also extremely important how we say something. Our speech, or the communicator's speech, is therefore crucial for the transmission and understanding of whether the receipt of the information. It is therefore good to focus on the presentation of information. According to Plato, the style of storytelling and acting is natural. Thus, not only does nature mark a person's style of behaviour and communication, but conversely, the ways of communication also change character.

[6] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 28.
[7] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 28.
[8] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 29.
[9] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 31.
[10] TUBBS, L. S.: *Human Communication*. New York : McGraw-Hill Companies, 1999, p. 8.
[11] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 37.

"Communication strengthens or dampens emotions and shapes attitudes. It can irritate, provoke, initiate, appease, and slow down the other in determination. It can convince the truth and spread the lie in a credible way."[12] We use communication every day as a weapon that many cannot handle. According to psychologists, communication is our basic need. "Being able to communicate reduces feelings of abandonment, sadness and anxiety and, conversely, strengthens the sense of belonging."[13] A human being needs to experience feelings of belonging; to be sure, that he belongs somewhere, that he understands someone. Hence the need for non-binding conversation, to talk about anything. Entire sections of communication do not serve to convey content, but "it is necessary to make contact, maintain it, develop it, renew it, dominate the relationship, compare it with someone, interrupt it, end it, encourage it ... we communicate to associate." [14]

As early as 1948, Harold Lasswell formulated the condition of effective communication into a relatively simple but still valid formula: it is crucial who speaks what, through what channel, to whom, and with what effect. The person of the communicator, "his prestige, role, status, popularity"[15] is therefore important. Equally important according to this definition is the definition of the addressee, i.e. the target group, communication channels, etc.

The term mystifier is also related to this. This term was introduced to psychology by the English psychiatrist Laing. He tells us: what you see / hear is not true. I will tell you what is true, what you should hear and what you should think.[16]

3 Sociological perspective

As E. Katz points out in his work, the beginnings of communication studies are inextricably linked to sociology. It was the faculties of sociology that were one of the first to engage in communication research, thus laying the interdisciplinary foundations of this field of study. One of the pioneers was the University of Chicago in the United States, whose academic staff established the Communications Committee, which brought together sociology scholars from elite American universities.[17] Thanks to its origins in sociology, communication could later become a separate scientific discipline.

Therefore, what do sociologists view about communication? They agree that this is the process by which certain information is communicated and received. It is one of the conditions of the society's existence.[18] According to Kollárik, it is a specific type of communication, in the process of which people communicate with each other, exchange views, attitudes, announce their own experience of the situation and the relationships of the participants in the communication. Kollárik lists four basic elements in the communication structure: Communicator (the person who transmits the information), Communication

[12] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 34.
[13] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 35.
[14] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 34.
[15] VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 27.
[16] LAING, R. D.: The Politics of Experience and The Bird of Paradise. In VYBÍRAL, Z.: *Psychologie lidské komunikace*. Praha : Portál 2000, p. 59.
[17] KATZ, E.: Why Sociology Abandoned Communication. In *The American Sociologist*, 2009, Vol. 40, No. 167, p. 168.
[18] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 322.

(message content or information), Communication channel (the way the information is transmitted), Communicator (the person to whom the message is addressed).[19]

Katz goes on to tell a story about the "breakdown" of communication and sociology, a story about the impact of academics such as Lazersfeld, who have begun to question the real effects of communication on social or decision-making processes. They focused mainly on the mass media, which seemed to show only limited effects on the internal processes of individuals or groups, whether it was election or consumer decisions. However, these findings were realized mainly on a mass scale, so they observed the reaction of the mass, regardless of the individual, contextual characteristics of individual communities. It was the return to "micro" sociology that made it possible to examine certain decisions in context and, over time, restored the study of communication credit. In sociology, therefore, we can apply two frameworks to the study of communication, and its effects, namely the mass, which has proven to be less effective and community-based. We can say that it is the community view that follows the psychological tradition, by examining internal and external factors that affect how communication we interpret, but in the case of sociology, this happens on a larger scale when we examine the inner world of the community.[20]

Sociology, according to Kratochvíl, states that palo-altonian communication divides communication into digital and analogue. Digital communication is based on reason and logic, uses factual argumentation and logical laws. Analogue communication is figurative, intuitive and imaginative. An image, a comparison, a metaphor, a small sample, from which one creates an overall image. [21]

As mentioned above, in effective communication, one of the key conditions is to know the addressee; in the case of sociology, we can also identify the community or another group of individuals. Without knowing his previous experiences, attitudes, opinions and expectations, we cannot effectively formulate a message, nor choose a person as a communicator, nor choose a communication channel. Social communication is considered the common denominator of the three basic aspects of social contact: joint action, interaction and interpersonal relationships. It is used to pass on information and knowledge to other people, to search for common opinions, beliefs, comparison and problem solving, mutual understanding, evaluation and assessment of achieved results, or searching for new procedures and possibilities. Our communication with the other person changes according to what we think of him and what he thinks of us. In social communication, therefore, we cannot limit ourselves to what the other person tells us, but we must pay attention to how is it told, why is it told to us and what is wanted to be achieved, what attitudes and expectations is shown us. Social communication and adequate social skills are indeed an essential part of many professions. The worker who knows the limits and possibilities of social communication can achieve far better results in his work and use the knowledge in his partner and family life.[22]

In sociology, we distinguish between three basic types of social communication, verbal, nonverbal and deed communication. Verbal communication is mediated by a language sign. Non-verbal communication, on the other hand, is wordless. It takes place through movements and gestures, facial expressions, glances and eye movements, hand touches, physical postures

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[19] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 322.
[20] KATZ, E.: Why Sociology Abandoned Communication. In *The American Sociologist*, 2009, Vol. 40, No. 167, p. 167-174.
[21] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 324.
[22] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 347.

and changes in distance, but also by adjusting the appearance, clothing colours, speed and volume of speech, even the way the communicator treats time.[23]

Communication is a key process in dealing with crises that occur naturally in society. F. Cohen and R. S. Lazarus state that, as the first of five strategies to manage the stress that arises during a crisis, they raise awareness of what is happening to me, as well as what is happening outside of me, but it concerns me, or what the hope is that whether, by another strategy, I am able to reverse the course of events or at least alleviate the effects of stress. Sociologists, like psychologists, define variables in the field of communication.[24] First, we sort the definitions of individual groups of beneficiaries.

Traditional types of social formation include the crowd, the public, and the audience. The crowd is larger, but still defined by recognizable boundaries and space. The public deal with the circumstances of public life and its primary purpose is to promote an interest or opinion and to achieve political change. It is a fundamental, constitutive element of democratic politics. The emergence of the public is related to the rise of the bourgeoisie and the emergence of party newspapers. The audience is scattered and its members do not know each other, nor does the one who founded it. It is not able to act together to ensure that its goals are met. It is diverse (heterogeneous), extremely numerous and its members come from different occupations and demographics, but it is homogeneous.

The mass audience is numerous and very scattered, non-interactive, anonymous, heterogeneous, disorganized and incapable of independent action. When discussing the mass audience, we are mainly concerned with mass communication. Mass communication differs in the image of the population that it can achieve. The content character of mass communication allows reaching to a wider audience, which allows the subsequent emergence of mass or popular culture.[25] It is mass communication that fits into the ancient Greek idea and essence of communication, as the sharing of common ideas about the world, society, what it is and should be.[26] However, mass communication, as mentioned above, has been a problem for research. Kappler and Lazarsfeld in particular pointed out the problem. Traditionally, mass communication is perceived through a mass audience that is made up of a group of individuals without any interrelationships. Lazersfeld offered an alternative: two-step flow of communication. In this theory, the object of attention is primarily the so-called the opinion leader, i.e. the individual who follows the medium and is exposed to it, and subsequently, having a certain level of trust and intimacy with his successors, shifts and spreads the content of communication across society. The need for a new perspective on this issue stems from the unfulfilled predictions of scholars like Lasswell. Klapper, like Lazarsfeld, has shown that the dissemination of information across audiences is not linear and its effects are limited.[27] If, as McQuail states, the task of mass communication is to be, for example, influencing, changing opinions and attitudes, then its success is lower than originally expected. Klapper, however, claims that mass communication, on the other hand, confirms existing views, and changes them with great difficulty. This analysis again leads us to the community concept of

[23] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 348.
[24] KŘIVOHLAVÝ, J.: *Jak zvládat stres*. Praha : Grada, 1994, p. 53.
[25] VOPÁLENSKÝ, J.: *Médiá na prahu tretieho tisícročia*. Trnava : Univerzita sv. Cyrila a Metoda, 2003, p. 63.
[26] GÁLIK, S.: *Filozofia a médiá*. Bratislava : Iris, 2012, p. 42.
[27] KATZ, E.: Why Sociology Abandoned Communication. In *The American Sociologist*, 2009, Vol. 40, No. 167, p. 169.

communication, which represents a more appropriate framework for conceptualizing communication, its functions and impacts.[28]

4 Mass communication

Berger and Chaffee have defined the field as a science that seeks to understand the production, processing, and effects of symbolic and signalling systems by making verifiable theories involving legitimate generalizations. In mass communication, submitters are professional communicators. Content shared in the mass communication process is more often produced in a standardized way. Most mass-communicated messages are not addressed to specific individuals and there is a physical distance between the submitter and the recipient. In addition, distance is highlighted by the social gap. This asymmetry can be weakened by greater media diversity and access to them. We would be able to characterize the process of mass communication with a large scale, one-way flow, a process that is impersonal and anonymous.[29]

According to Rogers, mass communication is understood as an effective means by which a certain message reaches a large number of people. Lasswell similarly sees mass communication as a purposeful application of mass technologies to persuade, manipulate, or inform the masses.[30] Communication looks different from the recipients' point of view. Let us now look at the ways in which the beneficiaries work.

The first way of manifesting activity is selectivity. The more active the audience is, the more evidence we have of their choices and distinctions in relation to the media and their content. Selectivity is most evident in differentiated attention. Selectivity is a very weak manifestation of activity, because switching from one channel to another would probably have to be considered as selectivity. The recipient can also show activity in the form of utilitarianism, where the audience becomes the embodiment of the consumer's own interest. Intensity is a stronger manifestation of activity than selectivity. The audience is active and cognitively processing the incoming information and based on them makes a conscious choice. Intentionality to some extent implies resistance to influence, the ability to prevent unwanted influence or learning available to audience members. The reader, the viewer or the listener remain above the matter and unbiased until he decides otherwise. The last manifestation is retraction. The more an audience member is engrossed in constant media experiences, the more involved he is. This phenomenon can be described as an affective arousal.

According to Kollárik, the crowd is a real social unit, which is formed on the basis of a group of people oriented towards solving current common problems. “Its forms of behaviour are deprived of rationality, they are under the influence of emotions and affect, therefore negative forms and manifestations of behaviour arise. In an effort to control the crowd, the focus should be on emotions rather than rational.”[31]

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[28] KATZ, E.: Why Sociology Abandoned Communication. In *The American Sociologist*, 2009, Vol. 40, No. 167, p. 170.
[29] MCQUAIL, D.: Sociology of Mass Communication. In *Annual Review of Sociology*, 1985, Vol. 11, p. 102-104.
[30] MCQUAIL, D.: Sociology of Mass Communication. In *Annual Review of Sociology*, 1985, Vol. 11, p. 94.
[31] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 460.

According to the French psychologist Gustav Le Bon, the crowd exhibits these characteristics:

- irritability, variability and impatience (crowd is influential and more prone to aggressive actions),
- lightness and suggestibility (because the qualities of individuals are irrelevant),
- exaggeration and simplification of emotions in the crowd (people in the crowd do not feel responsible and therefore commit acts that they would not do as individuals),
- intolerance, authoritarianism, conservatism (the crowd does not allow arguments and debates, either accepts or rejects opinions, it is pronounced in its opinion about truth and lies),
- morality of the crowd (is capable of all acts, such as murder or crimes, but also acts of devotion and selflessness.[32]

Teams are a very important type of audience in the context of communication. Elton Mayo laid the foundations of social psychology of work. According to Mayo, the social environment, a suitable climate, is a significant part of the work environment. Employee productivity is influenced by social forms and their position in the group. The position, membership in the group, is also followed by the behaviour of employees, which is directly derived from this variable. The informal groups that arise and function in the workplace are based on extracurricular factors. Mayo also highlights the role of informal leadership, which, together with significant information and communication in the organization, especially from the bottom up, contributes to the overall prosperity of the work environment.

The attitudes of individuals and groups seem to be an integral part of the psychological explanation of their thinking, experience, behaviour. Attitudes determine the interaction between people. Why is attitude important? Because it affects our interpretation of the perceived, as well as what information we put into context.[33] Opinions on a certain thing, person or phenomenon are characterized as a specific, conscious and outwardly obvious expression of attitude.[34] Belief is a person's opinion of a subjectively perceived degree of probability that a certain entity has a certain characteristic.[35] Who communicates is also important. People tend to perceive good-looking people as more social, friendly, balanced, pleasant, attributing desirable personality traits and also higher intelligence and success.[36]

In discussing social communication and its success, De Vito highlights areas that need to be further addressed if communication is to be well managed. Before mentioning the following areas, however, it is important to mention the forms of social communication as described by De Vito, so that we can frame these areas into specific processes. The first form is interpersonal communication. In interpersonal communication, we talk to ourselves, interact with each other, compare other people and ourselves, and give them the opportunity to get to know us. The second is communication within small groups, where individuals interact with other members of the group and solve common problems.[37] Within these forms, it is good to

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[32] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 459.

[33] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 259.

[34] OSKAMP, S.: Attitudes and Opinions. In KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 261.

[35] FISHBEIN, M. A., AJZEN, I.: Belief, attitude, intention and behavior: An introduction to theory and reasearch. In KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 262.

[36] EAGLY, A., ASHMORE, R., LONGO, L.: What is beautiful is good, but…: A meta-analytic review of research on the physical attractiveness stereotype. In KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 299.

[37] DEVITO, A. J.: Základy mezilidské komunikacie. Praha : Grada, 2001, p. 15.

focus on these areas in order for communication to be effective, successful. They are: skills development, awareness of cultural influences, the art of listening, critical thinking, the relationship between communication and power and ethics.

Public speech, which is a speech for a large group of people, such as employees, requires social, academic and professional skills. It is recommended that these steps be followed in preparing for effective public speaking: [38]

- choice of topic and purpose,
- audience analysis,
- choice of topic and identification of propositions,
- review the topic,
- support for the main propositions,
- arrangement of material for speech,
- stylization of speech,
- compilation of the introduction and conclusion of the speech,
- speech practice,
- delivering a speech.[39]

Mass communication is a social subsystem that aims to influence and modify the thinking, behaviour and attitudes of recipients. In terms of population coverage, mass communication is mediated through the mass media. The media perform the following functions in the company: information, correlation, maintaining continuity, entertainment, and mobilization. The way in which information is disseminated from the media takes several forms: direct action on the recipient, mediated through opinion leaders, multi-level, combining mass and interpersonal communication.[40]

According to James Carey, communication is a symbolic process in which reality is produced, maintained, corrected and transformed.[41] John Dewey argues that there are two contrasting definitions in the history of Western thought, which James Carey later called a transactional and ritual view of communication. According to Carey, the transactional view is the most common in our culture: it is defined by terms such as transmitting, sending or providing information to others and is based on the metaphor of geography or transportation. According to Carey, the ritual view of communication is older; it connects communication with the terms sharing, participation, association, community. The view of communication as a ritual is aimed at keeping society in time, at the representation of shared values.[42]

It was the need to communicate with numerous groups that led to the development of the media. It was not only a desire to travel great distances, to preserve the message and pass on the experience from generation to generation, but also a desire to make the message available not only to one, but to a greater number of addressees. The turning point was the invention of letterpress (1448).[43] According to Neil Postman, each medium brings with it a certain form of using intellectual abilities. The dominance of the image media has evoked a superficial and incoherent perception of information.

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[38] DEVITO, A. J.: Základy mezilidské komunikacie. Praha : Grada, 2001, p. 277.
[39] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 331.
[40] KOLLÁRIK, T. et al.: *Sociálna psychológia*. Bratislava : UK, 2008, p. 481.
[41] REIFOVÁ, I. et al.: *Slovník mediální komunikace*. Praha : Portál, 2004, p. 49.
[42] REIFOVÁ, I. et al.: *Slovník mediální komunikace*. Praha : Portál, 2004, p. 49.
[43] JIRÁK, J., KÖPPLOVÁ, B.: *Médiá a společnost*. Praha : Portál, 2003, p. 17.

It is also useful to distinguish the media according to the type of social relations they create or support - that is, the role played by the media as a social institution. So on the one hand there are interpersonal media (letters, e-mail, telegraph, telephone); these media allow to send and receive messages on both sides and the participants are considered unique personalities. On the other hand, there is the mass media. This communication takes place from one source to the audience; thus, it places one participant in the role of submitter and the other in the role of recipient. They create new social bonds in society, strengthen group identity and help the individual find his place among other people. Some then distinguish between network media, which constitutes a communication network. Such a medium is e.g. mail or telephone conferences.[44]

The transmission model understands communication as the process of transmitting a message from a source to a recipient. This model finds sufficient support during interpersonal communication. The source has the initiative, while the recipient can only respond. Successful delivery of the message means that the recipient should also understand it.[45]

The cultural model focuses on finding the relationship between the processes of social communication and creating a common culture. Culture is crucial in this model. Raymond Williams pointed out that the oldest meaning of the word culture includes, on the one hand, what is worshiped and, on the other, refers to agriculture and the cultivation process.[46] In the 19th century, these two meanings were extended to the field of human development; today the term evokes the idea ofdeveloping the abilities, habits, and knowledge shared by the human community in general. The cultural model perceives communication as the construction of a shared space of meanings in which members of a given culture move. While the transmission model isolates the message and "transports" it as a letter to the recipient, the cultural model emphasizes the fact that people share a world of common meanings that they take for granted long before a message is formulated.

Recipient refers to the person who receives and decodes the message. Today, the recipient is no longer a passive recipient of the media message, but is actively entering the process of mass communication. We refer to the process of dealing with the media as the reception. In order for an individual to become part of an audience, he must have sufficient education to be able to decode and interpret the mediated message; he must have the time and be economically strong enough.[47]

Conclusion

As is clear from the scientific disciplines themselves, each views communication from the perspective of the main aspects of research. Psychology puts motives in the foreground, i.e. for what purpose the communication is conducted and what are the intentions of the participants in the communication. It also focuses on their perception and the impact of information on the psyche. Sociology focuses more on the possibility of communication to group people for a specific purpose. Through communication, we can create groups that have the same interests. The mass media should not be interested in performing any of these

[44] JIRÁK, J., KÖPPLOVÁ, B.: *Médiá a společnost*. Praha : Portál, 2003, p. 21.
[45] JIRÁK, J., KÖPPLOVÁ, B.: *Médiá a společnost*. Praha : Portál, 2003, p. 48.
[46] WILLIAMS, R.: Culture and Society 1780/1950. In JIRÁK, J., KÖPPLOVÁ, B.: *Médiá a společnost*. Praha : Portál, 2003, p. 50.
[47] JIRÁK, J, KÖPPLOVÁ, B.: *Médiá a společnost*. Praha : Portál, 2003, p. 49.

missions. Their purpose is to bring information to a wide range of people. Their goal is not to provoke the grouping of groups of people or direct communication between people.

Common to all three disciplines is the power of communication in the possibility of manipulation. Communication can manipulate the relationships of individuals, the behaviour of the individual, his feelings. It can also manipulate the group's dynamics, direction and behaviour. Finally, the mass media can manipulate groups, individuals, by abusing communication and deviating from their purpose. Thus, communication cannot be divided into individual types, taking into account the scientific disciplines from which we look at it. Communication is based on our natural essence to belong somewhere, to a group and to create something with this group and exchange information. It is the deepest essence of humanity as such. From the point of view of the individual, who ultimately forms a crowd, mass, or work team, it is important to know all the relevant previous experiences, experiences, knowledge, but also dreams and expectations, so that we can formulate a suitable communication message. However not only that, it is also important that this message is properly understood and elicits the response we expect. The choice of communication channel and communicator person is also very important. It needs to know the recipient's relationship to communication channels. The person communicating must have a range of skills that are crucial in terms of their impact on the recipient person.

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USE OF VIRTUAL AND AUGMENTED REALITY IN HEALTHCARE

Ján Proner – Martin Graca

Abstract
The phenomenon of the new millennium, that is also the way we could indicate a virtual and augmented reality that found space almost in all areas of our life. The widest use has experienced these technologies in the entertainment industry as digital games and immersive movies. They also found their way to develop technologies in education, healthcare, in the training of employees, but also in academic research. Virtual Reality (VR) and augmented reality (AR) have a broad application and their potential on the market is still growing. One of the industries is also health care. The article offers a view of using virtual and augmented reality in health care. For this area, the virtual and augmented reality can be used in education for the preparation of new medical personnel but also as a means of treating specific health indications and treatment. The article analyzes specific examples of the use of virtual augmented reality in health care.

Key words:
Augmented Reality. Healthcare. Virtual Reality.

Introduction

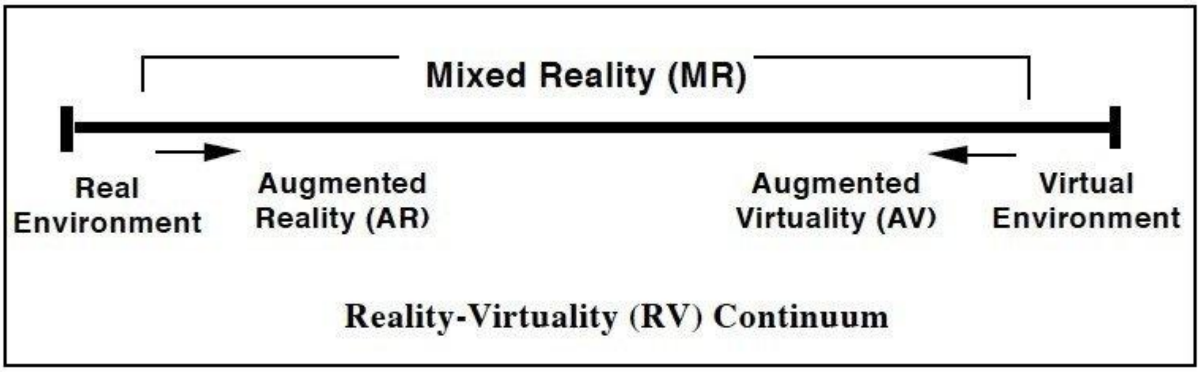
Virtual Reality (VR) but also augmented reality (AR) offers direct virtual connection with digital media, and seemingly without borders. Creating convincing experience in the VR is a complex and difficult challenge for its creators. If the VR done well, the results can be favourable and effective, with the potential to go beyond what we can do in the real world. But if the VR is done wrong, the user's frustrations may occur, or even worse, various nausea may occur during use of VR. Virtual Reality is a computer-synthesized, three-dimensional environment in which a plurality of human participants, appropriately interfaced, may engage and manipulate simulated physical elements in the environment and, in some forms, may engage and interact with representations of other humans, past, present or fictional, or with invented creatures. It is a computer-based technology for simulating visual auditory and other sensory aspects of complex environments.[1] By drawing the user to a computer generated world, technology of virtual reality allows us to break the line between humans and computers. P. Lévy defines virtual reality as a type of interactive simulation in which the user is experiencing psychological experience, drawn into situations defined by the computer. In his opinion, this virtual world can exactly simulate the real world. At the same time, this allows the user to create their own virtual concepts that are very different from the true view of the world.[2] S. Gálik states that virtual reality is clearly different from real socio-cultural reality. It defines it as something impossible, imaginary or fictional. However, in a philosophical understanding, it is also a virtual reality to some extent reality and vice versa reality - as we perceive it and interpreting it - is to some extent virtual.[3]

[1] ONYESOLU, M. O.: *Virtual reality laboratories: An ideal solution to the problems facing laboratory setup and management.* San Francisco, USA : Newswood Limited, 2009, p. 291-295.

[2] LÉVY, P.: *Kyberkultura.* Praha : Univerzita Karlova v Prahe, Nakladateství Karolinum, 2000, p. 64-65.

[3] GÁLIK, S.: *Filozofia a médiá. K filozofickej reflexii vplyvu médií na utváranie (súčasnej) kultúry.* Bratislava : Iris, 2012, p. 63.

Reality takes many forms and can be considered to range on a from the real environment to virtual environments.[4] The concept of a virtual continuum, designed by P. Milgram and F. Kishino in 1994, will be helpful to show different between types of virtual continuum.



Picture 1: The Concept of Virtual Continuum
Source: *Milgram and Kishino's Mixed Reality on the Reality-Virtuality Continuum* [online]. [2021-10-05]. Available at: <https://www.researchgate.net/figure/Milgram-and-Kishinos-Mixed-Reality-on-the-Reality-Virtuality-Continuum-Milgram-and_fig1_321405854>.

From this simple graph, the nature of both realities is clear, ie. virtual reality replaces a completely real environment, unlike augmented reality, which adds artificially generated objects into the real environment. However, there is also a third group called mixed reality, which is in between a pure virtual reality, and a pure augmented reality.[5] Augmented reality (AR) is an communicating experience of a real-life environment wherever the objects that exist in in the real life are enriched by virtual perceptual data, sometimes across numerous sensory modalities, containing auditory, olfactory, visual, haptic and somatosensory. AR can be defined as a scheme that achieves three simple features: a mixture of real and virtual worlds, real-time communication, and accurate 3D recording of virtual and real stuffs. [6]

In 1997 Ronald Azuma characterized augmented reality by tree characters:
- combination of real and virtual,
- real-time interactivity,
- connection to space.[7]

In general, there are four basic properties to define augmented reality:
- added content,
- interactivity,
- real time,
- binding to the environment.

[4] MILGRAM, P., KISHINO, F.: A Taxonomy of Mixed Reality Visual Displays. In *IEICE Transactions of Information Systems*, 1994, Vol. E77-D, No. 12. [online]. [2021-10-05]. Available at: <http://vered.rose.utoronto.ca/people/paul_dir/IEICE94/ieice.html>.
[5] PRONER, J., BLAHÚT, D.: New opportunities for virtual and augmented reality during the Covid-19. In HOSSOVÁ PROSTINÁKOVÁ, M., RADOŠINSKÁ, J., SOLÍK, M.: *Megatrends and Media: Home Officetainment*. Trnava : FMK UCM in Trnava, 2021, p. 581-589.
[6] BHOSALE, S. S., PATILl, R. B., KARJULKAR, M. J.: *Augmented Reality*. [online]. [2021-04-05]. Available at: <https://www.researchgate.net/publication/352477822_Augmented_Reality>.
[7] AZUMA, R. T.: A survey of augmented reality. In *Presence: Teleoperators and Virtual Environments,* 1997, Vol. 6, No. 4. [online]. [2021-10-02]. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.35.5387&rep=rep1&type=pdf>.

The difference between virtual and augmented reality is that, when it comes to augmented reality, apps work with a scanned scene and do not create a new reality. Selection of the information, scenes and their use depend on the user's choice and its intention. This process takes place in real time. We obtain additional information without real-time delay, directly in the image and in scanned reality. The information is stored in large databases available through internet connection(online) or without access to the network (offline).[8] In virtual reality, the concept of augmented reality is often discovered. But these two concepts do not represent the same concept of technological principle. We could understand the augmented reality as a certain subspecies of virtual reality. AR allows the user to perceive the real world supplemented with virtual objects. It is about supplementation of the real world with the artificially created. This virtual view gives the user to get additional information about physical environments that are not perceptible to human senses.[9] However, it can be argued that *„the expression „virtual reality" is most commonly used to name three-dimensional, computer-generated world that can be entered with a special sensor garment, gloves and glasses. The computer mediates the user programmed environment."*[10] From individual definitions, we can draw that the term virtual reality is most commonly used to name a three-dimensional, computer-generated world that can be entered using the input device (such as VR headset) Subsequently, through this device a computer system provides the programmed environment.

1 Objectives and Methodology of Research

The main topic of the study is a virtual and augmented reality used in health care. At present, virtual and augmented reality receives not only in the entertainment industry but also in other sectors. One of them is health care. For this area, virtual and augmented realities can be used in education for the preparation of new medical personnel but also as a means for the treatment of specific health indications. The aim of the study is to create an overview of theoretical bases and the current state of solved issue. The study develops current knowledge in the field of virtual and expanded reality used in health care. We used several methods to achieve the main goal. In the introduction of the study, we use the induction and deduction method when classifying virtual reality and its characters. In the next section, we are dedicated to the analysis of how to use virtual and augmented reality in medical environment, new trends and approaches. The object of research are specific examples of the use of virtual and augmented reality in various areas of healthcare.

2 Use of Virtual Reality and Augmented Reality in Medicine

As we mentioned, virtual and augmented reality found its place in their beginnings mainly in the entertainment industry in the field of games and films. With the development of technologies, the interest and use of the VR and AR is also moving to health. At present, it forms a market with VR and AR The global VR in healthcare market size was valued at $240.91 million in 2018 and is projected to reach $2,383.68 million by 2026, registering a CAGR of

[8] GRACA, M.: Rozšířená realita jako nástroj vzdělávání. In *MMK 2014 - Mezinárodní Masarykova konference pro doktorandy a mladé vědecké pracovníky* : sborník příspěvků z mezinárodní vědecké conference. Hradec Králové : Magnanimitas, 2014.

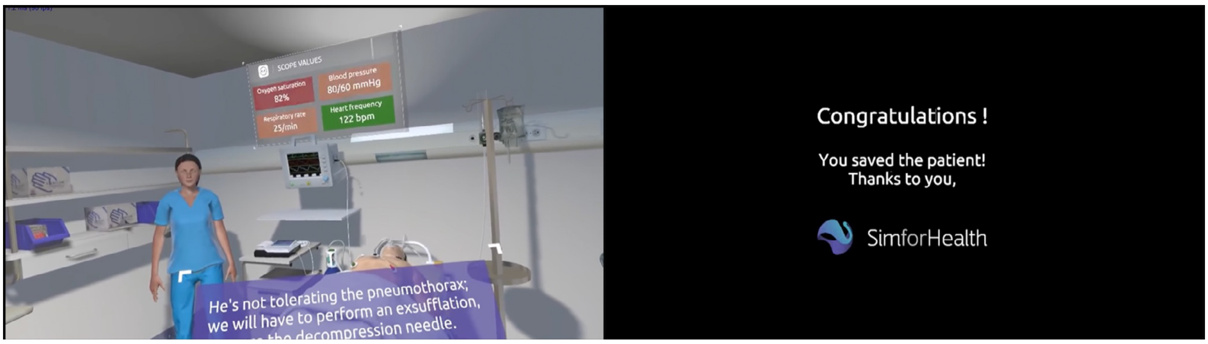
[9] BENETINOVÁ, S.: *Virtuálna realita, Rozšírená realita a Metaverzum.* [online]. [2018-01-05]. Available at: <https://plus.fmk.sk/wiki/fmk-4/tedi/herne-siete/2363-2/>.

[10] HEREC, O.: *Prieskumník virtuálnej reality*. [online]. [2018-05-25]. Available at: <http://www.klemens.sav.sk/fiusav/doc/filozofia/2003/9/636-655.pdf >.

33.18% from 2019 to 2026.[11] Virtual reality is expected to integrate significantly into healthcare worldwide and change the way patients are treated. It also helps to create a simulated environment for training doctors or medical personnel. According to Harward Study „A study from Harvard Business Review showed that VR training *improved participants overall surgical performance by 230% compared with traditional training methods."*[12] It also creates room for treatment of mental diseases such as panic seizures or anxieties. If we looked at other statistics, up to 82% of healthcare professionals agree that virtual reality creates a convenient way of accessing and learning information for medical students and practicing healthcare professionals**,** Accenture says. The agency also reports that 62% of patients would welcome virtual reality healthcare services as an alternative to traditional healthcare.[13] Rights these technologies enable medical staff, but also to patients, interaction in simulated environment created for education, training or rehabilitation patients. The health sector uses a virtual and augmented reality in all its segments, to offer patients and medical staff to higher quality care and efficiency. VR and AR is used in healthcare from surgical preparation of doctors, through personnel education to patient disease therapy.

VR SimforHealth

SimforHealth focuses on training of medical staff and doctors in medicine. Specifically creates virtual solution for medical education. After the VR headset is deployed, the student will find himself on the emergency room in the doctor's avatar, which has a task of solving the patient's health indication. The student must set the correct diagnosis, to confirm it by examining and set the treatment and health care of the patient." *Beyond the clinical theory that the student should display, the immersion also forces him/her to manage the stress lead by the emergency situation and the patient's critical evolution. Thanks to virtual reality, the learner can apply his theoretical knowledge and transform it into skills to understand clinical reasoning in an emergency situation."*[14] This virtual simulator from SimForhealth works more than 4 years and has completed it more than 50 000 people from the health care for this time.



Picture 2: VR SimforHealth

Source: Own processing. Available at: <https://www.youtube.com/watch?v=OyB1fkJ_rlY>.

[11] MANJREKAR, S., SUMANT, O.: *VR in Healthcare Market.* [online]. [2021-10-05]. Available at: <https://www.alliedmarketresearch.com/vr-in-healthcare-market-A06193>.

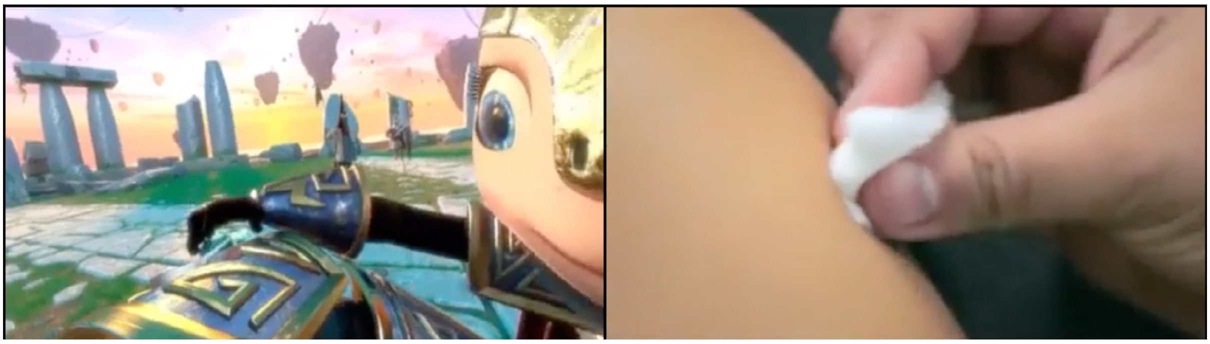
[12] BLUMSTEIN, G.: *Research: How Virtual Reality Can Help Train Surgeon*. [online]. [2019-10-16]. Available at: <https://hbr.org/2019/10/research-how-virtual-reality-can-help-train-surgeons>.

[13] SAFAVI, K., KALIS, B.: *How Can Leaders Make Recent Digital Health Gains Last?* [online]. [2020-08-12]. Available at: <https://www.accenture.com/_acnmedia/PDF-130/Accenture-2020-Digital-Health-Consumer-Survey-US.pdf#zoom=40>.

[14] *SimforHealth.* [online]. [2021-09-15]. Available at: <https://simforhealth.fr/en/projects/virtual-reality-virtual-clinical-case-in-pneumology/>.

VR Vaccine

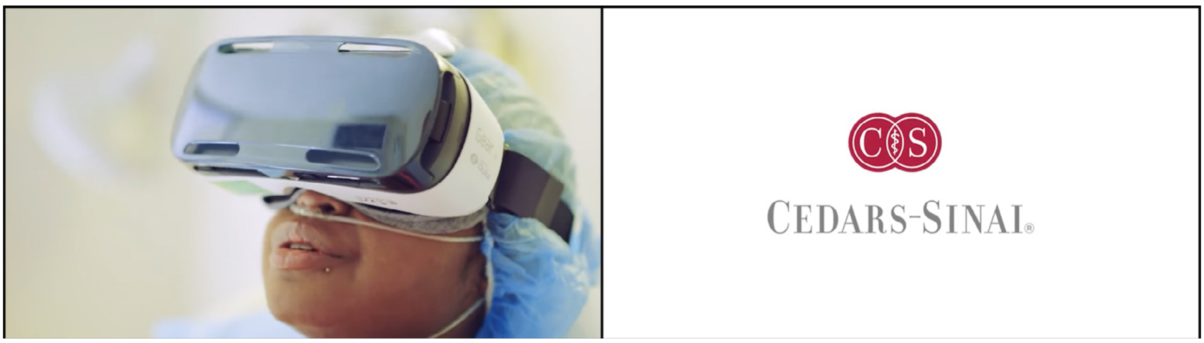
Another example of how to use VR in the healthcare is campaign VR vaccine from Ogilvy Brasil. In this case, there was a support of children's vaccination that were afraid of the needles. The company has created a virtual game, the environment where the small patient was placed. With the help of VR headset, he found himself in a fictional world where he was served with a super heroic drug/shield, against the enemy. The virtual avatar with the patient has met, described how vaccination works and protects him against whom. Part of the vaccination was a tablet for nurses that progressed with the same speed and procedure as a virtual character. The result was that children have adopted vaccination significantly better and in peace, in a fun way, and also facilitated the work of medical staff



Picture 3: VR Vaccine
Source: Own processing. Available at: <https://www.youtube.com/watch?v=KBL0K2EX-o8>.

VR Cedars Sinai Hospital

A good example of use of VR is the Cedars-Sinai hospital in LA that uses the VR as a tool in the fight against pain. „Chronic pain" in this case, VR is used in the form of a „brain hack" that by transferring the patient into virtual world, the brain significantly reduces cause of pain. In Sinai hospital, this method was treated with more than 2500 patients, recording up to 50% reduction of the pain in most patients. Researchers in this hospital believe that VR headsets have a positive impact on people with limited mobility such patients in wheelchair or patients „attached "to beds.*"What we are doing here is a part of a larger initiative to find out how to use digital technologies to improve the value of care at Cedars-Sinai and beyond. By value we mean to improve the quality of care, the experiences that our patients have, but also to reduce the cost of care"*.[15] The entire VR usage is also supposed to draw attention to excessive drugs that people can become quickly addicted.



Picture 4: VR Cedars Sinai Hospital
Source: Own processing. Available at: <https://www.youtube.com/watch?v=0pizYFG8F3A>.

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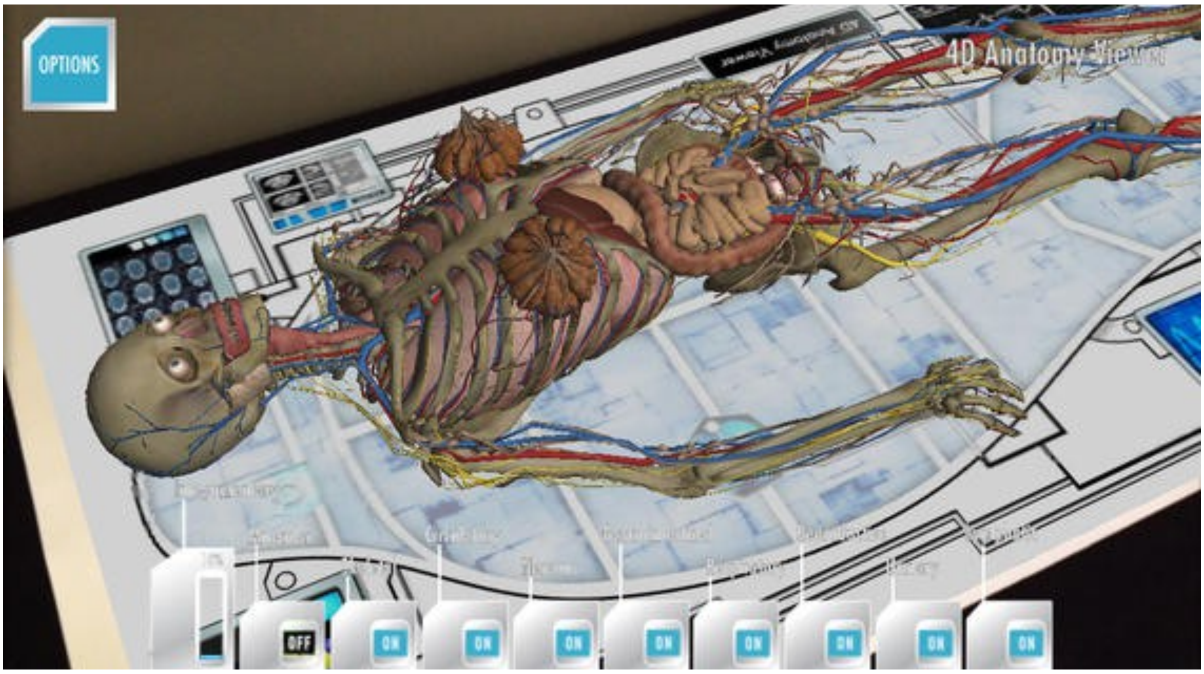
[15] VALICH, T.: *Cedars-Sinai Hospital Adopts Virtual Reality.* [online]. [2016-02-16]. Available at: <http://vrworld.com/2016/02/16/cedars-sinai-hospital-adopts-virtual-reality/>.

AR 4D Anatomy

4D anatomy is anatomy of the human body that works based on augmented reality. After printing or scanning the image (label), the app allows users to track the human body anatomy in 3D. All it takes is just to point the lens of the smartphone or tablet at the image and the app will take care of everything. Anatomy 4D allows to examine the human body and heart in various complex details, choose between bone views, muscle or respiratory tract, to switch the display of a male and female body or approach each part of the body or organ to depth. Anatomy 4D provides 24 modules from more than millions of images and 2000 structure labels. All 4D Interactive Anatomy's images are unique photographs of over 20 real cadavers covering both genders and all age groups. This app is mainly used in the field of doctors and medical staff within formal, non-formal or informal education.



Picture 5: 4D Anatomy

Source: 4D *Anatomy.* [online]. [2021-10-06]. Available at: <https://edshelf.com/tool/anatomy-4d/>.

AR Xvision

Xvision is a tool that can be used mainly for surgical interventions. Xvision works through a headset that is equipped with transparent AR Display, Built-in Surgical Tracking System, Wireless System, High Speed Processor and Headlight. On this basis, the Headset can display the doctor in real time in the augmented reality. Xvision is called also a navigation system of augmented reality for surgery. *"The 3D navigation data is then projected onto the surgeon's retina using the headset, allowing him or her to simultaneously look at the patient and see the navigation data without averting his or her eyes to a remote screen during the procedure. The system is designed to revolutionize how surgery is done by giving the surgeon better control and visualization, which may lead to easier, faster and safer surgeries."*[16] Xvision started to distribute to the American market at the beginning of 2020. The company plans to continue to expand and innovate apps for this platform.

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[16] *Augmedics launches AR guidance system for surgery.* [online]. [2020-01-09]. Available at: <https://tectales.com/ar-vr/augmedics-launches-augmented-reality-guidance-system-for-surgery.html>.

Picture 6: Xvision
Source: own processing, 2021. Available at: <https://www.youtube.com/watch?v=yMnUeIstKeY>.

Conclusion

The use of virtual and augmented reality is a significant milestone within technological innovation in health care. Their use as we pointed out in analyzed examples, it is not only possible in diagnosis and treatment of health indications but also in the education of medical staff and doctors. Most devices of virtual and augmented reality are at the development phase, whether in the field of didactics and methodology for education, technical and software solutions or are tested in the treatment of different types of diseases. When implementing virtual and augmented reality in healthcare, creators can rely on headset technologies from commercial companies such as HTC, Oculus etc. or take their own path and create a prototype headsets suitable for a given medical procedure. Of course, an important factor in modernization and improving various operations in healthcare is finance. Creating of „virtual and augmented reality "is financially demanding not only after the hardware site but also software. Making of a virtual world is time consuming and requires some „know-how ". Therefore, there is no complex virtual and augmented reality system that would be used across all health areas. In the future, it is possible that such a system will work in health care and successfully improve the quality of providing healthcare in terms of patients but also doctors and medical staff. Virtual and augmented reality is a great promise for the future in the treatment, providing healthcare and education of medical staff.

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EDUCATIONAL DIMENSION OF SOCIAL MEDIA: ANALYSIS OF SELECTED EDUCATIONAL PROFILES ON INSTAGRAM

Monika Prostináková Hossová – Marija Hekelj

Abstract
The importance of the media in the process of informing and education of the public is unquestionable. In the current situation, which is related (also) to the coronavirus pandemic, the educational function of the media seems to have been further strengthened. This can be seen as the result of "media market oversaturation" with information, but also misinformation, fake news, hoaxes and conspiracies. Although, the primary purpose of the media is to inform its audience, in today's postfactual society, many media creators are aware that they also "need" to educate, direct or navigate their audiences in a sea of information. This trend can be observed especially on social networks, which are also the subject of an investigation of the submitted post. It aims to explore the potential of using social networks in the field of education and audience information, as well as in the area of awareness of current issues resonating in society. In theory, the authors are characterized by theme-forming concepts related to the issue of the potential of social networks in the field of education and self-education. In the second part of the post, the authors perform a combined qualitative and quantitative content analysis of three selected Instagram profiles, which through their content convey information and knowledge, spread awareness and educate their audience on important topics. The subject of the investigation are posts on Instagram profiles dealing with COVID-19, with the authors noting the degree of representation of posts with coronavirus-related content; the features that these posts perform; but also, whether the authors cite sources of information as a sign of the relevance and credibility of the published content.

Key words:
COVID-19. Disinformation. Education. Instagram. Media Literacy. Social Media. Social Network.

Introduction

Digital media and social networks are now becoming a space primarily used to gather new information about what is happening in the world. While traditional media (e.g., print, television or radio) employ people to correct content as well as in terms of truthfulness and relevance of information (editor or head of editions a), in new media, they determine the relevance of the content and/or the audience. To distribute content to other users, you need to use buttons such *as share, comment* or *like,* and thanks to the established friendship and the algorithm used by the media, it is this content that is made visible to other users. Social media and social networks are of great importance in informing process and education. They are saturated with important information, but it is also necessary to monitor the credibility and relevance. Thanks to their popularity, we can use social media not only for entertainment, in everyday education or in the so-called "self-education", but also for spreading awareness and fighting disinformation. It was not only during the pandemic that half-truths and misrepresented information published on the Internet proved to have great power in shaping the views of individuals and groups. It is therefore very important to combat disinformation in this way, using the educational and awareness-raising dimensions of social media and social networks in the current COVID-19 situation.

1 Social Media and Their Functions

The rapid development of the Internet has brought us modern communication between people. The importance and popularity of social media is made possible by the availability of internet everywhere. It is social media that allows us to connect, communicate and gather information quickly and from virtually anywhere in the world, but it is highly debatable, whether they are relevant and truthful. The concept of social media evokes social networks such as popular *Facebook, Instagram, Twitter* and more. While it is right, these are social platforms that belong to a broader group called social media.[1] This is also why social media can be understood as a specific category of online media through which participants communicate with each other and associate within the network of relationships. In this way, they create two-way communication between users of social networks.[2] In the past, the emergence of social networks had one basic condition – the emergence of the Internet within the web space, its functionality, improvement and expansion not only within individual areas of the world, but also within the social layers and groups.[3] *"The term social media usually includes the Internet, mobile communication channels and tools that can share opinions and content with each other. As the title implies, social media involves building communities and networks and encouraging their users to participate."*[4] Solomon and Tuten define the concept of social media as a means of communication in an online environment, serving to transmit information, cooperate and maintain relations between interconnected participants, communities and organizations. They allow users to actively participate in a large number of communication activities – creating, disseminating and sharing media content with others. Through social media, users can shop, learn, play games, work or communicate.[5] Since social networks (and social media in general) are media, they fulfil basic media functions: entertainment, information, cultural, social, political and educational function.[6] Social networks are *understood by the European Network and Information Security Agency* as: *"An online community that, through a created profile, allows people to meet, interact, stay in touch, and share images and videos within a shared space."*[7] Warner defines the individual social network as follows:

- Six Degrees (1997) – the first platform that made it possible to create profiles and befriend others.
- StumbleUpon (2001) – a platform that focused more on sharing posts.
- LinkedIn and MySpace (2003) – platforms that were inspired by music.
- Facebook (2005) – one of the most popular, widely used social platforms in the world.
- YouTube (2005) – a video sharing platform.
- Twitter (2006) – a microblog platform for sharing short messages on the principle of SMS.
- Tumblr (2007) – a microblog platform that allows you to share content with a specific group of people.
- Instagram (2010) – the first platform to offer photo sharing.
- Google+ (2011) – The platform allowed the posting of photos, videos, and grouping in so-called circles.
- Snapchat (2011) – the first-ever platform that lets you share photo and video experience.
- Pinterest (2012) – A platform that allows you to store and discover information on the Internet using images and, to a lesser extent, animated GIFs and videos.

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[1] KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J.: *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie*. Trnava : FMK UCM in Trnava, 2021, p. 109.
[2] Ibidem, p. 109.
[3] DIJCK, J. V.: *The Culture of Connectivity: A Critical History of Social Media*. Oxford : University Press, 2013, p. 23.
[4] *CIPR Social Media Best Practice Guidelines.* [online]. [2021-10-20]. Available at: <https://www.slideshare.net/CIPRPaul/cipr-social-media-guidelines-final-2013 >.
[5] TUTEN, T. L., SOLOMON, M. R.: *Social Media Marketing.* UK : Saga, 2016, p. 36.
[6] See: KAČINOVÁ, V.: *Teoretické východiská učenia (sa) o médiách.* Trnava : FMK UCM in Trnava, 2019, p. 6-7.
[7] *European Network and Information Security Agency.* [online]. [2021-10-20]. Available at: <http://www.enisa.europa.eu/act/ar/deliverables/2010/onlineasithappens>.

- Vine (2012) – a platform that allowed to create 6-second videos with the possibility of repetition (so-called loops).
- Periscope (2015) – the first live streaming app.[8]

Media, information and digital literacy are very much needed when observing and participating in social networks. We consider information literacy, together with media and digital literacy, to be phenomena that need to be viewed comprehensively and in context. Already in the definition of the information era we deal with the term "internet" and "ICT".[9] Digital literacy also operates with information, but it also involves information and communication technologies in the process of obtaining, evaluating and using it. [10] A media literate individual possesses a technical skill (use of available media types); information skills that we understand as the ability to obtain information from the media and its contents; communication skills related to the processing and use of the information obtained, but also to the creation of its own media content.[11]

2 Critical Thinking in Social Media Era and in COVID-19' Era

It is very desirable that in today's modern world we try to avoid situations that can negatively affect us or our surroundings. It is imperative that we think critically, select media content, share relevant and truthful content and thus, spread awareness. Today, however, media literacy, which has become a key competence in modern times, is also included among the basic domains of literacy. Over the past century, communication disseminated through the mass media, has reached the so-called three thresholds of mapping: the expansion of radio broadcasting, then television broadcasting and finally the expansion of electronic means of communication. [12] The extremely important factors that condition the need for media literacy include the significant features of today's media: they are part of everyday life; are ubiquitous; interfere with global events; media reality is considered to be more real than reality itself; participate in socialization.[13] Therefore, it is very necessary to critically approach media content. Critical thinking is a key competence for fulfilling the essence of media literacy. In general terms, we can define it as a separate thinking, in the process of which one will come to new knowledge through research, comparison or verification of the correctness of his own and other ideas. Critical thinking is conditioned by previous analytical thinking. It results in the ability to identify important facts and contexts in a large amount of information and to formulate opinions and solutions on the basis of them.[14]

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[8] KRAJČOVIČ, P., RADOŠINSKÁ, J., VIŠŇOVSKÝ, J.: *Slovník vybraných pojmov z masmediálnej a marketingovej komunikácie*. Trnava : FMK UCM in Trnava, 2021, p. 110.

[9] Information currently plays an important role in a society that we say is Information. Slavomír Gálik calls this epoch informational and characterizes it by the existence of and the leading position of the Internet and information and communication technologies (ICT) in society. See: GÁLIK, S.: *Úvod do filozofie médií*. Trnava : FMK UCM in Trnava, 2011, p. 45.

[10] HOSSOVÁ, M.: Gramotnosti 21. storočia. In PETRANOVÁ, D., SOLÍK, M., RADOŠINSKÁ, J. (eds.): *Megatrendy a médiá 2016: Kritika v médiách, kritika médií I. Médiá a gramotnosť.* Trnava : FMK UCM v Trnave, 2016, p. 74.

[11] Ibidem, p. 76-77.

[12] RANKOV, P.: *Informačná spoločnosť. Perspektívy, problémy, paradox*. Levice : LCA Publishers Group, 2006, p. 36.

[13] BUCKINGHAM, D.: *Media Education: Literacy, Learning and Contemporary Culture.* Cambridge : Polity Press, 2003, p. 8.

[14] PETRANOVÁ, D.: *Mediálna výchova a kritické myslenie*. Trnava : FMK UCM, 2013, p. 15.

Importantly, it is necessary to characterize the concept of hoax. It is this concept that is one of the most discussed (not only) in the media in the current (pandemic) situation. In translation, the word has several meanings – mystification, fraud, but it is best described by the term alarm message.[15] Hoax ranks among alarm messages sent between people in different ways. Previously, emails have often been used, but nowadays, mostly social networks are the most common in the process of dissemination. These are often various warnings, attempts to disseminate some misleading information, but also various types of chain messages that bring happiness, calling for as many other addressees as possible to be forwarded.[16] Hoaxes, fake news or misinformation have become a kind of integral part of today's society, known as post-factual.[17]

The situation that occurred on social media during the global coronavirus pandemic is specific itself. The enormous increase in the spread of misinformation in the form of hoaxes or conspiracy theories is evident. It is for this very reason that many personalities on social networks (especially journalists, scientists, academics, etc.) try to expose hoaxes, fake news and misinformation related to COVID-19. The importance of critical assessment of media content on social networks appears to be a necessity in this situation.

3 Methodology

The aim of the submitted contribution is to explore the potential of using social networks in the field of education and audience information, as well as in the field of dissemination of awareness and awareness of current issues resonating in society. The contribution responds to the current situation with the arrival of the COVID-19 pandemic. In fact, the arrival of the pandemic has shown us in many cases the strength of social media and social networks, namely (more often) in a negative sense of the word. On the other hand, however, the current situation has contributed to an increase in activity in the field of prevention against negative social media phenomena, e.g., the spread of disinformation and hoaxes. The subject of combined quantitative and qualitative content analysis in this study are selected profiles on Instagram, which is currently the third most visited social network in Slovakia. It is used daily by up to a fifth of the population of Slovakia, while in the under-26 age group, up to 80% of young people visit Instagram.[18] As part of our investigation, we chose 3 Instagram profiles with a similar content focus. They address issues related to current events and therefore problems related to the COVID-19 pandemic. These are profiles: *Očami farmácie (ocami_farmacie)*[19], *Vedátor (vedator_sk)*[20] and *Krotíme hoaxy (krotimehoaxy)*[21]. These profiles meet the criteria chosen by us, i.e., they aim to spread awareness of current events, their content is informationally saturated and has attributes of educational content and "fight" against negative phenomena of society (disinformation, hoaxes, etc.).

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[15] For more information, see: KAČINOVÁ, V.: *Fenomén „fake news“, hoaxov a konšpiračných teórií v kontexte mediálnej výchovy.* Trnava : FMK UCM, 2019, p. 14-21.
[16] DŽUBÁK, J.: *Čím hoax škodí.* [online]. [2021-10-20]. Available at: <https://hoax.sk/co-je-to-hoax/>.
[17] HOSSOVÁ, M.: Fake News and Disinformation: Phenomena of Post-Factual Society. In *Media Literacy and Academic Research,* 2018, Vol. 1, No. 2, p. 28.
[18] RED: *Králi sociálnych sietí na Slovensku: Facebook, YouTube a Instagram*. [online]. [2021-10-17]. Available at: <https://strategie.hnonline.sk/marketing/2349341-krali-socialnych-sieti-na-slovensku-facebook-youtube-a-instagram>.
[19] Remark by the authors: Phrase *"Očami farmácie"* means *"Through the Eyes of Pharmacy"*
[20] Remark by the authors: Word *"Vedátor"* means *"The Scientist"*
[21] Remark by the authors: Phrase *"Krotíme hoaxy"* means *"Taming Hoaxes"*

We analyze these profiles between the 1st of February 2020 and the 31th of October 2021 and include only published posts and series stories (saved in highlights) in the analysis. It was in February 2020 that the first reports of a new type of coronavirus began to appear on the territory of Slovakia, which complicates life worldwide to this day. As part of the combined quantitative and qualitative content analysis, we therefore take note of:

1. the rate of representation of contributions dealing with coronavirus (out of the total number of contributions in the time observed);
2. content focus of posts dealing with coronavirus and with regard to the function of the post: a. information function (e.g. information on current events at home/in the world); b. educational function (e.g. refuting disinformation, medical explanation of the problem and context); c. entertainment function (e.g. "meme" illustrations of human behavior at the time of the pandemic, ridicule of the statements of public officials, etc.); d. mobilization function (e.g. persuasion and mobilization of the audience to active citizenship – in the context of the pandemic, persuading the audience about the benefits of vaccination, the need for measures to prevent the spread of the virus, etc.)[22];
3. the sources of mediated information;
4. the level of interaction with the audience.

Based on the analysis and monitoring of the above attributes, we correspond to the following research questions:
RQ1: What is the rate of representation of contributions dealing with COVID-19-related issues on the analyzed profiles?
RQ2: What functions do posts on analyzed posts perform most often?
RQ3: To what extent do authors report resources in the analyzed contributions and what kind of sources do authors cite?
RQ4: To what extent are mediated information shared by the audience?

4 Results – Analysis of Selected Educational Profiles on Instagram

For the purposes of the submitted post, we have selected three Instagram profiles that can be considered valuable in terms of spreading awareness, information or education, and their content is information-educational in nature.

4.1 Characteristics of the Analyzed Profiles

The first analyzed is the profile ***Očami farmácie (Through the Eyes of Pharmacy – ocami_farmacie)***. The profile was established in 2020 by Marek Kajan (doctor of pharmacy) and is characterized by the assertion: *"Regular dose of undistorted relevant information about medicines."*[23] In addition to the Instagram profile, the project also includes the eponymal podcast. According to its founder, the aim of the project is to inform about how medicines work, how their development works, and also aims to refute hoaxes related to topical topics resonating in society.[24] The Instagram profile has 58,700 followers. In addition to topics related to the coronavirus, the author also deals with civilization and genetic diseases or issues of dietary supplements (CBD, collagen, etc.).

[22] According to: MCQUAIL, D.: *Úvod do teorie masové komunikace.* 4th Edition. Praha : Portál, 2009, p. 110; KAČINOVÁ, V.: *Teoretické východiská učenia (sa) o médiách.* Trnava : FMK UCM in Trnava, 2019, p. 6-7.
[23] *Ocami_farmacie.* [online]. [2021-10-28]. Available at: <https://www.instagram.com/ocami_farmacie/>.
[24] KAJAN, M.: *About Očami farmácie.* [online]. [2021-10-28]. Available at: <https://www.patreon.com/ocamifarmacie>.

The profile ***Vedátor (The Scientist – vedator_sk)***[25] was founded in 2016 by Samuel Kováčik, a theoretical physicist and university lecturer. In addition to the founder, however, 7 other co-workers regularly participate in the creation of content from an Instagram profile, YouTube channel, podcast or content on Facebook. The aim of the project is defined by the author by saying: *"I try to make people understand the world better."*[26] Activities cover the field of physics, mathematics, biology, chemistry, history, artificial intelligence, medicine, psychology and other disciplines. Instagram profile has 52,800 followers.

The profile of the journalist (Denník N) Vladimír Šnídl ***Krotíme hoaxy (Taming Hoaxes – krotimehoaxy)*** was created in 2019. The author himself describes it by saying: *"I show the stupidity that Slovaks believe on social media and offer tips on what to do with it."*[27] Profile activity focuses on refuting hoaxes, explaining, commenting on context and arguing based on substantiated information, thus the author significantly contributes to the raising awareness and prevention in the field of disinformation and hoaxes. The thematic focus is diverse and depends on the current problems that society is struggling with. Most often these are COVID-19-related hoaxes, the domestic (and foreign) political scene, human rights, sexual harassment and many others. That profile has 10,600 followers. In addition, the author is also active on YouTube channel called *Krotíme hoaxy (Taming Hoaxes).*

4.2 Measure of Representation of Coronavirus-related Contributions

In this section of the post, we analyze selected profiles in terms of the frequency of Instagram contributions and the rate of representation of coronavirus-themed posts. As for coronavirus-themed contributions, we evaluate those that touch the issues of the existence of the disease, vaccination against the disease, hoaxes related to COVID-19 (vaccination, testing, course, treatment, etc.), etc. As part of the analysis, we note all posts that are currently available on the profile – i.e., posts and stories saved in "highlights".

Table 1: Measure of the representation in posting about COVID-19 – profile *Očami farmácie (Through the Eyes of Pharmacy)*

Total number of posts and stories during the existence of the profile	**Total contributions about COVID-19**	**Number of COVID-19 posts**	**COVID-19 saved stories**
276 (181 posts and 95 saved stories)	143	92	51

Source: Own processing.

Table 2: Measure of the representation in posting about COVID-19 – profile *Vedátor (The Scientist)*

Total number of posts and stories during the existence of the profile	**Total contributions about COVID-19**	**Number of COVID-19 posts**	**COVID-19 saved stories**
263 (223 posts and 40 saved stories)	52	38	14

Source: Own processing.

[25] *Vedator_sk.* [online]. [2021-10-28]. Available at: <https://www.instagram.com/vedator_sk/>.
[26] KOVÁČIK, S.: *Podporte nás.* [online]. [2021-10-28]. Available at: <https://vedator.space/podporte-nas/>.
[27] *Krotimehoaxy*. [online]. [2021-10-29]. Available at: <https://www.instagram.com/krotimehoaxy/>.

Table 3: Measure of the representation in posting about COVID-19 – profile *Krotíme hoaxy (Taming Hoaxes)*

Total number of posts and stories during the existence of the profile	Total contributions about COVID-19	Number of COVID-19 posts	COVID-19 saved stories
204 (204 posts and 0 saved stories)	84	84	0

Source: Own processing.

The above tables show that the largest rate of representation of COVID-19-themed posts has a profile *Očami farmácie (Through the Eyes of Pharmacy),* where such posts account for up to 52% of the total profile content. The other two profiles pay less attention to COVID-19 (or pay more attention to other topics). The representation of coronavirus-themed posts on the *Krotíme hoaxy (Taming Hoaxes)* profile is 41%, while *Vedátor (The Scientist)* deals with the topic in only 20% of contributions. In all three analyzed profiles, we observe that authors use more posts publishing (compared to published stories series that are saved in highlights). Posts make up 64% of contributions to COVID-19 on the profile *Očami farmácie (Through the Eyes of Pharmacy),* 73% on the profile *Vedátor (The Scientist)* and 100% on the profile *Krotíme hoaxy (Taming Hoaxes).*

4.3 The Focus of the Coronavirus Posts and Their Function

Within this category, we analyze the content focus of published posts with regard to what functions these posts perform: information function, educational function, entertainment function, mobilization function. (See 3 Methodology). Given that some contributions may perform more than one function at the same time (e.g., education and mobilization), we attribute contributions to the function based on the predominant function (e.g., primary mobilization nature of the contribution) for the purposes of our investigation.

Table 4: Content focus of coronavirus-related contributions and post function – profile *Očami farmácie (Through the Eyes of Pharmacy)*

Total COVID-19 contributions	Number of contributions fulfilling the information function	Number of contributions fulfilling the education function	Number of posts fulfilling the entertainment function	Number of contributions fulfilling the mobilization function
143	45	62	17	19

Source: Own processing.

Table 5: Content focus of coronavirus-related contributions and post function – profile *Vedátor (The Scientist)*

Total COVID-19 contributions	Number of contributions fulfilling the information function	Number of contributions fulfilling the education function	Number of posts fulfilling the entertainment function	Number of contributions fulfilling the mobilization function
52	21	29	0	2

Source: Own processing.

Table 6: Content focus of coronavirus-related contributions and post function – profile *Krotíme hoaxy (Taming Hoaxes)*

Total COVID-19 contributions	Number of contributions fulfilling the information function	Number of contributions fulfilling the education function	Number of posts fulfilling the entertainment function	Number of contributions fulfilling the mobilization function
84	52	18	12	2

Source: Own processing.

Within the framework of education, all authors also take care and thoroughly explain phenomena and contexts in a popular form and simple language. Informationally tuned posts provide information about the current situation, are shorter and do not explain the context, only inform the reader of the status. Contributions fulfilling the mobilization function focus on calls for anti-pandemic measures, support vaccination and directly encourage followers to take actions that can contribute to improving the situation. The entertainment function of posts is mainly fulfilled by meme images that criticize, ironize different groups of people (e.g., antivaxers, antimasks), statements of public figures, etc.

As with the first analyzed category, there are clear differences between the examined profiles. "The most educational" profile appears to be the profile *Očami farmácie (Through the Eyes of Pharmacy),* where 43% of the content exhibits an educational function, 31% of the posts have an information function, 12% the contribution is entertaining and 13% of the contributions perform a mobilization function. *Vedátor (The Scientist)* profile does not contain any entertainment contribution and does not show engagement even in the mobilization (only 4% of content, i.e., 2 posts). The difference between the number of information and educational contributions is also smaller, but contributions fulfilling the educational function (56%) predominate. As for the mobilization function of posts on the third analyzed profile *Krotíme hoaxy (Taming Hoaxes)*, it is also only 2 posts (2% content). However, there are more fun posts on this profile (14%). Unlike the previous two authors, Šnídl is more concerned with informing the public than education. Posts that perform an information function are 62%, while those with an educational character are only 21%.

4.4 Listing of Sources of Intermediated Information

Table 7: Listing mediated information sources for COVID-19 posts - profile *Očami farmácie (Through the Eyes of Pharmacy)*

Total COVID-19 contributions	Number of contributions indicating source of information	Number of contributions without specifying the source of information
143	97	46

Source: Own processing.

Table 8: Listing mediated resources for COVID-19 posts - profile *Vedátor (The Scientist)*

Total COVID-19 contributions	Number of contributions indicating source of information	Number of contributions without specifying the source of information
52	18	33

Source: Own processing.

Table 9: Listing of sources of mediated information for COVID-19 posts – profile *Krotíme hoaxy (Taming Hoaxes)*

Total COVID-19 contributions	Number of contributions indicating source of information	Number of contributions without specifying the source of information
84	13	71

Source: Own processing.

When listing sources of mediated information, we monitor whether the authors indicate, for example, links to the original articles or indicate the name of the author of the scientific study from which they draw, etc. In this category, we observe differences between the monitored profiles resulting in their focus and content. The profile *Očami farmácie (Through the Eyes of Pharmacy)*, which contains the most COVID-19-themed posts, also has the most contributions with the indication of the source (68%). The second analyzed profile *Vedátor (The Scientist),* whose thematic scope is significantly broader, lists the source with only 35% of contributions. This is also the case with the *Krotíme hoaxy (Taming Hoaxes)* profile, which focuses on detecting hoaxes in several areas (not only coronavirus), with the author listing sources of information for 15% of contributions. The reason why other contributions of the contributions studied are without a source is that authors often work with their own knowledge and experience. Misinformation and hoaxes disproven on the basis of their own knowledge (Vladimír Šnídl on the profile *Krotíme hoaxy (Taming Hoaxes)* e.g., often works with screenshots of his own articles published in *Denník N*). In the case of posts fulfilling a fun function, it is the own creation of fun images, where the indication of the source is not necessary.

The sources reported by the authors in their works can be divided into several categories: 1. scientific studies; 2. notices, letters, studies and information published by public institutions, e.g. government, minister, *World Health Organization (WHO), European Medicines Agency (EMA), State Institute for Drug Control (ŠÚKL*, Slovak Republic), etc.; 3. articles and information published by domestic and foreign media (most often print, but also television and web news media); 4. self-processing of authors (knowledge stems from the author's education or experience in the field). Tracked profiles most often work with the first two types of resources. Most often, authors cite scientific studies whose content is legitimate and relevant (e.g., published in reputable journals). The second most common source of information is announcements, studies and information published by public institutions, most often *WHO*, *EMA* and *Ministry of Health of the Slovak Republic.* However, there are also often posts without specifying the source or sharing of own posts published elsewhere (e.g., journalist Vladimír Šnídl often shares his own articles published in daily newspaper *Denník N*). Since the monitored profiles also focus on refuting hoaxes and disinformation in their activities and their interaction on the social network is of an information and educational nature, it would be appropriate for them to guard the use of resources and report them correctly. Although we do not observe incorrect citation or reporting of sources of published information within the analyzed sample, a higher level of source or a consistent way of listing sources would highlight the credibility and relevance of those profiles and the information published by them.

4.5 Audience Interaction Rate

Under the term interaction with the audience, we mean tracking the sharing of analyzed profiles by other profiles, i.e., the audience. Since we conduct the review retrospectively and not in real time of publication by the post, we may only watch followers in a limited way as followers share published content. For this purpose, we follow the "tagged" section of the profile, which shows the posts in which the author has been tagged. From these posts we select those dealing with COVID-19 and track *who shares posts* (profile type – private person, institution, profile with similar focus) and *for what purpose* they share them (expressing consent to opinions, opposing opinions, sharing similar content as the profile analyzed, etc.).

The posts dealing with COVID-19, which in this sense, we consider to be the interaction between the analyzed profile *Očami farmácie (Through the eyes of pharmacy)* and its audience, are 35 (out of a total of 56 in the monitored time), which is 62.5%. These are interactions in the form of sharing information published on the *Očami farmácie (Through the eyes of pharmacy)* profile, profile tags by other authors (most often other scientific profiles, doctors appearing on *Instagram,* journalists informing about the benefits of vaccination, or profiles aimed at refuting hoaxes and disinformation). Profile *Vedátor (The Scientist)* has a lower number of such interactions. Out of a total of 154 designations in the time spent, only 16 of them (10%) were dealing with the coronavirus issue. As with the first analyzed profile, this is about sharing published information, but more often it is the labels that occur in similarly content-oriented posts of other authors. Sharing profiles are of a scientific nature, but there is also a label in a post published by the *Ministry of Health of the Slovak Republic* or tags in the posts of doctors, scientists, journalists and media. The weakest interaction reaches the profile *Krotíme hoaxy (Taming Hoaxes).* The share of shared posts dealing with COVID-19 is 16%, only 3 posts (out of a total of 19 tags in the time tracked). One of the labels appears in a post published by the *Ministry of Health of the Slovak Republic*. Another tag is by sharing content posted on *Krotíme hoaxy (Taming Hoaxes)* profile by profile sharing entertaining content. The last interaction is a follower label that is being treated for COVID-19 and recommends following the analyzed profile to gather relevant information. For all three analyzed profiles, interactions are about sharing similar views, or sharing similar content and alerting or recommending profiles that address the topic and "are worth following".

Conclusion

Based on the research carried out, we can conclude that the authors of the analyzed profiles aim to broaden the public's horizons on important topics resonating in society. Although the focus of the analyzed Instagram profiles is different (different areas of science, pharmacy, disinformation and hoaxes), all three profiles also deal significantly with the coronavirus issue. After all, the ongoing pandemic has affected virtually all areas of life and can therefore be addressed from the point of view of various disciplines. In the paper, we analyze the degree of representation of COVID-19 contributions; the functions that these posts perform, but also the extent to which authors work with sources of information, which in some way, means the authors' efforts to ensure the objectivity and relevance of the content. Based on the analysis carried out, we correspond to the established research questions as follows:

RQ1: What is the rate of representation of contributions dealing with COVID-19-related issues on the analyzed profiles?

The highest rate of representation of COVID-19-themed posts has the profile *Očami farmácie (Through the Eyes of Pharmacy)* (up to 52% of profile content in the monitored time). The representation of coronavirus-themed posts on the *Krotíme hoaxy (Taming Hoaxes)* profile is 41%, while *Vedátor (The Scientist)* deals with the topic in only 20% of contributions.

RQ2: What function do posts on analyzed posts perform most often?
The posts of the analyzed profiles most often perform two functions, educational and informational. The most educational contributions contain the profile *Očami farmácie (Through the Eyes of Pharmacy),* the most informational posts contain the profile *Krotíme hoaxy (Taming Hoaxes).* In addition to educating and informing the public, the authors also devote themselves to mobilizing their audience and entertainment, but to a significantly lower extent. Therefore, we can characterize the monitored profiles as informing and educational.

RQ3: To what extent do authors report resources in the analyzed contributions and what kind of sources do authors cite?
The authors cite sources of published information most often when it comes to communicating information from foreign scientific studies or other professional sources. The most posts with the indication of the source can be found on the profile *Očami farmácie (Through the Eyes of Pharmacy)* (68%). *Vedátor (The Scientist)* cites the source at 35% of the posts and *Krotíme hoaxy (Taming Hoaxes)* with only 15% of contributions. The authors most often work with information published in relevant scientific studies, as well as information (notices, official documents, studies) of public institutions such as *WHO*, *EMA or Ministry of Health of the Slovak Republic.* In this context, however, we must draw attention to the fact that seemingly low level of resource listing does not necessarily mean bias or irrelevantness of the profile. Authors often come out and argue on the basis of their own knowledge and abilities (based on their profession or study).

RQ4: To what extent are mediated information shared by the audience?
In the *Očami farmácie (Through the Eyes of Pharmacy)* profile, we'll see 35 (out of a total of 56) interactions in the form of labeling and content sharing, representing 62.5%. *Vedátor (The Scientist)* profile has a 10% share of such interactions in the coronavirus theme, representing 16 posts out of a total of 154 tags at the time being tracked. The lowest interaction rate is recorded for the *Krotíme hoaxy (Taming Hoaxes)* profile, where are only 3 labels relate to COVID-19, representing 16% of the total 19 designations in the viewing time. Followers and audience share information from analyzed profiles or mark these profiles in other posts to draw attention to a topic, share information, or promote opinions and their own content. The most common labels and sharing come from other scientific profiles, profiles of doctors appearing on the social network, journalists, media, but also from public state institutions (*Ministry of Health of the Slovak Republic*). It is clear, that who shares published information and indicates the analyzed profiles in posts with similar content, increases the credibility and relevance of the analyzed profiles and moves them forward in the ranking of relevant educational and information sources.

It should be noted that the differences that the analysis showed between the observed profiles stem from the different content and thematic coverage, but also from the different intentions of the authors. While the profile *Očami farmácie (Through the Eyes of Pharmacy)* covers the pharmaceutical field, *Vedátor (The Scientist)* deals with e.g., physics, astrophysics, medicine, but also other topics. Its content focus is significantly broader, therefore the number of contributions dealing with the coronavirus issue is also lower. It's the same with the *Krotíme hoaxy (Taming Hoaxes)* profile. The author of the profile deals with hoaxes and disinformation occurring in society in various fields – health care, domestic and foreign policy, technology, etc. However, all three analyzed profiles have in common that their content contributes significantly to better informing their audience and their activities are also educational in nature. They point to the inevitability of shaping the critically minded recipient of media content, as well as how fragile the line between truthful and distorted or misrepresented (diss)information is. This is what we consider important, even inevitable, in today's society (and the situation) where the relevance of the information we work with and directly affects our lives. Finally, we can only add that today's society faces really big challenges, and not just in the media industry. If we focus on this aspect of life, today (more than ever) we should focus our attention on building media literacy and shaping critically minded individuals. It is essential to teach the audience to distinguish between alternative and conspiracy media[28] - between facts and opinions, but also between truth and fiction.

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SEARCH ENGINE OPTIMIZATION OF VIDEO CONTENT

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Abstract
The digital transformation of organizations and their content is key to their continuous improvement. Businesses and other organizations, as well as state and public institutions, are gradually digitizing their content. They transform it from paper to digital online form. Modern organizations choose the video format with which they have the opportunity to reduce the environmental impact and cost of paper, including its storage and maintenance or scanning, faster processing of inquiries or even increasing customer satisfaction. A huge number of people watch live broadcasts every day, i. e. streams their creators on platforms like Twitch, YouTube, Facebook or TikTok. Video is becoming one of the most important formats for presenting and promoting organizations, but also individuals, even in the results of online search engines. This paper discusses of the most important aspects of optimizing video content for search engines. We created an experiment establishing a YouTube channel to see after 1 year its across various metrics of success and improving its visibility in Google Search. We've identified key search engine optimization factors for searches related to video content. We have analysed the impact of video in search on customer behavior. We also created a dashboard for content analysis in Google Analytics for easier analysis of results in the future.

Keywords:
Content analysis. Content optimization. Google. Indexing. Online marketing. Search Engine Optimization. Search factors. YouTube. Users behavior. Video.

Introduction

The Internet is a true phenomenon of our time as only a few technologies could so quickly become such an integral part of everyday life. In less than 40 years since its creation, there are about 4.66 billion active users, about 59.5% of the world population.[1] For many if not all of the users the internet became the place for entertainment, communication, receiving and sharing information, but also to conduct business, trade and work. And with projects such as Starlink, which is to offer cheap high-speed internet globally and the increase in use of 5G technology and the Internet of Things, both the use and user base is to dramatically increase. These factors make online marketing an increasingly important tool to advertise products and services.[2] Digital enterprise transformation refers to improvements in business models, processes, activities, customer experiences, contents, competencies, and business opportunities, by taking advantage of the changes and opportunities offered by digital technologies.[3] Digital transformation has fully begun in different areas of our lives. It is good to use best practices, tools, and frameworks to manage it. It is appropriate to become inspired by digital transformation and digitisation of and continuously improve organisational processes. [4] This paper discusses some the most important aspects of digital transformation in organisations in context of search engine optimization. The focus of this paper the search engine optimization

[1] *Internet users in the world*. [online]. [2021-08-19]. Available at: <https://www.statista.com/statistics/617136/digital-population-worldwide/>.
[2] *Frequently Asked Questions of Starlink*. [online]. [2021-08-19]. Available at: <https://www.starlink.com/faq>.
[3] EVANS, N., QURESHI, A., MIKLOSIK, A.: Digital Enterprise Transformation: Lessons Learnt From Expert Experience. In *22nd European Conference on Knowledge Management (ECKM)*. [online]. [2021-10-19]. Available at: <https://www.researchgate.net/profile/Athar-Qureshi-2/publication/354533479_Digital_Enterprise_Transformation_Lessons_Learnt_From_Expert_Experience/links/613dce6901846e45ef429ea5/Digital-Enterprise-Transformation-Lessons-Learnt-From-Expert-Experience.pdf>.
[4] REITER, M., MIKLOSIK, A.: Digital Transformation of Organisations In The Context Of ITIL® 4. In KVETANOVÁ, Z., BEZÁKOVÁ, Z., MADLEŇÁK, A. (eds.): *Marketing Identity: COVID-2.0*. Trnava : FMK UCM v Trnave, 2020, p. 522-536.

of video content and its use in organizations. Specifically, the research focused on an experiment with creating a YouTube channel that we can see across different metrics of success after 1 year, and on improving visibility on Google Search. The paper is structured as follows: Firstly, the importance of online and video marketing for organisations is discussed, along with the characteristics of online marketing and overview process of search engine optimalization. Secondly, the research methods and methodology are presented. Thirdly, the results of the research are presented, including an experiment of company IT Academy. The paper concludes with a Discussion and conclusion section.

1 Online and video marketing

Online marketing is the process of using web channels to spread the message about a company's brand, products or services to its potential customers. The methods and techniques used for online marketing include email, video, social media, display advertising, search engine optimization (SEO), PPC campaign and much more. Video marketing is part of online marketing and means using videos to promote and tell people about your product or service. It helps increase the engagement of your digital and social channels, educates your audience and allows you to reach them with new media. The goal of online and video marketing is to reach potential customers through digital channels where they spend time reading, searching, shopping, watching videos and socializing online.

1.1 Characteristics of Online Marketing

First of all, it is important to note, that online marketing refers almost exclusively to the so-called Clear web or those websites, that are accessible by standard web browsers. Clear web accounts for only between 1-4% of the whole internet, the rest is the so-called Deep web, which contains anything on the internet that is not indexed by search engines, such as medical or company records, fee or membership-based content and so on. A part of Deep web is the Dark web, which may only be accessed by the browser Tor and is mainly used for illegal activities. This comprises about 5% of the Deep web.[5] In the minds of many people, there persists the view that internet is used by mainly young people, but after 40 years and its wide application in day-to-day life this is changing. Worldwide the use of internet based on age among adults is 18% for ages between 18-24, 32% for 25-34, 19% for 35-44, 14% for 45-54, 10% for 55-64 and 7% for 65 and more in 2021.[6] Based on global regions by far the largest is Asia with around 54% of internet users being located there, then Europe with 14%, Africa with 11%, South America 10%, North America 7%, Middle East 4% and Oceania with 0.6%.[7] This would make the median internet user located in Asia and be in his mid-30s. While the internet is vast in the number of individual websites, only some of them managed to gain prominence and relevance among the internet users. The global top five of most visited websites in 2020 were Google, YouTube, Facebook, Twitter and Wikipedia.[8] Although in some ways more important is the fact that different websites attract different types of users. It is clear that on average a user

[5] GUCCIONE, D.: *What is the dark web? How to access it and what you'll find*. [online]. [2021-08-19]. Available at: <https://www.csoonline.com/article/3249765/what-is-the-dark-web-how-to-access-it-and-what-youll-find.html>.

[6] *World Internet Users Statistics 2021*. [online]. [2021-08-19]. Available at: <https://www.internetworldstats.com/stats.htm>.

[7] *Internet users by age worldwide*. [online]. [2021-08-19]. <https://www.statista.com/statistics/272365/age-distribution-of-internet-users-worldwide/>.

[8] NEUFELD, D.: *The 50 Most Visited Websites in the World*. [online]. [2021-08-19]. Available at: <https://www.visualcapitalist.com/the-50-most-visited-websites-in-the-world/>.

reading a news article on the New York Times website is different from one found on Instagram. This makes it possible to better target users not only based on real-time data provided by internet tracking services, but also based on the website in question as well.

Picture 1: Most Visited Websites in the World
Source: NEUFELD, D.: *The 50 Most Visited Websites in the World*. [online]. [2020-08-19]. Available at: <https://www.visualcapitalist.com/the-50-most-visited-websites-in-the-world/>.

During the Covid-19 pandemic, the global market for online marketing was estimated at 350 billion USD in 2020 with an expected average growth of 14% for the next 5 years, as it is expected to reach 786 billion USD in 2026.[9] Another of the specifics of online marketing is therefore its scalability. Depending on the type of marketing strategy used a single advertisement may be viewed by tens of thousands of users. The nature of the internet and the possibility of tracking any information on user behaviour makes it also possible to carefully measure and track results of marketing campaigns. Certain websites also may offer to show

[9] *Digital Advertising and Marketing - Market Study by Global Industry Analysts*. [online]. [2021-08-21]. Available at: <https://www.strategyr.com/market-report-digital-advertising-and-marketing-forecasts-global-industry-analysts-inc.asp>.

different advertisements to different groups of users, which allows for so called A/B testing. A/B testing is one of the simplest yet one of the most effective ways to optimize marketing strategies. While it may be hard to gauge what works best for increasing interest of users, an A/B test makes it very intuitive. The basic idea is to show two different advertisements, designs, products, messages, etc. measure their effectiveness and make real-time, near instant, changes in the marketing strategy. Advertisement online is also on average cheaper than offline. While advertisements using billboards, television or radio as a medium may cost thousands of euros, marketing online may cost only in the hundreds or may in some cases be mostly free.[10] Although there are also some negative aspects of online marketing. Raised awareness of the dangers stemming from cybercrime and of various marketing techniques makes it increasingly difficult to establish trust. Online marketing is also dependent on the marketers' technical abilities. Additionally users increasingly demand control over content they see, which results in ignoring advertisements and the use of Ad Blockers that block the display of any marketing content to users. Concerning tracking and use of information about the behaviour of users has increasingly become restricted by legislation, such as the General Data Protection Regulation or GDPR in the European Union.

1.2 Search Engine Optimalization (SEO)

A search engine in computing is defined as "a program that searches for and identifies items in a database that correspond to keywords or characters specified by the user, used especially for finding particular sites on the World Wide Web." [11] While this is a wide definition, for the purposes of this paper we are mostly going to consider the most used search engines, such as Google, Yahoo, Bing and especially YouTube and Vimeo. Search engine optimization is a process of making appropriate changes to an online element, such as a website, video, article, etc., to enable it to be in the top results of a search engine for a given searched topic. This is done because research and experience show that most users consider only the top five results in their search results, the rest is generally not evaluated. This is relevant for marketing purposes, because if an advertisement, company website, product or service does not appear in the top results in its category, then this may be considered a failure since this will result in little attention from potential customers. [12]

The process of SEO may be divided into several steps and aspects that need to be considered, which for Google are:

- Submitting a sitemap which is a website file that helps search engines to gather information on what is new or changed on a given website.
- Choosing which pages should not be accessed by search engines as they may contain sensitive or content that is not useful to users.
- Make sure that all aspects of the online element are able to be read and indexed by the search engine software.
- Create unique and accurate page titles which makes it possible to be shown in search results for the appropriate topic. As well as creating URLs that use words instead of unique characters as they are also displayed and used by search engines.
- Use description tags for google to use when displaying results.

[10] KUSTOV, D.: *The Pros and Cons of Offline and Online Marketing*. [online]. [2021-08-21]. Available at: <https://fleximize.com/articles/015879/offline-and-online-marketing>.

[11] *Definition of Search Engine.* [online]. [2021-08-21]. Available at: <https://www.lexico.com/definition/search_engine>.

[12] YALÇIN, N., KÖSE, U.: *What is search engine optimization: SEO?* In *Procedia - Social and Behavioral Sciences*, 2010, Vol. 9, p. 487-493. Available at: <https://doi.org/10.1016/j.sbspro.2010.12.185>.

- Use structure data which is code that allows showing additional information, such as ratings or prices.
- Create logical site hierarchies and make navigation understandable. This makes it both for the search engine easier to appropriately index the website and to improve the experience of users visiting the site.
- Understand the needs and interests of users. Interesting, understandable and useful content naturally increases the popularity of the online element, which in turn makes it move up in the search results.
- Images and videos should contain a short description of them in their URLs. Often users search not only text results, but also images and videos. Properly naming them makes them also a key asset in gaining more interest.
- Make the online elements mobile-friendly. As the use of smartphones increases users demand content to be also optimized for viewing on smaller touch screens.
- Promotion of the online element is crucial both online and offline. As mentioned above, an important aspect determining if the element is in the top results is its popularity. Using promotion via advertisements on other websites, social media, in business communication or in connection with other marketing activities may be key to achieve the necessary popularity.
- Analysis of behaviour is an important aspect as it is one of the best ways to get feedback on the effectiveness of the marketing efforts. This may be done using web analytics software.[13]

1.3 Video marketing

Online marketing has come a long way since static banner advertisements on webpages. Since the beginning of the internet the steady increases in internet speeds caused a gradual shift from text-based communication to video-based communication. This trend is expected to continue, which is only underlined by the growth of video-sharing platforms such as TikTok. It expected that by 2022 up to 82% of all internet traffic will be video content.[14] The trend can also be observed by the size of the video marketing market size, which was valued at 33 billion USD in 2020 with an expectation to reach the size of 45 billion USD by 2025.[15] Video marketing is defined as a process of using a video to promote a brand, product or service. It is mainly focused on creating an emotionally engaging way to connect with customers and gain their attention. Strategic video marketing considers the goals and metrics by which to both create and assess the strategy and its effectiveness. For effective audience targeting it is essential to appropriately define the place and context in which they will be viewed as different websites attract different users.[16] Video marketing offers several advantages over other marketing methods. One of the most important factors is the strong engagement it has with users. Engagement tracks the number of actions that a user makes with the content, such as writing comments, rating or following links the video provides. Users may be up to 10 times more likely to engage with video content than other types, although this varies among different types of videos. Additionally, users spend more time on a website when a video is present on it. Videos also offer an increased conversion rate. The conversion rate is the proportion of visitors to a website

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[13] *The Basics | Google Search Central*. [online]. [2021-08-21]. Available at: <https://developers.google.com/search/docs/beginner/seo-starter-guide?hl=sk>.

[14] *Cisco Annual Internet Report (2018–2023)*. [online]. [2021-08-21]. Available at: <https://www.cisco.com/c/en/us/solutions/collateral/executive-perspectives/annual-internet-report/white-paper-c11-741490.html>.

[15] NESTOR, G.: *74 Essential Video Marketing Statistics: 2020/2021 Data Analysis & Market Share*. [online]. [2021-08-21]. Available at: <https://financesonline.com/video-marketing-statistics/>.

[16] *Adobe video marketing*. [online]. [2021-09-10]. Available at: <https://business.adobe.com/glossary/video-marketing.html>.

that have completed a desired goal, such as buying a product or service. The conversion rate may be up to 5% higher with a video rather than without. Although videos come at a higher cost. Production overheads for necessary video-making hardware and software may cost thousands of euros. It is possible to both rent equipment or hire a company, but the barriers may still be quite high. For some types of content, such as news, the users may prefer text over video content.[17]

2 Methods and methodology

In line with the research goals, the authors used a quantitative method of the experiment with content analysis. We analysed data from YouTube Studio and Google Analytics about users of the largest Slovak IT online educational platform called VITA. VITA is an abbreviation for Virtual IT Academy, and it is an elearning platform of the company IT Academy s.r.o. Based on data from YouTube Studio and Google Analytics, we have compiled the following research questions:
1. How long will it take to index a video in the Google search engine?
2. How much traffic does YouTube generate as an acquisition source?
3. What revenue will we achieve directly through video uploads to YouTube and how much indirectly through Google searches with eshop conversions?
4. What are the important success metrics on YouTube?
5. What are the key factors for optimizing videos for Google search?

We want to demonstrate best practices for optimizing content for the Google web search engine and in the digital transformation of an enterprise. Effective use of digital content in the form of video content can bring far-reaching benefits to all organizations, whether large or small, in the public or private sector. It allows organizations and businesses to:
1. Increase web traffic.
2. Improving the company's product awareness and company brand.
3. Acquiring and reaching new customers.
4. Improving the conversion rate.
5. Improve the user experience.
6. Better management and maintenance of content.

For the purpose of the experiment, a Slovak company IT Academy s.r.o. (further as "IT Academy") has been selected. IT Academy is an accredited and certified educational company based in Slovakia in Bratislava. It provides internationally certified training and exams for companies such as Microsoft, Axelos, Android, Google, ISTQB, Oracle, SAP, EXIN, CISCO and Adobe. The company offers 260 online trainings. There are trainings in areas such as office packages, programming, graphics and design, SAP, databases and analytics, marketing, advertising and law, management, website creation, networks and IT administration. The basis of our research was measurement in the YouTube Studio of YouTube Channel IT Academy and Google Analytics tool of webpage VITA. We analysed the data for the period 30. 10. 2020 - 29. 10. 2021. Part of the quantitative research was the classification, i. e. sorting and segmentation of user's information. Table 2 shows the data that served as the basis for analysis of the previous (paper-based) customer satisfaction survey results.

[17] SHEWAN, D.: *Pros & Cons of Video Content Marketing*. [online]. [2021-08-21]. Available at: <https://www.wordstream.com/blog/ws/2017/09/15/video-content-marketing>.

Table 1: Research sample of YouTube channel IT Academy

Period	30.10.2020-29.10.2021
Subscribers	2781
Number of videos	354
Impressions	1 865 697
Impressions click-through rate	3,20%
Views	124 900
Unique viewers	36 900
Watch time (hours)	21 589
Average view duration	10:21
Subscribers	2784
Revenue	405,8 €
RPM	3,26 €
Playback-based CPM	7,95 €

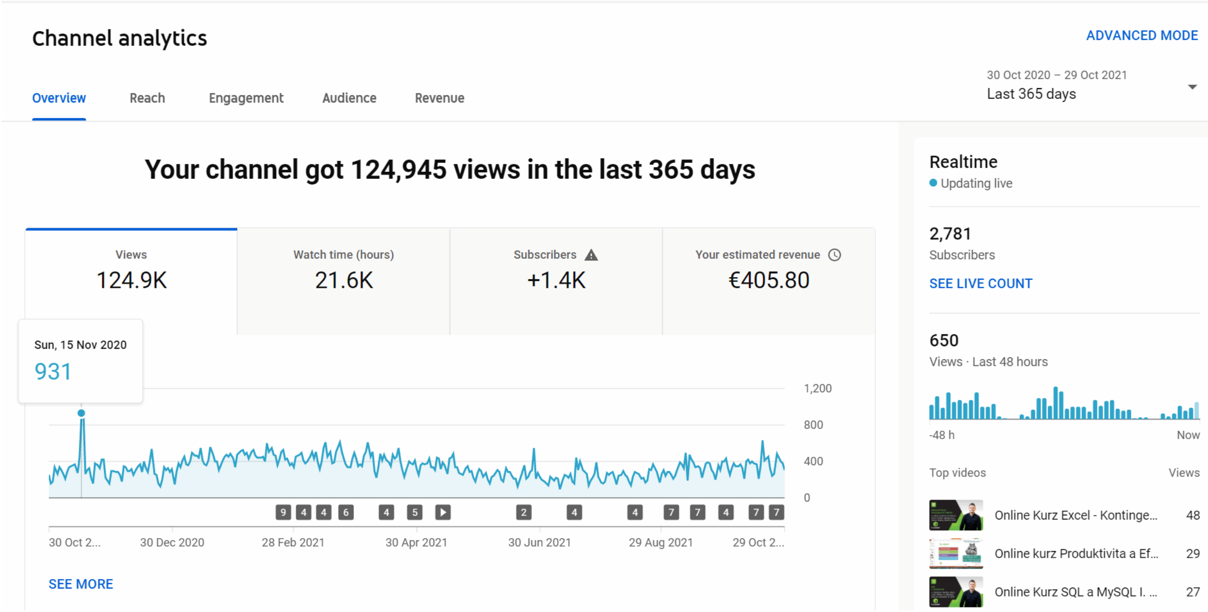
Source: Own processing.

The research sample consists of subscribers and viewers to the YouTube channel IT Academy. These are potential clients of IT Academy s.r.o. The goal was to find out which factors are key to optimizing the video content of a Google search engine. We were interested in the data traffic flows and conversion path of users from Google search engine and YouTube as we see it on Picture . Details and results of the experiment are presented in chapter 3.

Picture 2: Data flows of web visitors
Source: Own processing.

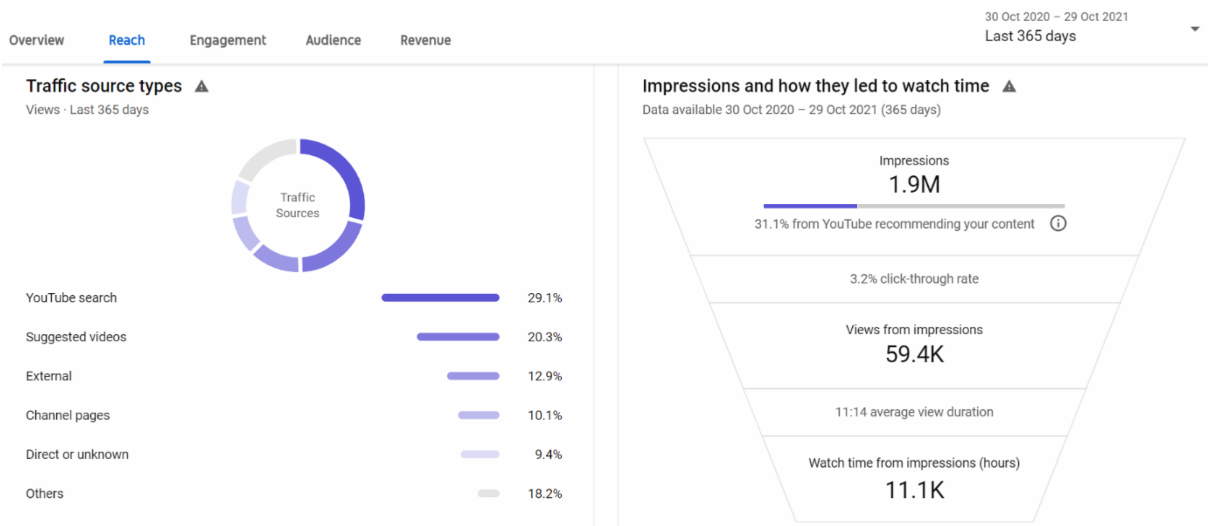
Experiment – IT Academy

Our hypothesis was that by using the YouTube channel and redirecting users to their site, organizations and companies will earn an important source of traffic and purchase conversions. We needed to quantify and verify this hypothesis through revenue and traffic data from Google Analytics. Over the course of one year, we've added 354 videos from areas such as IT, management, and marketing to YouTube channel IT Academy. At YouTube Studio, we've analysed the top search queries and video views, along with playlists. We also analysed users behavior. The most frequent users were men, up to 73.9 %. The most represented age group were people aged 25-34 with 46.2 % and then 35-44 with 25 %. YouTube channel produces Slovak video content, 70.5 % of users were users from Slovakia and 19.9 % were users from the Czech Republic. Interestingly, the content was watched the most on Sunday. Most were watched between 6:00 PM and 7:00 PM throughout the week. In a year, the channel organically received 2,781 subscribers and 124.9 thousand views see **Chyba! Nenašiel sa žiaden zdroj odkazov.**.



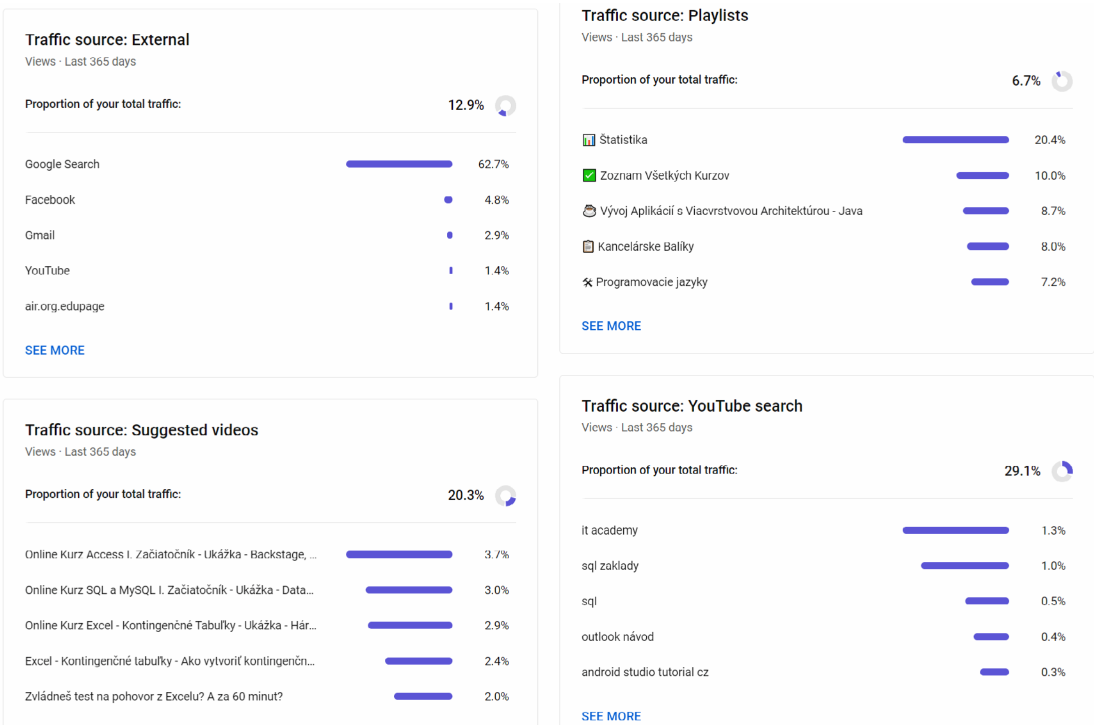
Picture 3: Analytics overview - IT Academy channel
Source: Own processing.

By analysing traffic and reach, we found that the most common users find video content through YouTube searches 29.1% and through suggested videos 20.3% see Picture 2. The total number of impressions reached 1.9 million. Watch time form impressions was more then 11 000 hours.



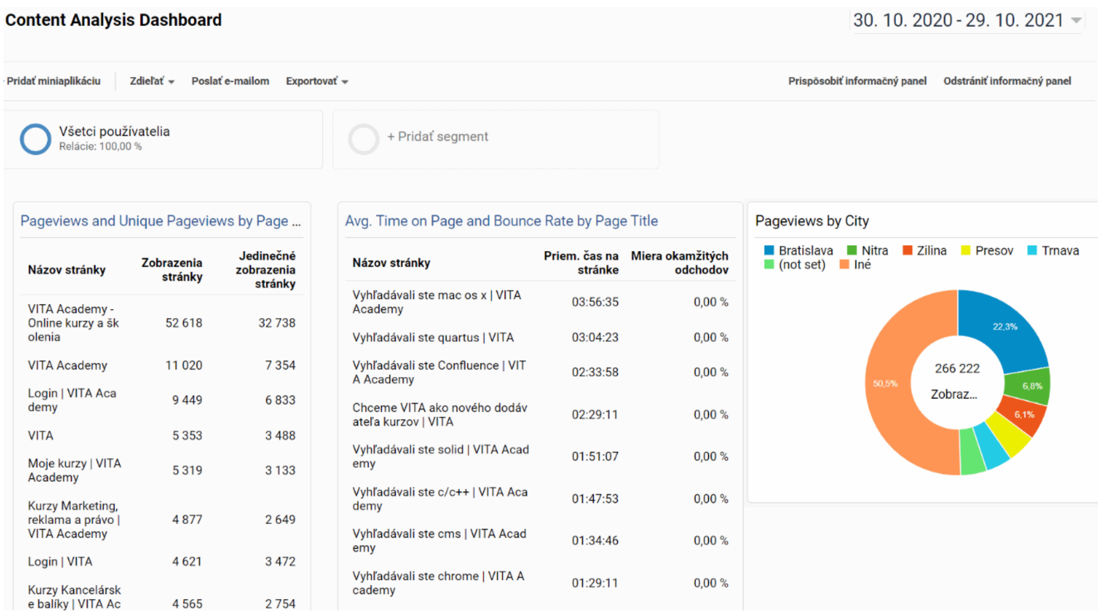
Picture 2: Analytics reach - IT Academy channel
Source: Own processing.

The largest source of external traffic was Google Search, up 62.7%. The social network Facebook had only 4.8% and Gmail 2.9% see Picture 5.



Picture 3: Analytics of traffic source - IT Academy channel
Source: Own processing.

Users most frequently searched for videos on SQL and the Access and MySQL database engines. They also often looked for videos focused on Excel and PivotTables. Users used the company name “it academy”, the word “sql” in conjunction with other words as keywords. The statistics of playlist usage are also interesting, which shows a great interest in statistics, all courses, java programming, office packages, programming languages. To confirm our hypothesis, to identify important factors in the search and analysis of user behavior, we have created a content analysis dashboard. Content analysis dashboard confirmed data from YouTube studio. Most of the visitors came from Slovakia, specifically from Bratislava. Users most often searched for programming languages, office suites and all courses.

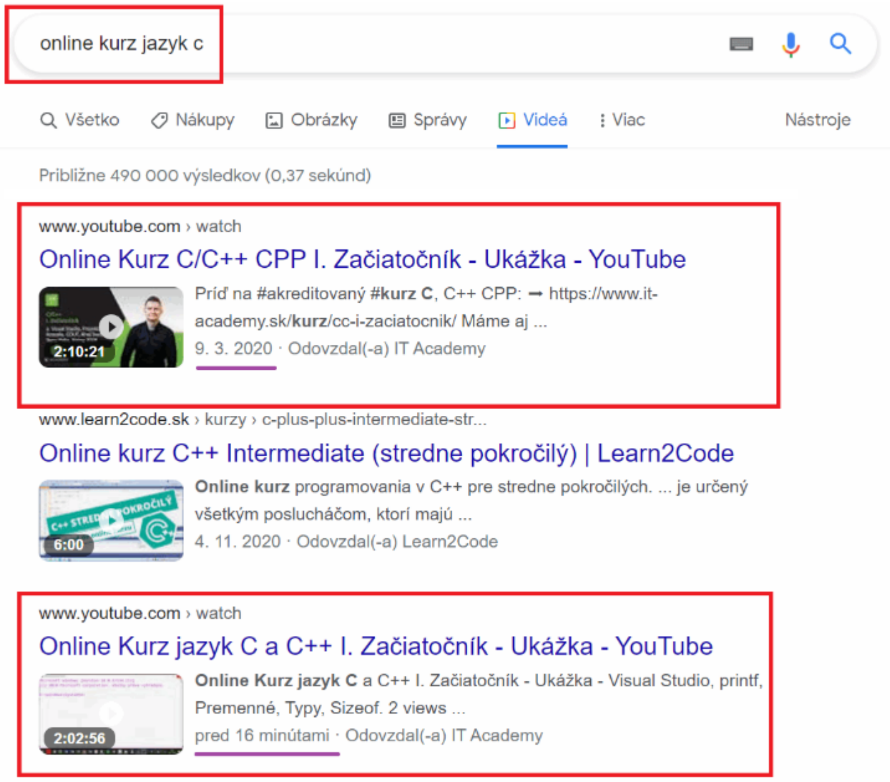


Picture 4: Content analysis dashboard in Google Analytics
Source: Own processing.

Discussion and Conclusion

Search engine optimization (SEO) is commonly used by various companies and organizations to increase web traffic and improve search engine rankings. Video is becoming the dominant type of content, so optimizing video content is key to improving search results. Through the digital transformation of companies and content, we can achieve better results and reach new customers. At the same time, we can build a brand more effectively and improve the user experience. Our hypothesis of the importance of the YouTube channel for gaining new customers and increasing traffic has been confirmed. We have collected the following interesting findings:

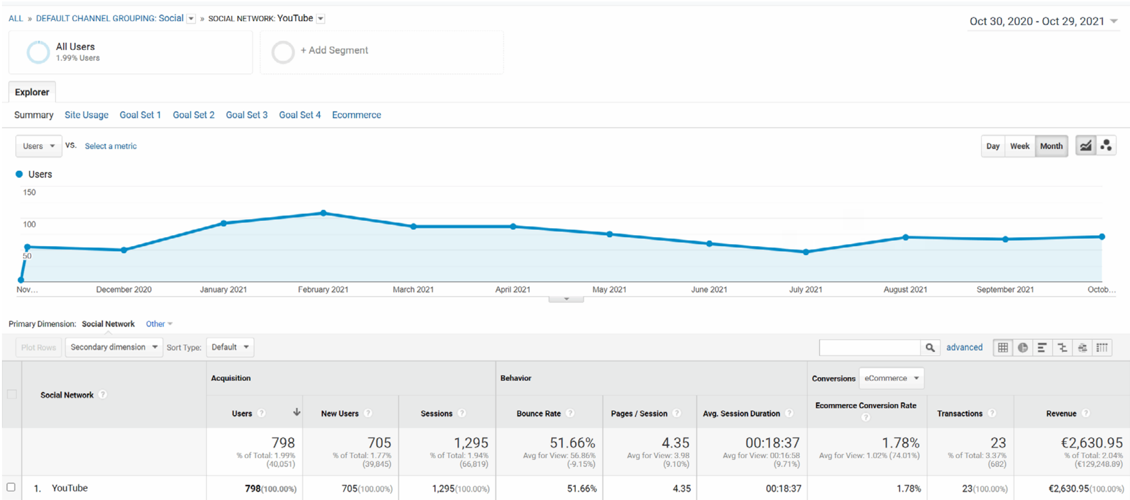
1. YouTube has almost instant indexing within a few hours max. days if uses the correct video format and doesn't violate the YouTube Community Guide, see Picture. **5** (RQ1).



Picture. 5: Speed of indexing the video uploaded to YouTube
Source: Own processing

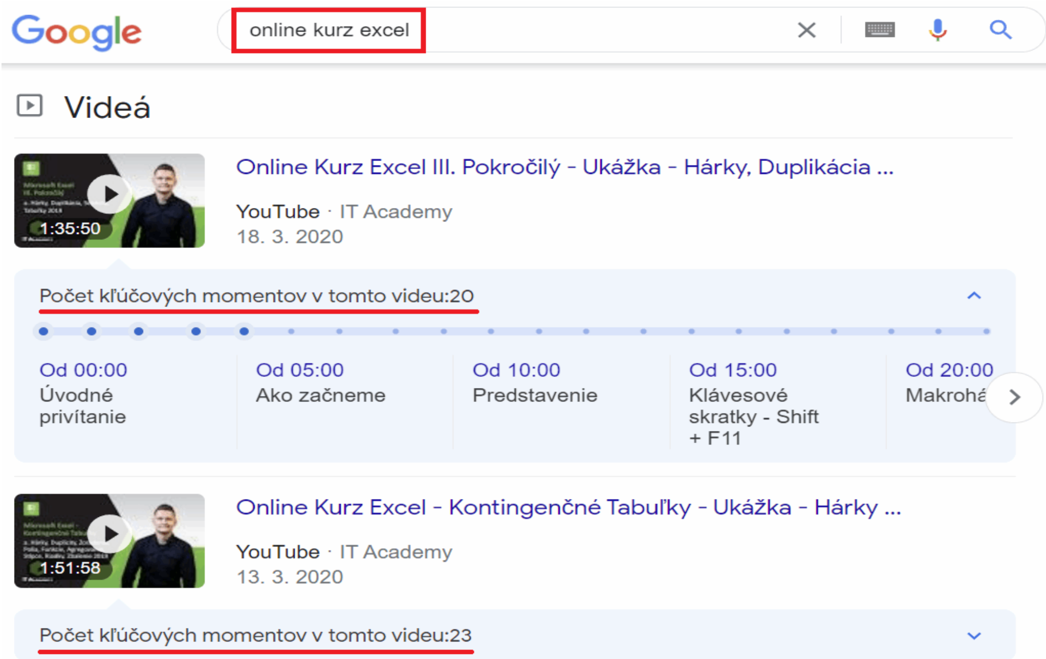
2. Using an experiment to create a YouTube channel, we earned a total of 405.8 € from Google AdSense in a purely organic way for 1 year of watching videos with ads. This means that we have not used any form of promotion or promotion of the YouTube channel through social networks or other channels. At the same time, with the help of the channel, we achieved a traffic increase of 1.94 % with 705 users, see Picture 6 (RQ2). Although we may find the value of the 1.94 % increase in traffic as low, it made it possible to obtain 23 transactions amounting to 2 630.95 €. The total recorded revenue from the YouTube channel for 1 year without promotion is 3 036.75 €. This is revenue recorded directly in Google Analytics, but IT Academy has seen an overall increase in email and phone lead by

34 %, or as much as one third. In this way, we can state good performance in 1 year and at the same time high potential of the YouTube channel in the future (RQ3).



Picture 6: Google Analytics acquisition of YouTube
Source: Own processing

3. YouTube's key metrics are subscribers, views, watch time, average view duration, as well as revenue and RPM. In an experiment, we wanted to demonstrate that even a small YouTube channel has the potential to increase traffic to your site (RQ4).
4. The most important search factor for a video is its title (it seems common sense, but it's based on data from YouTube Studio and Google Analytics). Other important factors are thumbnail of video and chapters see Picture 7:. We recommend to create chapters because of the structure and content of the video and including its description and keywords on YouTube. Videos with chapters had higher CTRs than videos without chapters (RQ5).



Picture 7: Structuring a video uploaded to YouTube through chapters
Source: Own processing.

For the best results and placement in the organic results, we recommend uploading 2-3 videos straight away and use them for optimization if you want to completely outperform the competition. We believe that content optimization for search engines will be increasingly focused on optimizing video content. That is why our next steps will be to repeat the experiment for the same period of 1 year, but with the promotion of the YouTube channel through other sources such as social networks, newsletters etc.

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NEW PERSPECTIVES OF PERCEPTION OF MASS CULTURE STRUCTURES IN THE CONTEXT OF OTHER CULTURAL SYSTEMS

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Abstract
In the environment of contemporary culture, it is humanly natural to respect and adopt "foreign" elements of a more dominant culture and then use them positively in the development of own cultural identity. However, reckless or forced imposition of the dominant culture elements might lead to an increased risk of a formation of a universal, commercialized world and consequent disappearance of individual cultural identities of countries, nations, and individuals. Mass media are the primary cause of the aforementioned transformations. They are the ones that present national, local cultures and imbed their own values and convictions into them. Therefore, the main objective of the study is to evaluate the current status of mass media and the associated dominant (mass) culture within the system of other culture forms. Using the methods of logical analysis of text, we clarify the fundamental terminological axis. Terms such as "mass culture", "media culture", "popular culture", "high culture", "subculture", and others become the subject of a closer theoretical reflection. Consequently, we use the acquired information in an effort to identify the impact of mass culture on selected cultural systems. Finally, we are interested in the rate of impact that the merging of cultural elements has on the perception of cultural identity. We start from the premise that although cultural identity is considered a basis of existence of individual cultures, its position within the maze of cultural systems is not that significant. The aforementioned marks the importance of continuous analysis of the issue in question with regard to the ever-changing socio-cultural environment, which poses new challenges for media studies regarding research of selected cultural phenomena. We analyse the discussed topic on the basis of the mass communication theory, media studies, cultural studies, psychology, and media sociology.

Key words:
Cultural identity. Cultural systems. High (elite) culture. Mainstream. Mass (dominant) culture. Mass media. Media culture. National (local) culture. Popular culture. Postmodern. Subculture.

Introduction

Nations, countries, and individuals try to answer the most fundamental question that people face: "Who are we?". To define their identity, they refer to their ancestors, religion, language, history, values, customs, and institutions. They identify with culturally determined groups – tribe, ethnical group, religious community, nation, and, on the most general level, with civilization; thus, identifying with the culture itself. This is the way people build their cultural identity. The positive current of opinion perceives cultural identity as a prerequisite for existence of individual cultures, regions, and nations, integrating individual cultural elements into a single unit. The negative view, however, presents cultural identity associated with national culture as a dead, useless term; mainly because dominant ideologies and concepts become equivalent to ideals of a cosmopolitan, universal culture.[1] The aforementioned clearly shows a certain paradox – the actual word "identity" evokes a notion of unanimity, bringing individual elements together and creating a whole, although the negativistic approach proclaims uselessness of the above-mentioned terms. After the Cold War, culture has become both the dividing and unifying power, while nations that cooperate within related cultures are much more successful than those trying to reach beyond the cultural boundaries. Due to a possible triumph, the choice of future cultural direction is quite clear for many nations. Although joint success of related cultures on the market is more or less certain, it is not always reached as a result of equal "partnership". H. Pravdová also confirms the stated words

[1] For more information about the formation of cultural identity, see: PRAVDOVÁ, H.: *Determinanty kreovania mediálnej kultúry.* Trnava : FMK UCM v Trnave, 2009, p. 162-163; HUNTINGTON, P. S.: *Střet civilizací: Boj kultur a promněna světového řádu.* Praha : Rybka Publishers, 2001, p. 14.

and stresses that one culture elevates itself above the other one, because it considers itself a more rational, smart, moral, orderly society that has a right do decide the level or even existence of other cultures.[2] In this context, S. P. Huntington adds that it is the West that is the most powerful civilization and will likely remain such in the near future[3] – it spreads, makes, and exports its products and values through its own, universal, "mass" language or with the help of the aforementioned "feeding" on national cultures.[4] The current state is thus far from an equal cooperation of related cultures. Mass culture is, therefore, largely formed by the economically most powerful countries. However, the question of how this type of culture differs from its other correlatives still remains. Is there a chance for a peaceful coexistence or is mutual adjustment necessary? Why is mass culture put in a position of a cultural identity reformer? What are the challenges that (mass) culture is facing in the current socio-cultural situation? If we aim to answer the aforementioned questions, it is necessary to respect new approaches to the perception of cultural (sub)systems and the related cultural identity.

1 Culture and Its Three Fundamental Structural Components – Mass, High, and Popular Culture

The mass (dominant, universal) culture, which brings a variety of new phenomena, is a part of a greater whole called "media culture". It becomes the unifying element of the mass culture and the popular culture. However, media culture cannot be qualitatively or quantitively determined, while the mass and popular culture can, as well as the other types of cultures, which daily interact with the mass culture. We are speaking about the high, or elite, culture, postmodern culture, and subculture as counterparts of the dominant culture and mainstream as its integral component.

According to J. Musil, **mass culture** has enabled access to culture to the people and that is why it is undoubtedly a positive consequence of media development.[5] Theory emphasises the positive aspect of mass culture, which uncovers for us all approaches, knowledge, and values of other national cultures through media – it makes them available to the wide society. Nevertheless, T. Zasepa holds a slightly critical view of the issue. The author outlines the words of M. McLuhan and states that, on the one hand, mass culture brings opportunities for formulating a rich personality, but, on the other hand, contains a threat of "homogenization" of its recipients who are dependent on the opinions forced from the outside, which leads to a formation of common cultural identity based on "forced" culture.[6] By this words, T. Zasepa's theory confirms definitions and theoretical concepts which neither strictly criticise, nor glorify this culture of masses, as it all depends on rational attitude of an individual towards national, local cultures during the process of absorbing and perceiving universal values and convictions. U. Eco further states that it is necessary to view and study mass culture pamphlets as documents of impartial research and beware mistakes they carry in their foundations.[7] The aforementioned shows the variety of opinions of a wide range of authors,

[2] PRAVDOVÁ, H.: *Determinanty kreovania mediálnej kultúry.* Trnava : FMK UCM v Trnave, 2009, p. 167.
[3] HUNTINGTON, P. S.: *Střet civilizací: Boj kultur a promněna světového řádu.* Praha : Rybka Publishers, 2001, p. 15-16.
[4] BOLTON, K., OLSSON, J.: *Media, Popular Culture, And American Century*. Lund : Mediehistoriskt Arkiv 20, 2010, p. 30.
[5] MUSIL, J.: *Sociální a mediální komunikace*. Praha : UJAK, 2010, p. 107.
[6] ZASEPA, T.: *Médiá v čase globalizácie.* Bratislava : LÚČ, 2002, p. 225.
[7] ECO, U.: *Skeptikové a těšitelé.* Praha : Argo, 2006, p. 33.

while the indictment of mass culture currently stands in contrast to its defence; just as it used to be in the past.

Within the concept of this topic, **high, or elite culture**, becomes a centre of attention, as it prefers artistic values, while its correlative – mass culture – highlights those inartistic, or commercial, elements more attractive to the recipients. These words were confirmed by the analysis of *Film Forum* conducted in 2001. Each film was assigned a certain “artisticness” according to the prizes it had won at prestigious film festivals. At the same time, it proved that the more “artistic”, avantgarde, the film was, the less spectators it had. It cannot be stated that current successful mainstream movies lack artistic values, however, they definitely do not prevail. Thus, there is an apparent difference between the mass and the elite culture.[8] U. Eco comments on the aforementioned as follows: Currently, a very strange situation occurs, where mass culture consumes bourgeois cultural models and considers them its autonomous expression, while high culture still remains a bourgeoise culture. In relation to mass culture, it is, therefore, a “subculture” that does not belong to it and it does not realize that it is the “higher” culture that is the original source of mass culture.[9] Similar situation can also be seen in the sphere of film industry – here, mass culture is often being linked to products which it regards as its autonomous production, not realizing that the theme, original source of these artworks, their context, situation, and content come from the sphere of high culture, and in mass media, they then undergo a process of equalization with other “entertainment” products. In this commercial world, gossip about movie stars reaches the same level as footage from museums, church masses, orchestral concerts, etc.

It is also important to note that the existence of this imaginary gap between the elite and mass culture is continually, year after year, narrowing.[10] Through this expression, J. Monaco manifests a statement that high culture nowadays is a content-free term, as it is impossible to strictly define the boundaries between other cultural structures and the content, the concept of high culture as such. U. Eco similarly leans towards insubstantiality of the term “high culture” and emphasises that mass culture has never taken the place of high culture; it has only expanded to masses, who had no access to cultural goods before.[11] The disappearing gap between these two correlatives is thus confirmed also by the production of independent, non-commercial, and postmodern cinematographic works that stand against mass production based and produced on predetermined mainstream features and values.

The terms mass and **popular culture** are also not identical connotations. J. Malíček states that mass culture, contrary to popular culture, is genuinely a “culture of the masses”, communicating mainly quantity, is a matter of statistics, “an object of passive reception”.[12] Therefore, mass culture is spread on a mass scale and promotes consumer, often also commercial, values with a primary objective – to arouse and maintain attention of mass audience. Mass audience seeks entertainment, relaxation, and rest within the contents of this culture. That is the reason why mass culture aims mostly at the emotional side of its recipients. In this context, it is important to mention that it is the culture of mainstream that is the mass-spread culture – it reaches its recipients through electronic and printed media or

[8] MUSIL, J.: *Sociální a mediální komunikace*. Praha : UJAK, 2010, p. 109.
[9] ECO, U.: *Skeptikové a těšitelé.* Praha : Argo, 2006, p. 24.
[10] MONACO, J.: *Jak číst film: Svět filmu, médií a multimédií. Umnění, technologie, jazyk, dějiny, teorie.* Praha : Albatros, 2004, p. 390.
[11] ECO, U.: *Skeptikové a těšitelé.* Praha : Argo, 2006, p. 39.
[12] MALÍČEK, J.: *Vademecum popkultúry.* Nitra : UKF v Nitre, 2008, p. 13-14.

multimedia.[13] As an example, we can mention the area of mainstream film, which uses the most basic social situations related to banal, i.e., most general, human urges and emotions (most often sex and violence). From this point of view, it is mainly the American cinematography that is classically regarded as commercial, as it mass-produces profit in an effort to touch as many people as possible; it appeals to emotions through various media. Consequently, it causes equalization of tastes and likings and, thus, becomes a fundamental precondition for mass consumption.[14] According to various theoreticians, mass culture is characterized mostly by negative connotations.

Popular culture finds itself in a different position – as it is an ambivalent phenomenon, it becomes a term without content that defies clear comprehension and evaluation of its social function. This factor reinforces its semantic instability. Therefore, the designation "popular" can have a negative or positive, ironic or serious meaning.[15] A. Plencner holds a similar view. He outlines words of J. Fiske and states that if products of popular culture contain elements that allow their users to form their own meanings and distinctive understanding, it evokes feelings of pleasure.[16] Through this act, products of popular culture (mainly because they fulfil human pleasures) become elements of mass culture. They can, thus, be regarded as closely linked, often indistinguishable terms, which R. Schusterman confirms with words: Anything that turns to general experience is disregarded to the area "beyond art" and pejoratively marked as kitsch, entertainment, or popular culture industry.[17]

According to J. Hartley, popular culture as it is generally understood, contrary to its pejorative structure called "mass culture", has a positive connotation.[18] It is also a paradox that in English language, mass culture is also expressed by the term "popular culture", i.e., culture absorbed mainly by masses.[19] In conclusion to this topic, R. Schusterman adds that there is a duality in society between the elitist institution of high art (associated with social-political elite) and art (associated with lives of common people, with life and experience) that is defined as mass or popular art (related connotations).[20] It is, thus, visible that within this problematic sphere, we discern inconsistencies in definitions by different authors. However, one thing is certain – popular culture, according to H. Pravdová, builds on individual approaches, assumes an ability of recipients from diverse social groups and subcultures to formulate their own meanings reflecting their needs, and this distinguishes it from dominant mainstream meanings and values.[21] Furthermore, popular culture is a wider term than mass culture and includes a multitude of human activities related to leisure time, which do not have

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[13] RADOŠINSKÁ, J., VIŠŇOVSKÝ, J.: *Aktuálne trendy v mediálnej kultúre.* Trnava : FMK UCM v Trnave, 2013, p. 12.
[14] See: MUSIL, J.: *Sociální a mediální komunikace*. Praha : UJAK, 2010, p. 107; BOLTON, K., OLSSON, J.: *Media, Popular Culture, And American Century*. Lund : Mediehistoriskt Arkiv 20, 2010, p. 219; ŠTROBLOVÁ, S.: *Film a televize jako audiovizuální zprostředkování světa. Filmová a televizní dramaturgie a programová skladba.* Praha : UJAK, 2009, p. 47.
[15] VOLEK, J.: Kultura populární. In REIFOVÁ, I. et al. (eds.): *Slovník mediální komunikace.* Praha : Portál, 2004, p. 116.
[16] PLENCNER, A.: Sociálne významy v mainstreamovom filme. In MAGÁL, S., MISTRÍK, M., SOLÍK, M. (eds.): *Médiá, spoločnosť, mediálna fikcia*. Trnava : FMK UCM v Trnave, 2008, p. 86.
[17] SCHUSTERMANN, R.: *Estetika pragmatizmu.* Bratislava : Kalligram, 2003, p. 96.
[18] HARTLEY, J.: *Communication Cultural and Media Studies: The Key Concepts.* London, New York : Routledge, 2002, p. 178.
[19] ŠTROBLOVÁ, S.: *Film a televize jako audiovizuální zprostředkování světa. Filmová a televizní dramaturgie a programová skladba.* Praha : UJAK, 2009, p. 160.
[20] SCHUSTERMANN, R.: *Estetika pragmatizmu.* Bratislava : Kalligram, 2003, p. 72-112.
[21] PRAVDOVÁ, H.: Fenomén zábavy a úloha stereotypov v produkcii a recepcii mediálnej kultúry. In *Communication Today*, 2011, Vol. 2, No. 1, p. 22.

to be directly connected neither to the production and reception of media communication, nor to the main stream of culture.[22] Audience's ability to form their own meanings and reactions to the transmitted content, and also the option to choose ways of spending free time (not) bound by the dominant cultural trend thus becomes the main dividing and distinctive mark between mass and popular culture.

2 Perception of Mass Culture Structures within the Context of Other Cultural Systems

Within the context of complex culture emerges also the area of **postmodernism** which is understood as a cultural and historical phenomenon characteristic for its constant development and, therefore, hard to be defined more closely. For instance, postmodernist film is the most recent period in cinematography, lasting more than twenty years (since 1980s up till now). M. K. Booker states that postmodern culture manifests itself as a "crisis of faith" and postmodernism reacts to the developed Western tradition characterised by "playful" and "cheerful" products.[23] As an example, we can mention director T. Burton and his movie *Charlie and the Chocolate Factory* (2005). It is questionable, whether this film wants to react to mainstream practices of some multinational film companies (e.g., W. Disney production with his cheerful cartoons designed on "happiness") by using unconventional elements and "higher values" or, by applying them, "only" attempts to return or come close to the high, elite art. In U. Eco's opinion, there can be a product of high culture that requires a certain cultural preparation because of its qualities, but there can also be elements of low culture aimed mainly at general audience which exceed the area of consumerism due to their originality, and these can be considered absolutely valid artworks.[24] These words only confirm the tendency of constantly diminishing boundaries between the high and the low culture and also the effort to "overstep" the mass culture with a desire to become a legitimate art, which is something the postmodernism itself is attempting in some cases.

There is also a controversial hypothesis becoming more prominent, which asks whether postmodernism exists as an independent culture or emerges in society as a certain type of **subculture**. According to J. Smolík, subculture means a certain group of people presenting strange values and norms which make it diverge from mainstream culture. Even the prefix "sub" insinuates this difference.[25] Based on Smolík's definition, the already mentioned postmodern film could also be included in the area of subcultures, as it also stands against the phenomenon of mass culture and through its own preferred non-commercial elements diverges from the mainstream. In this context, it is, however, also necessary to add that formation of any subculture in current cultural situation occurs on the basis of using media, and is, therefore, not an autonomous process strictly separated from mainstream.[26] For this reason, the postmodern film itself does not strictly oppose mainstream trend; on the contrary, some creators are trying to come up with innovative and crafty ways to treat themes, genres, signs from the dominant culture, while simultaneously cooperating with independent

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[22] RADOŠINSKÁ, J., VIŠŇOVSKÝ, J.: *Aktuálne trendy v mediálnej kultúre.* Trnava : FMK UCM v Trnave, 2013, p. 16-17.
[23] BOOKER, K. M.: *Postmodern Hollywood: What´s New in Film and Why It Makes Us Feel So Strange.* London : Praeger, 2007, p. xiv.
[24] ECO, U.: *Skeptikové a těšitelé.* Praha : Argo, 2006, p. 50.
[25] SMOLÍK, J.: *Subkultury mládeže – Uvedení do problematiky.* Praha : Grada, 2010, p. 31.
[26] BARKER, Ch.: *Slovník kulturálních studií*. Praha : Portál, 2006, p. 185-186.

production (e.g., *Pulp Fiction*, 1994 and *Trainspotting*, 1996).[27] The model of Hollywood economic success is associated with partnership with independent creators that has been successful since the 1950s as a purposeful search for boundaries of cinematographic art.[28] Postmodern Hollywood movies have become a "super-profitable" sector by using such depictions of a story. That is why this American machinery succeeded again in the 1980s. Studios consolidated everything they had learnt from before, which resulted in (among other things) even stronger establishment of the mass (mainstream) culture.

3 Are the Terms "Mass Culture" and "Mainstream" Synonyms?

It is noticeable in the above-mentioned text that the terms "mass" and "mainstream" overlap.[29] To clarify their mutual relationship and evaluate their similarity, it is necessary to define the latter term more closely – to clarify it, we must return to the period of the 1900s, as the term in question is often linked to the Americanization taking place since the year of 1900. At that time, millions of new American immigrants joined the main stream of American society. It resulted in an occurrence of the process of "Americanization", in which the immigrants "transformed" into Americans and integrated themselves in the American economic, social, and moral life.[30] Nowadays, mainstream is a cultural phenomenon that constitutes a subject of interest of several Slovak and foreign theoreticians. The actual term, its functions, status, and meaning are, therefore, defined from various points of view.

J. Radošinská perceives mainstream in a certain "functionalistic light"; she refers to it as a segment of media market which draws momentum from its own commercial potential and global cultural influence, and, at the same time, deals with preferences and expectations of its recipients.[31] In G. Goméz-Pena's opinion, this contemporary phenomenon removes boundaries between the popular culture and an artist and their presentation, between peripheral cultural identities and fashion trends, and others, while it is easy to "lose oneself in this entertainment world full of virtual mirrors".[32] The most benevolent attitude towards the term in subject is held by G. Gerbner, L. Gross, M. Morgan et al., who see mainstream in a positive sense of word as a dominant (mass) trend aimed at expanding the most general system of messages, images, values, etc. It is a homogenization of divergent opinions and an attempt to bring different people closer together. It constitutes a stable, functional main stream representing a wide spectrum of shared and generally accepted opinions.[33] It follows from the aforementioned definitions that the primary function of mainstream is its effort to "engulf" all preferred values, cultural identities, and popular cultural ideologies with the objective of presenting them to the wide masses – it is based on formation of globally applicable, commercially aimed values and messages, while using sophisticated technologies

[27] IMEC: *Dejiny filmu.* [online]. [2021-09-29]. Available at: <http://www.medialnavychova.sk/dejiny-filmu/>.
[28] ROWEKAMP, B.: *Hollywood.* Praha : Computer Press, 2004, p. 159.
[29] For more information about a relation between the terms „mass culture" and „mainstream", see: CHRENKOVÁ, L.: Elektronická invázia amerických filmov. In *Media Literacy Student Magazine*, 2015, Vol. 2, No. 2, p. 4-10.
[30] BOLTON, K., OLSSON, J.: *Media, Popular Culture, And American Century*. Lund : Mediehistoriskt Arkiv, 2010, Vol. 20, p. 145.
[31] RADOŠINSKÁ, J.: Vývojové trendy americkej manistreamovej filmovej produkcie. In *Communication Today*, 2014, Vol. 5, No. 1, p. 13.
[32] GÓMEZ-PENA, G.: The New Global Culture: Somewhere between Corporate Muliculturalism and the Mainstream Bizzare (a boredr perspective). In *TDR: The Drama Review*, 2001, Vol. 45, No. 1, p. 13.
[33] GERBNER, G. et al.: Growing Up with Television: Cultivation Processes. In ZILLMANN, D., BRYANT, J. (eds.): *Media Effects: Advances in Theory and Research.* Mahwah, London : Lawrence Erlbaum, 2002, p. 51.

of production that "delight" a wide spectrum of recipients. Based on the aforementioned theoretical framework, the phenomenon of mainstream production could be included in a giant category of "mass culture", which we definitely define as a compact culture of diverse pleasures.

Conclusion

After the World War II, a situation of unification of individual cultures occurred. Such "partnership", has, however, not always been regarded as a synonym for equality in coexistence, as, coming to the fore were the globalization tendencies of the Western, mainly North American, cultural domination, which caused an emergence of the global phenomenon called "mainstream". It resulted in an expansion of mass culture that has been perceived by many authors within the context of cultural systems as a negative consequence of contemporary media production and also as a means of destruction of the cultural identity that had appeared stable until then. Nevertheless, mass culture has established itself as a part of our everyday lives. The product of mass culture – mainstream – has started to discover in itself universal elements and values used in diverse areas of media production, mainly in cinematography. Mainstream has always referred to the natural need of target audience to be entertained, which has started the process of unification with other elements of mass culture. Effort to provide mass products, which various groups of recipients would find easy to process and which would have a potential to meet their emotional, affectional, and cognitive expectations, has become the result of media producers' work. Distortion of the original understanding of cultural identity is thus more than evident in the case of synergy of cultural systems and media sectors. In the current socio-cultural situation, there is a certain interconnection between mass culture and other social structures, which include not only popular culture, perceived more broadly and more positively than the phenomenon of mass culture, but also high culture with a clear opposing position towards its dominant counterpart, which also postmodernism and subcultures as important subsystems of the society try to define against. However, all these types of culture have one thing in common – an existing relationship with mass culture and the associated mainstream. Their ability to coexist without conflict and adapt to each other becomes a prerequisite for efficient functioning of the media industry. Their peaceful coexistence certainly poses a challenge for an efficient functioning of the media industry. New approaches to the perception and study of cultural (sub)systems and the related cultural identity are, therefore, more than desirable in the present hectic times.

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ECO, U.: *Skeptikové a těšitelé.* Praha : Argo, 2006.
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GÓMEZ-PENA, G.: The New Global Culture: Somewhere between Corporate Muliculturalism and the Mainstream Bizzare (a boredr perspective). In *TDR: The Drama Review*, 2001, Vol. 45, No. 1, p. 7-30. ISSN 1531-4715.
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SOCIAL CAMPAIGNS WITH NEGATIVE EMOTIONAL DRIVE AS POSSIBLE SOLUTION FOR EXCESSIVE FOOD WASTE PROBLEM

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Abstract
Food waste is considered one of the worldwide and society-wide environmental issues. Preventing food waste is one of the current priorities of the European Commission. Households in Slovakia produce about 400 kg of waste per capita every year and have a share of up to 53% in the generation of food waste in the country (per capita). The main reason for such behaviour is that consumers often do not see the problem and its impact on the environment. Other factors are consumerism and a deep-rooted indolent lifestyle. In the presented paper an emotional social marketing campaign (unrelated to food waste but with the related message) was analysed. A sample of 180 young adults watched the video, they evaluated it on the scales of semantic differential and answered several questions related to food waste and to their personal and psychological characteristics. The Mann Whitney U test was used for analysing the differences between chosen groups of respondents. It was found out that the negative emotional drive of the message in the campaign helped them realise the problem of food wasting. We consider a strong emotional content a possible way to present consumers with the current problems and also a possible help with their solution.

Key words:
Consumer Behaviour, Environment, Food Waste, Social Marketing, Sustainability, Sustainable Development

Introduction

The concepts of sustainability and sustainable development are inextricably linked to the environment and environmental issues. Today, sustainability is a concept we encounter daily in various areas of our lives. We read about sustainability issues in newspapers and books, listen to the reports and speeches of domestic and foreign politicians and various associations and organizations, monitor the behaviour of smaller and larger companies, which often confuse marketing campaigns with CSR, watch programmes, movies and series inspired by environmental problems, we are seeing the gradual emergence of "green" shops and "green" consumers, and gradual changes in our shopping behaviour. Sustainability issues and environmental issues are now an integral part of our daily lives. We have known and listened to environmental problems for a long time, we are not only confronted with the concept of sustainability, but also with other often repeated concepts - global warming, climate change, melting glaciers, water, soil, and air pollution, excessive waste generation, the greenhouse effect, environmental damage, etc. Whether we incline to the theory that the humanity is directly contributing to climate changes, or that its impact is only indirect, we cannot deny that through our activities and day-to-day operations, we damage or contribute to the damage of the environment. At the end of November 2019, the European Parliament declared a state of climate emergency in the European Union. It is undeniable that we are facing the diverse, interconnected environmental challenges that have and will have consequences for the lives (not only) of people around the world[1].

[1] *Sprievodca neformálnou environmentálnou výchovou a vzdelávaním pre udržateľný rozvoj na Slovensku. Inšpirácie pre učiteľov a pracovníkov s mládežou.* [online]. [2021-09-05]. Available at: <https://www.minzp.sk/files/sprievodca-neformalnou-environmentalnou-vychovou-slovensku.pdf>.

1 Sustainability Issues, Food Waste and UN 2030 Agenda

Efforts to protect the environment and raise awareness of sustainability issues have undergone a turbulent development. In 1983 the United Nations (UN) established the World Commission on Environment and Development, which focused on environmental issues. This commission, also known as the Brundtland Commission, issued a report in 1987 entitled Our Common Future[2]. It addresses the issue of economic development, which can be sustainable without destroying non-renewable natural resources and the environment. 34 years have passed since the Brundtland report was issued, which means that the future that the report describes is happening now. Many activists and researchers are legitimately wondering why we are still talking about sustainability and why we are doing so little. The answers are not easy to find, the current situation is probably closely related to the lifestyle of people in developed countries, as well as the way the current generations are raised and educated. Although, there are some efforts to reverse the unfavourable development. Since the 1980s, the UN has been working to raise awareness of sustainability issues and to design, implement and monitor activities to mitigate the impact of human economic activities on the environment. In September 2000, the largest meeting of world leaders in history took place in New York, during which the so-called UN Millennium Declaration was adopted. In it, countries have committed themselves to a new global partnership to help alleviate poverty, which has also set a number of goals with a deadline of 2015. These goals are referred to as the Millennium Development Goals (MDGs)[3,4]. In 2015, the 2030 Agenda for Sustainable Development was approved at the unscheduled UN summit in New York. It sets the general framework for the world's countries to eradicate poverty and achieve sustainable development by 2030. It builds on and follows the Millennium Development Goals of 2000. The UN 2030 Agenda for Sustainable Development is by far the most comprehensive set of global goals for achieving sustainable development[5]. The transformative power of the 2030 Agenda is represented by 17 Sustainable Development Goals (SDGs) developed into 169 related partial goals, which are intended to guide the structural political, economic and social transformation of individual countries. The document is not legally binding. It expresses the intention of countries to lead their development towards sustainability and to adjust their national policies, strategies, and planning to contribute to the achievement of global goals[6]. 9 years remain to meet the 17 SDGs. The Social Progress Index report[7] states that if the current trend does not change, the goals will not be met until 2082. The COVID-19 pandemic postpones the achievement of the goals by another decade, to 2092, a delay of more than 60 years. Many experts are concerned if we are able to meet the goals of the 2030 Agenda, they suggest, in particular, radical changes in primary, secondary, and tertiary education. According to them, our inability to

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[6] *Voluntary National Review of the Slovak Republic on the Implementation of the 2030 Agenda for Sustainable Development.* [online]. [2021-09-05]. Available at: <https://sustainabledevelopment.un.org/content/documents/20131Agenda2030_VNR_Slovakia.pdf>.

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deal with deteriorating environmental problems results from the fact that generations have been led to unsustainability, in education as well. Examples include the overuse of plastic bags (until recently available for free in supermarkets and shops) and plastic packaging, the overuse of private vehicles, the consumerist lifestyle, the overconsumption of fast food, etc[8].
Food loss and food waste (FLW) are long-standing problems that occur throughout the whole food supply chain. Food loss is the decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the chain, excluding retailers, food service providers and consumers. Food waste refers to the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers and consumers[9]. There has been a growing body of literature on FLW quantification in the past years; however, significant challenges remain, such as data inconsistency and a narrow temporal, geographical, and food supply chain coverage[10]. FLW is a global and societal problem. Preventing food waste is one of the current priorities of the European Commission and its activities. Consumers in developed countries prefer a consumerist way of life, they waste limited resources, which also damages the environment. According to FAO[11,12], excessive food waste leads to higher greenhouse gas emissions and more significant changes in biodiversity. The challenge for the EU Member States is to reduce, by 2030, per capita, global food waste at retail and consumer levels by 50%, and to reduce food losses throughout the production and supply process[13]. Reducing food waste and food losses can reduce production costs, improve food security and contribute to sustainability[14]. The FAO report from 2011[15] states that up to one third of the world's food produced for final consumption ends up as waste. This represents 1.3 billion tons of food per year, despite the fact that one in nine people in the world (approximately 870 million people) suffers from malnutrition or hunger. Of the total amount of food intended for humans, approximately 45% of fruit and vegetables, 35% of fish and seafood, 30% of cereals, 20% of dairy products, and 20% of meat are discarded[16]. FLW vary along the food chain in different countries[17]. Consumers are the largest producers of food waste[18,19]. This finding is often surprising for them, because they

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believe that the largest producers of food waste are big supermarkets and restaurants[20]. Despite extensive research, a comprehensive model that would explain why consumers waste food has not been developed yet. Further research is therefore urgently needed. Although, we know some factors that influence consumer behaviour in this regard. Insufficient or inaccurate household management, insufficient or missing food purchase planning, and consequent excessive emotional shopping can lead to excessive waste. Other important factors include attitudes, values, education, and learned habits related to food consumption[21,22,23]. Food shopping is significantly influenced by marketing campaigns that can change consumer behaviour towards increased consumption and by psychological and personality factors (family habits, personality characteristics and temperament of the consumer, quality of life and life satisfaction, wellbeing, internal motives, etc.). Last but not least, a lack of education, lack of responsible approach to limited resources, and general lack of interest in the environment are equally important factors leading to over-consumption and consequent waste. Responsible consumption is something we can learn, but in order to behave responsibly the consumer must perceive nature and the environment as a part of himself[24].

2 Emotional Appeals in Social Marketing

Social marketing represents one of many possible practices in which society can positively influence consumer behaviour, and also the ways to achieve SDGs of the 2030 Agenda. Social marketing campaigns influence behaviour, change of attitudes and maintain or promote certain community beneficial behaviour. Social marketing represents a modern marketing concept focused on embracing changes that help to improve life in society and solve various social and environmental problems. Based on the growing social, health and environmental problems, various ways of solving them are being sought. These include social marketing campaigns, which can help educate consumers and thus contribute to solving social, health or environmental problems. The term social marketing often refers to the preparation and implementation of campaigns focused on obtaining the financial or material resources needed to solve a problem, force people to behave differently and point to a particular social issue. A specific type of social marketing is a social commercial (social advertising), which can be defined as a type of social marketing communication, aimed to influence the state of public opinion in a certain social area, or information leading to the acquisition of certain positive ideas useful for selected social groups, alternatively the whole public[25]. From the above-

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mentioned, several characteristic elements of social marketing result. Social marketing use tools and techniques known from the commercial marketing and marketing communication, but also common interpersonal communication activities; to promote an idea that is to bring about a change in society opinions, attitudes, behaviours, prejudices, and values; this change should be socially beneficial[26]. Consumer behaviour consists of the activities and experiences of customers who are in any way involved in the process of purchasing and consuming products and services. The whole process of consumer behaviour is influenced by motivational factors, specifically the ever-changing needs and wishes of customers, biological, social, cultural, and psychological factors. Social marketing is looking for ways to influence the consumer, and thus achieve the desired change in the consumer behaviour for the benefit of society. Emotional appeals in commercials can be positive or negative. We can use practically anything – daily situations, pure emotions, music, sounds, social situation, etc. Mostly used appeals are anger, fear, disgust, humour, eroticism, joy, happiness, pride, guilt, jealousy, compassion, nostalgia, seniors, small children or cubs, ominous, sad or otherwise related music, etc. Humour is the most commonly used emotional technique in the world and has been shown to attract the recipient's attention to watch the commercial. Music can attract attention and highlight some dramatic or visual moments and gives the overall content and meaning to the message. It can also arouse emotions and create a specific atmosphere. If humour and music also evoke an honest atmosphere, then the effectiveness of the commercial increases. The emotional appeal of fear is very often used in social campaigns. The appeal of fear must be proportionate, though. The extreme intensity of fear can evoke negative feelings, so the recipient will try to avoid the commercial. Mild fear tends to be more effective, as the subtext can make the recipient think about a specific problem. Social advertising should, more than the inappropriate consequences of current behaviour, highlight the benefits of the change of behaviour[27]. Appeals that provoke negative emotional reactions are commonly used as a means of persuasion to influence and change attitudes, opinions, or behaviours that are the cause of negative social, health, environmental or cultural phenomena.

3 Material and Methods

Today, not only children, teenagers, and young adults spend a significant amount of time on the Internet and social media, but often their parents and grandparents, as well. Therefore, digital space seems to be the right place for educational campaigns and social marketing. In addition to the "traditional" social media (Facebook, Instagram, Twitter), new ones are constantly being added, which are attractive especially for the younger generation. The main aim of the presented paper is to analyse the possible impact of a short social campaign, focused on the issue of food waste. Material of the presented paper is a short emotional social marketing campaign that is also one of analysed campaigns in the research project VEGA 1/0368/19 "Life-satisfaction and other psychological dispositions as predictors of behavioural tendencies associated with food wasting". The duration of the short video is one minute. It is originally a short Norwegian social campaign pointing out the need of foster homes for children (Available at: https://www.youtube.com/watch?v=pYHZhoESs_8).

The plot describes a little boy who is with other children in the class. The bell rings for a break and other children start eating their lunches. A boy quickly finds out that his lunch box is empty. He is sad, maybe frustrated and he leaves the room and starts wandering the school corridors. When he comes back, he wants to put his lunchbox into his bag, but when he lifts it,

[26] BAČUVČÍK, R., HARANTOVÁ, L.: *Sociální marketing*. Zlín : Radim Bačuvčík - VeRBuM, 2016, p. 44.

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he feels that it is heavy. He opens the lunchbox and finds food inside. He smiles and so do his classmates. Even though the video carries a different message, it is related also to food waste. As we mentioned above, one in nine people in the world (approximately 870 million people) suffers from malnutrition or hunger. That is why we use it as an emotional appeal for consumers to realise the possible consequences of food wasting. The short campaign was presented to 180 young adults (32 males and 148 females), from 20 to 33 years old. They evaluated the video on the scales of the semantic differential. They were also given a simple EQ test and they were asked complementary questions about the campaign. All respondents are students who study at universities in Nitra and Trnava and they are all citizens of the Slovak Republic. They were also asked other demographic questions that showed themselves not to be significant for the presented study. The differences in answers on the scales of semantic differential between chosen groups were verified by non-parametric Mann-Whitney U Test.

4 Results

The short video was evaluated on the 7-degree scales of the semantic differential (Table 1).

Table 1: The semantic differential scales

Interesting	1	2	3	4	5	6	7	**Boring**
Pleasant	1	2	3	4	5	6	7	**Unpleasant**
Funny	1	2	3	4	5	6	7	**Sad**
Emotional	1	2	3	4	5	6	7	**Neutral**
Positive	1	2	3	4	5	6	7	**Negative**
Touching	1	2	3	4	5	6	7	**Untouching**
Good	1	2	3	4	5	6	7	**Bad**
Strong	1	2	3	4	5	6	7	**Weak**

Source: Own processing.

The overall campaign was evaluated very positively. All 180 respondents answered that they like the video very much. It is considered to be very touching and emotional (Chart 1). 175 out of 180 respondents stated that the video could be used as a social campaign to raise awareness of food waste.

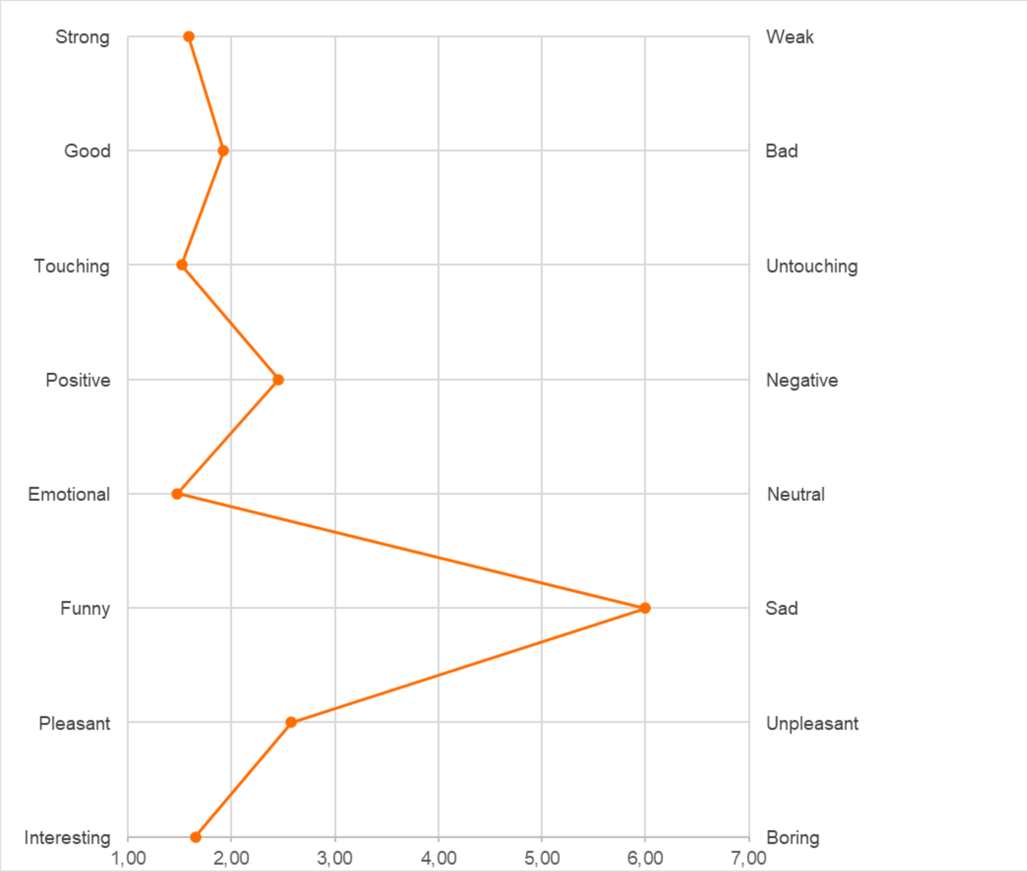

Chart 1: The semantic differential – evaluation of the video on 8 scales (by all respondents)
Source: Own processing.

The differences between groups (males – females, empathetic respondents – non empathetic respondents) were tested in evaluation on the individual scales of the semantic differential. The average values are shown in the Table 2.

Table 2: Average evaluation of the video by different groups of respondents

			High empathy		
Order of pairs	**Male**	**Female**	**No**	**Yes**	**All**
1	1,70	1,66	1,67	1,66	1,66
2	2,52	2,58	2,53	2,58	2,58
3	5,97	6,00	5,98	6,00	6,00
4	1,51	1,48	1,49	1,48	1,48
5	2,48	2,46	2,46	2,46	2,46
6	1,56	1,52	1,54	1,52	1,52
7	1,96	1,92	1,94	1,92	1,92
8	1,62	1,59	1,60	1,59	1,59

Source: Own processing.

With the use of Mann Whitney U test, it was found out that there are statistically significant differences between males and females in evaluation of the interestingness of the video (p = 0,001). Females consider the video to be more interesting than males. Differences in evaluation on other scales between males and females are not significant. There are also significant differences in the evaluation of the pleasantness of the video between respondents who scored high in the EQ test and respondents whom empathy is lower (p = 0,014). Respondents with lower empathy consider the video more pleasant in comparison with respondents with higher empathy. Differences in evaluation on other scales between respondents with different EQ scores are not significant.

5 Discussion

There are a lot of consumer psychology research[28,29,30,31,32] that studies consumer reactions to emotional appeals. Negative emotions or negative emotional drive are commonly used in social marketing campaigns as a means of persuasion or provoking actions. A combination of emotions with opposite valence is also very common, it is typical for example in the Christmas commercials. The aim is to provoke touching (emotion) and compassion. Negative emotions, in general, start the ancient brain reaction and evoke the need to protect (own life, family, environment,…). Negative drive of social marketing campaigns is based on the similar principle. In our research it was found out that even though the short video is sad, and provokes mostly negative feelings, respondents refer that it has a significant potential to raise awareness about the food waste issue.

Conclusion

The presented paper is part of the research of the research project VEGA. It provides a partial results of possible strategies how we can fight the excessive food waste and other environmental problems. Preventing food waste is one of the current priorities of the European Commission. Households in Slovakia produce about 400 kg of waste per capita every year and have a share of up to 53% in the generation of food waste in the country (per capita). The main reason for such behaviour is that consumers often do not see the problem and its impact on the environment. Other factors are consumerism and a deep-rooted indolent lifestyle. Properly suggested and elaborated social campaigns carrying strong emotions (even negative) present a promising tool for informing and raising awareness of environmental problems. The further research is needed.

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Agenda 2030. [online]. [2021-09-05]. Available at: <https://www.vicepremier.gov.sk/wp-content/uploads/2018/10/20131Agenda2030_VNR_Slovakia.pdf>.
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APPLICATION OF THE VIRTUAL ENVIRONMENT IN THE EDUCATIONAL PROCESS

Alexandra Rysuľová

Abstract
The presented contribution deals with the use of the virtual environment in the educational process, focusing on one particular virtual world - Second Life - and shows the advantages and disadvantages of using the virtual environment in the educational process. In the introduction, the views of renowned authors on the use of virtual worlds in general for education are presented. Then, the virtual world of Second Life and the basic peculiarities that affect the activities related to creation in the mentioned environment are presented. It also describes the institutions and the way they use the virtual environment for presentation and education on a global scale. The author briefly presents the ongoing project of the Faculty of Mass Media Communication in the form of a virtual institution, which is also used as an alternative form of distance learning on selected subjects. The use of the aforementioned environment is primarily used in the teaching of Digital Game students who have taken related subjects in previous semesters.

Key words:
Digital Games. Education. Learning. Second Life. Teaching. University. Virtual Environment. Virtual World.

Introduction

In today's pandemic COVID-19 world, we are confronted with the concept of virtual environments, which are defined by some users primarily as social platforms; they are considered as online channels whose main function is communication. The essential function of an online multi-user virtual environment is interactivity between individuals, and this can take various forms. Most commonly, we encounter virtual environments in the form of social networks. In other cases, we find some virtual environments that can be described by some as online digital games that allow interaction between multiple users. In rare cases, some platforms may have some traits of digital games, but since they lack some of the basic pillars of digital games, they can be better described as virtual worlds. Some users perceive virtual worlds as games, while others do not consider them games at all. They are platforms with many possibilities, including education, personal development and social communication, the formation of different social groups with common interests, or simply a place to experiment. The environment is perceived by users individually, and the impact that a virtual world has on individual users can vary depending on the user's behavior and emotional mood. Sometimes people who seek out and consistently use virtual worlds live vicariously through others as they seek to experience what they, for whatever reason, cannot experience in their lives. Accessing a virtual world has been likened to escapism, which characterizes the escape from reality into an imaginary world because it brings people experiences, they cannot have in their everyday physical reality.

1 Virtual World Environment

Second Life is among the most active virtual worlds with over sixty-four million registered users and about one million active users. Second Life users are commonly referred to as residents, unofficially some would call free accounts Second Life tourists. In the virtual world of Second Life, users can purchase full access to design the terrain, build 3D objects using the platform's rudimentary 3D building capabilities, or use external programs such as Blender or ZBrush capable of creating objects as complex and detailed as the user's will and abilities dictate, texture them using programs such as Photoshop or others, and import all of these creations into Second Life.[1] They can then use the LSL (Linden Scripting Language) scripting language developed by LL and program their new objects to perform a wide range of automated activities. They can also create complete environments using content they have acquired from others, changing the shape of the ground, adding fauna and flora and any building they see fit, along with decorative or practical scripted objects. R. Bartle considers the entertaining approach of the virtual world as a crucial element that makes users engage and experience the virtual environment, escape from reality and create an altered virtual identity.[2] T. Boellstorff expands on R. Bartle's statement and argues that residents who actively use Second Life consciously shape the virtual space by immersing themselves in a creative approach by creating virtual content, hosting workshops for other residents, learning the Linden Scripting Language, building something, and taking a proactive approach to education.[3] According to T.A. Mikropoulos and A. Natsis, a virtual environment allows users to develop their skills in a variety of ways. Online learning in a 3D virtual environment is usually successful for users, as they are likely to memorize the information and acquire knowledge through the possibility of repetition.[4]

R. Bartle defines virtual worlds as a simulation of an environment under the direct control of individual users. The environment evolves through and builds upon user interaction. According to Bartle, virtual worlds have an entertainment character and are perceived as computer games because users visit this type of environment to escape the real world and build an alter ego. [5] T. Boellstorff adds to R. Bartle's theory and claims that users who visit the virtual world Second Life try to create virtual content that helps them develop their skills. He claims that users who do not have the opportunity to present their ideas in a natural environment can create content that serves and educates other users so that they can work in a virtual environment.[6] T. Boellstorff explains that users who access the virtual environment can have a cognitive, communicative, or narrative structure. The cognitive structure focuses on the user's education and personal development and allows the user to create different types of virtual content, programming, animation, and others. The communicative structure focuses on user interaction and subsequent virtual relationship building.[7] According to T. Boellstorf, narrative structure in the virtual environment is generally understood as telling a story of events based on reality or fiction. It is told orally, in writing or through static and moving images. In the virtual world, the narrative structure is designed by the creators, and the player has the opportunity to complete the story with his ideas and actions. In the virtual world, there is no plot determined by the user, but the user is the creator of the narrative structure, and the community in which the plot takes place has a direct influence on the subsequent development of the story. In most virtual communities, narrative structure plays a minor role and there is no emphasis on relief. In contrast, there are communities for which narrative structure is the most important aspect of the virtual world. Narrative structure can also take an unconscious form when users create a story of their avatar without the influence of the

[1] *Second Life Grid Statistics*. [online]. [2021-01-11]. Available at: <http://www.gridsurvey.com>.
[2] BARTLE, R.: *Designing Virtual Worlds*. USA : New Riders Publishing, 2003, p. 275.
[3] BARTLE, R.: *Designing Virtual Worlds*. USA : New Riders Publishing, 2003, p. 277.
[4] MIKROPOULOS, T. A., NATSIS, A.: Educational virtual environments: A ten-year review of empirical research (1999–2009). In *Computers and Education*, 2011, Vol. 56, No. 3, p. 772.
[5] BARTLE, R.: *MMOs from Inside Out*. New York : Springer Science, 2016, p. 37.
[6] BOELLSTORFF, T.*: Coming of Age in Second Life An Anthropologist Explores the Virtually Human*. Princeton : Princeton University Press, 2015, p. 30.
[7] BOELLSTORFF, T. et al.: *Ethnography and Virtual Worlds*. Princeton : Princeton University Press, 2012, p. 53.

community. Users tend to create a virtual world that is different from the individual's real life and try to live in an alternative way.[8]

R. Freedman describes the virtual world Second Life as an optimal environment to start a virtual business with real profit. Users can create a virtual object and then offer it on the virtual market, converting the proceeds of the sale into a real menu based on the current exchange rate. With this permission, developers can offer their virtual objects for sale and profit from the profits, which vary depending on demand and total sales.[9]

All three authors state that the virtual world Second Life simulates real life in all directions and has an educational character that allows users to learn about certain topics. Second Life can be used as a tool to raise awareness of global issues and to better analyze individual topics. Second Life offers the possibility to search for contacts and groups as well as activities offered to users by using its own built-in search functions or linking it to other external platforms such as Facebook, Flickr or other social networks. On these external platforms, users can promote what they are up to in a variety of ways, most commonly through images, but sometimes through videos. The Second Life virtual world is also available in a text-only version for mobile phones, primarily for communication when a user has limited or no access to the world with a full viewer, or only needs to perform actions that do not require full access to the platform. Special viewers are also available for Windows that provide either text only or a limited, simpler 3D render. While participating in these craft activities, the user can acquire essential cognitive knowledge from other users who share their personal experiences and creations. Effective acquisition of user-specific information can be achieved through participation in seminars available to users on specific topics. The basic structure of the virtual world is communication, which is essential for every user. Community interaction helps users build friendships that can evolve into projects with a different focus by sharing individual skills in a cooperative effort. Users interested in creating multi-purpose experiences can create something in this way that they might not have been able to create as individuals. In this way, communities with specific focuses are created whose product can then be shared with other users. The Second Life platform was originally founded as a social world, but Second Life has evolved into an educational platform. Universities have purchased islands called regions, but often called sims by the SL community. These have an area of 256 by 256 meters with an official usable height of 4096 meters, on which they set up virtual campuses for educational activities, lectures, marketing and socializing. Uses include distance learning, historical museums, recreation of historical sites, musical performances, theater, collaborations of various kinds, cultural diversity, laboratories, group meetings, conferences, virtual libraries and lounge areas.[10] Second Life fits well with the constructivist philosophy of learning, which holds that people construct their understanding through experience and reflection. Second Life enables simulations that can lead to this understanding. H. Astleitner and C. Wiesner claim that practicing building can lead to visual literacy because students must use geometric shapes known in Second Life as "prims," short for primitives, as they represent the primary geometric volumes such as cubes, pyramids, spheres, and others. However, the term used in Second Life has been superseded by newly available options. For example, external programs such as Blender allow you to create more geometrically detailed objects, import them into the platform, and apply textures to these models to assemble

[8] BOELLSTORFF, T.: *Coming of Age in Second Life An Anthropologist Explores the Virtually Human.* Princeton : Princeton University Press, 2015, p. 43-44.

[9] FREEDMAN, R.: *How to Make Real Money in Second Life*. New York : McGraw-Hill Professional, 2008, p. 13.

[10] ROBBINS, S., BELL, M.: *Second Life for Dummies*. Indianapolis : Wiley Publishing, Inc., 2008, p. 157-164.

complex objects.[11] Furthermore, Second Life's social interaction capabilities are consistent with the social constructivist view that learning occurs in social situations. B. A. White defines the potential advantages and disadvantages of using Second Life as a tool in the instructional process as follows:

- The main advantages of Second Life in the teaching process are:
  - Most topics can be explored in a sensory rich environment,
  - Students can direct their learning and gain additional knowledge about other topics,
  - Students can see each other's avatars, customize them, and interact. They also build a bond with the character, and learning becomes enjoyable for them,
  - Students can also interact with objects or design their interactions with the object, e.g., sit down, play games, take a quiz.,
  - Texts can be placed on so-called notecards, a Second Life form of text files that can be shared between avatars,
  - Teachers and students can purchase objects and store them in their inventory. Although there is no set limit to an avatar's inventory in Second Life, it is recommended as a good practice to keep them under 100,000 objects, at 400,000 the system starts to become stressed, these inventories act as a virtual filing cabinet and it is a good practice for users to create and maintain a system with multiple folders rather than having all of their objects in a single folder,
  - Second Life offers the ability to stream audio and video. You can even access websites like YouTube directly from an object, such as a 3D screen modeled in Second Life.
- The main disadvantages for teachers in Second Life are:
  - In order to effectively use the Second Life viewer software, the user needs a computer that can run 3D graphics. Since Second Life is mostly user-created content, not always created by users with performance in mind, it requires more powerful hardware than it might first appear, as well as a good internet connection to stream all assets such as 3D models, and textures, which are often larger than necessary, fast enough,
  - Sufficient time must be spent to learn the basic skills and functionality of Second Life, which is a very steep learning curve for a platform as sophisticated and user-driven as this one,
  - Mastering advanced skills requires even more time, especially for scripting, ie, programming simulations for animations and others, which requires amazingly comprehensive skills,
  - It is essential to check for updates and download new software updates as new bugs are constantly being fixed and new technologies and features are being added.[12]

The use of a virtual teaching environment presents some obstacles and has disadvantages that may lead to reconsideration of the use of this form of teaching in the educational process. The advantages of adapting the virtual environment to distance learning outweigh the disadvantages, and in the case of tools that allow the use of this alternative form is considered.

2 Applied Educational Use of Virtual World

One example of actively using Second Life in an educational approach is Loyalist College, which developed a simulation to train border agents in interrogation techniques. According to Linden Lab, the results led to a significant improvement in students' scores on critical skills

[11] ASLEITNER, H., WIESNER, C.: An integrated model of multimedia learning and motivation. In *Journal of Educational Multimedia and Hypermedia,* 2004, Vol. 13, No. 1. p. 8.
[12] WHITE, B. A.: *Second Life: A guide to your virtual world.* Indianapolis : Que, 2008, p. 29.

tests. Pass rates increased from 56% in 2007 to 95% at the end of 2008 after the simulation was implemented. The success of the program has encouraged over 650 students and eight faculty to explore Second Life for mixed purposes.[13] A research study conducted by C. Pearce in 2015 addresses virtual worlds, incentives, and user preferences and processed the responses of 858 respondents who participated in an extensive questionnaire that explored various aspects of virtual worlds, users' reasons for visiting these worlds, users' opportunities in virtual worlds, and the educational aspects of virtual worlds. In his conclusions, C. Pearce states that virtual worlds can provide space for the realization of people with certain disabilities and offer a space for creativity and self-education of users in different ways.[14] With the development and popularity of digital games and social networks, the virtual environment is a popular haven for young people. Therefore, it is clear that teachers will try to incorporate it into the educational system. As A. Thomas explained in his 2018 TedTalk talk, traditional school teaching is not hands-on or effective with this experience. He describes the evolution of teaching over the age of the students. In kindergarten we learn through play, in elementary and secondary school we learn in a class of 20 or so students, but in university we learn in a lecture hall among 150 other people and a lecturer so far away from us we can barely see him. A. Thomas believes that games are as much a part of the education system as textbooks. In his presentation, he talks about various serious games, such as those that help children fight cancer, or games where players help scientists discover new proteins, or those where players learn about history. Another effective method that can be used for education in virtual space or cyberspace is to conduct a variety of hands-on, simulated activities, regardless of where in the world they are located. A popular world for these educational activities is the online world Second Life, as Professor L. Falconer of the University of the West of England explains.[15] Virtual worlds also have some obstacles that educators must recognise before they can professionally implement any aspect of virtual worlds. These obstacles include technology requirements and access, student training, student expectations, and assessment in virtual worlds.[16] When educators understand each of these obstacles, they can appropriately plan and systematically design professional development or instruction. The obstacles can then become part of the expectations of implementing virtual worlds and become a teachable moment for teachers and students. Educational institutions have been trying to use Second Life since its inception in the 2000s; more than 170 schools have used it. Currently, for example, there are virtual versions of more than 10 American universities, such as Oakland University, Ohio University, the University of Plymouth, Coventry University, Montana State University, but also, for example, credits from Harvard University, which students from China, South Korea and other countries attend. Harvard University also uses its virtual space to train its staff and attract new contacts and sponsors. Also worth mentioning, for example, is the Geographic Information Systems course (GIS) at New Mexico State University, where students work in teams to create a virtual Earth Aggie Island. Students visit the instructor in

[13] LINDEN, L.: *Virtual World Simulation Training Prepares Real Guards on the US-Canadian Border: Loyalist College in SL.* [online]. [2021-11-01]. Available at: <http://secondlifegrid.net.s3.amazonaws.com/docs/Second_Life_Case_Loyalist/>.

[14] C. PEARCE.: *Virtual Worlds Survey Report A Trans-World Study Of Non-Game Virtual Worlds – Demographics, Attitudes, And Preferences.* [online]. [2021-11-02]. Available at: <http://cpandfriends.com/wp-content/uploads/2015/03/vwsurveyreport_final_publicationedition1.pdf>.

[15] FALCONER, L.: *Using virtual worlds in education - UWE Bristol*. Broadcast on 10th May 2012. [online]. [2021-11-01]. Available at: <https://www.youtube.com/watch?v=hitoA7W5KhU&ab_channel=UWEBristol>.

[15] WARBURTON, S.: *Second Life in higher education: Assessing the potential for and the barries to deploying virtual worlds in learning and teaching.* [online]. [2021-11-02]. Available at: <https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-8535.2009.00952.x>.

[16] WARBURTON, S.: *Second Life in higher education: Assessing the potential for and the barries to deploying virtual worlds in learning and teaching.* [online]. [2021-11-02]. Available at: <https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-8535.2009.00952.x>.

his virtual space and are tasked with creating 3D models and various animations to better understand GIS and work with the software GIS.[17] Second Life also promotes, among other things, language teaching, which benefits from the possibility of spatial and unlimited contact between students and different professors from different countries of the world. Audio communication makes it possible to expand the possibilities of online teaching from ordinary text to practicing conversations in different languages, which is in line with the trends of modern language teaching based mainly on the development of communication skills. Examples include "Second Life English" or "British Council Isle", which offers free English classes for young people worldwide. English courses have been available there since 2008 and are also offered, for example, in the Czechoslovak environment of Second Life.[18]

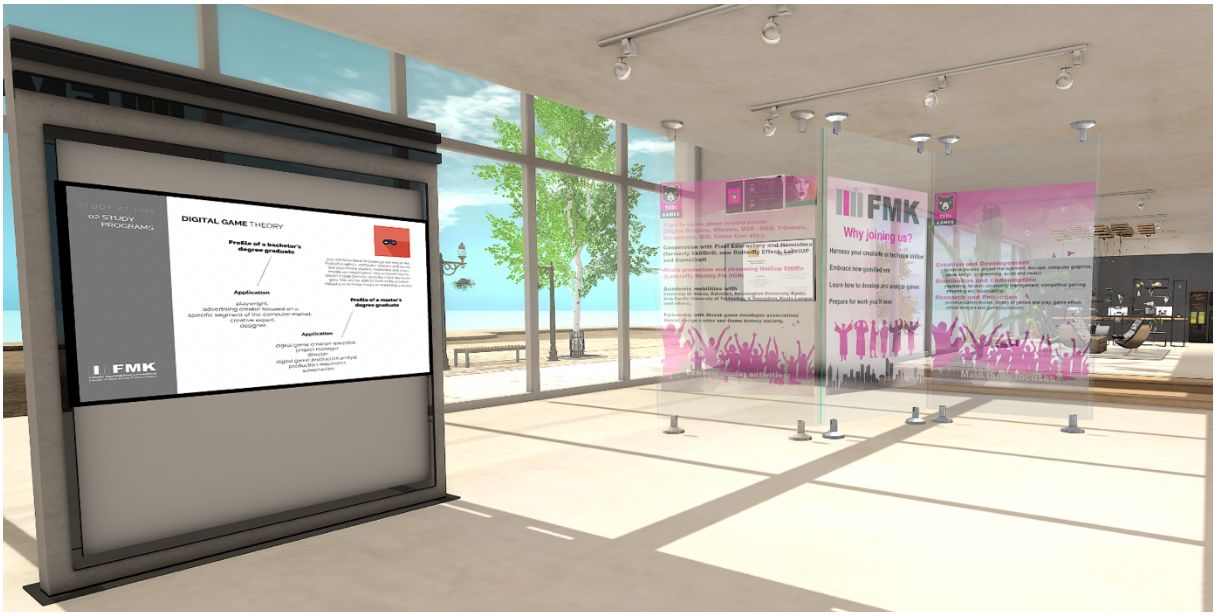
Moreover, in the digital world it is possible to simulate activities that would either be impossible or too demanding in real space, such as organizing an exhibition. While in reality it might be problematic to obtain the exhibits or props needed for this exhibition, a virtual representation can capture the same spirit and promise the same amount of information, if not more, at a fraction of the cost. Another effective tool that education in cyberspace offers is to combat a pandemic. It allows students to continue their education even if the collection uses the Internet and this type of education. In recent years, Second Life has become a social platform that serves communication and socialization. The number of traditional universities that present themselves in the virtual world today is not as large as in previous years. The reason for this lies in a variety of factors, and there can hardly be a single one that explains this trend. Whether it is because other, newer platforms are being explored or because Second Life itself is mainly used by people who are more into social interaction. According to faculty who are actively involved in Second Life, most universities decided to pull back after the community in Second Life began to focus more on fantasy, especially role-playing games, which often have a gritty and even adult tone that does not fit academics and learning, but much more for recreational fun. In 2019, Linden Lab launched another initiative focused on Second Life education when their official YouTube channel released the series "Made in Second Life," which featured the Chant Newall Development Group as a project of the University Central Florida in collaboration with Florida State University. The science subjects focused mainly on biology, economics, chemistry, and environmental science. Students learned about the structures of human cells by using Second Life to demonstrate the application of forensic science. Since then, the series on YouTube has also featured several artists who have created unique experiences in Second Life, from amazingly detailed tabletop games that cannot be recreated as easily on any other platform, to some of the creators making clothing for the avatars or parts of the avatars themselves, to artists using Second Life to showcase their millennial-inspired creations in a new way, giving a different and unique perspective on their work. The series also features a number of artists who have created their own avatars. As part of the promotion of education, Linden Lab offers a 50% discount on the region fee to schools that participate and create their regions representing universities. A subscriber list and communication channels have also been established for teachers to communicate with the community. This group is available to all teachers who wish to teach in Second Life without requiring their institution to be represented in Second Life.[19]

[17] DOSTÁL, J.: *Nové technologie ve vzdělávání – Vzdělávací software a interaktivní tabule*. Olomouc : Univerzita Palackého v Olomouci, 2011, p. 54.
[18] DOSTÁL, J.: *Nové technologie ve vzdělávání – Vzdělávací software a interaktivní tabule*. Olomouc : Univerzita Palackého v Olomouci, 2011, p. 55.
[19] LINDEN, L.: *Discounts for Universities*. [online]. [2021-11-02].
Available at: <http://specialorders.secondlife.com>.

Some universities continued active teaching and supported the virtual form of learning with ten or more years of tradition. One of the universities in the Rockcliffe University Consortium and its online organization targets technological advances in education and their application in the virtual world. The university covers an area with the main university building, several halls, conference rooms, classrooms, laboratories, lounges, sandbox, libraries, and other outdoor areas. The institution is unique in its accessibility to students and other adult learners who wish to acquire knowledge in the field of technology. The organization supports faculty who are not part of the university and are interested in lecturing by creating open access courses for anyone interested. Rockcliffe University's virtual facilities allow members to test new ideas and innovations by providing a free sandbox in which to build.[20]

In 2009, the University of Western Australia, abbreviated UWA, recreated its campus in Second Life, allowing residents from around the world to immerse themselves in the university's environment. The environment is known for its rich flora and fauna, which the university prides itself on in real life as well. The creators of the university have incorporated common animals that can be seen in their surroundings, as well as areas to hang out and places to relax and meditate. The university is known for its active academic, research, teaching, and social activities that are available to residents on a weekly basis. The University in Second Life focuses on business, law, art, anatomy, education, and biology. UWA offers lectures to students and the public, with a weekly program available in the world. In addition to educational purposes, UWA organizes themed social events with live music that are open to everyone. The university owns the entire campus, which is divided into several areas, including the main building, conference hall, classrooms, library, lounge area, and interactive information walls that visitors can browse.[21] Another example of an active university in Second Life is Stanford University and its collection of libraries and virtual archives that are replicas of real-world repositories. Second Life is the only place where the public can access Stanford's stacks and walk-through manuscript collections that in real life are only accessible to staff. The Stanford Region is divided into several areas, including museums, libraries, archives, and an outdoor area with information panels. The region offers scans of real documents to read, and users can explore the entire region on a train with a tour guide. The region contains information from real sources held in Stanford's libraries and archives that is not available to everyone in the world.[22] In 2011, the Faculty of Mass Media Communication built the virtual University of Ss. Cyril and Methodius, UCM for short, in Second Life in the Czechoslovak region of Bohemia, and the leader of the project and the virtual manager was Rastislav Zábojník. The building was available to all residents and served mainly representative purposes. It was used to hold exhibitions and conferences, as well as to provide information about the faculty and its activities. Compared to other universities, the premises were not designed for holding virtual courses and the space was limited. The virtual university was funded by the project and no longer exists in Second Life.[23]

[20] LINDEN LAB: *Second Life*. [virtual world]. San Francisco: Linden Lab, 2003.
[21] LINDEN LAB: *Second Life*. [virtual world]. San Francisco: Linden Lab, 2003.
[22] LINDEN LAB: *Second Life*. [virtual world]. San Francisco : Linden Lab, 2003.
[23] *Univerzita sv. Cyrila a Metoda v Trnave vstupuje do Second Life.* [online]. [2021-11-03]. Available at: <https://www.cinemaview.sk/spravy/univerzita-sv-cyrila-a-metoda-v-trnave-vstupuje-do-second-life/>.



Picture 1: Premises of the Virtual Faculty of Mass Media Communication
Source: Own processing.

However, the Faculty of Mass Media Communication applied for an FPPV grant to launch a new project in the virtual world of Second Life, creating a new building that represents much of the faculty media and student activities, as well as a virtual classroom for digital games students to experience spatial learning during their courses. The virtual classroom includes interactions with the residents, seminars, workshops, and presentations of their work where they can apply the skills, they have learned in creating the deliverables in the virtual environment. The virtual premises can be found in the Destination Guide on the official Second Life website, which is accessible to visitors of the network.[24]

Conclusion

The use of a virtual environment for educational purposes is an increasingly desirable alternative to traditional distance education in a pandemic situation because it allows for certain activities that are not available in basic distance education tools. Any limitations that an instructor encounters when setting up a virtual environment as an alternative platform for instruction must be defined. The main limitations we see in using the virtual world of Second Life are the financially demanding procurement and maintenance, and the high technical support requirements for the participants. The main advantages of using the virtual environment in the educational process should be the freedom of creativity that students get in self-expression and participation. In conclusion, we recommend taking a look at the existing universities around the world that participate in the virtual environment to understand the possibilities of using the environment for more than just educational processes.

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CONSUMER PREFERENCES ON THE READY-MADE DISHES MARKET IN THE MORAVIAN–SILESIAN REGION

Katarína Seifriedová – Adam Skácel

Abstract
The development of digital technologies (e-tailing) is not just about buying products online, but it is even more common to encounter the purchase of various services. These days it is possible to book a hotel, buy a train ticket, participate in elections or census via the Internet. One of such a services is also the delivery of ready-made dishes through online order, which has become even more popular during the Covid-19 pandemic. There are a large number of platforms that connect restaurants together and allow consumers to order food online. The restaurants themselves customize their websites for this purpose. The aim of this article is to analyze the preferences of consumers in the ready-made dishes market in the Moravian–Silesian region in general and also with a focus on the frequency of ordering. Within the quantitative research, the classification of the first and second degree is used for the data analysis and statistical tests are used to determine statistical significance.

Key words:
ANOVA test. Chi-square test. COVID-19. Moravian-Silesian region. Online food delivery. Ready-made dishes.

Introduction

The services sector has boomed in recent decades. This is happening especially because of e-commerce, which represents new opportunities. We can see this in the field of restaurants, which are involved in digitization. Food is sold through online channels that make life easier for consumers and save their time.[1] In turn, they can save suppliers costs and streamline the distribution process to customers. In principle, websites or mobile applications are used for online food procurement. At the same time, during the covid pandemic, restaurants struggled to stay in the market looking for ways to survive. Food delivery was a perfect opportunity for them. Online food delivering (OFD) services mean online food ordering and delivery systems that connect customers with partner restaurants through websites or mobile applications. When the customer places an order, the restaurant accepts the order and prepares the meal. A platform or restaurant employee (courier), then delivers the food to the customer. Payment can be made in advance when ordering or when the order is delivered. In most services, customers can track the status of their order.[2]

1 Online food delivering market

OFD market is divided into two sub-markets. The first of them is called Restaurant-to-Consumer Delivery, what means the delivery from the restaurant on its own (using their own website) to the consumer. The second sub-market is called Platform-to-Consumer Delivery. This means that these platforms deliver food from partner restaurants. The restaurant does not necessarily offer food delivery itself.[3] Today, OFD practices include, in addition to the

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[3] *Online Food Delivery: Czechia*. [online]. [2021-10-02]. Available at: <https://www.statista.com/outlook/dmo/eservices/online-food-delivery/czechia>.

delivery of ready meals, the delivery of cooking ingredients, including the recipe and food preparation process.[4] In this article, however, we focus specifically on the area of the ready-meals delivery. OFD services offer many benefits to restaurant owners and their customers. Consumers will have easier and more efficient access to meals from a wide network of restaurants at different times and in different places. In addition, they provide customers with comprehensive and especially up-to-date information about the restaurants themselves, their menus, prices and also reviews of customers who have previously tried food from the restaurant. On the other hand, restaurants have the opportunity to streamline their services, make contact with the customer (easier to get feedback) and can also expand their market. It is therefore a mutually advantageous business.[4] However, OFD services also bring some risks or disadvantages. One of them may be the margin of platforms for order mediation, which according to some information can climb up to 30.0% of the price of the service.[5] Another negative phenomenon is the number of plastics used, which arise during the packaging of meals and the delivery of cutlery and other accessories. Although, many restaurants are already trying to combat this by preferring easily recyclable materials over simple plastics. On the consumer side, delivery time can be a disadvantage. If it lasts too long, the food loses quality and the enjoyment of the food decreases. In this case, many restaurants use a full or partial refund of the order or a coupon for a discount in the future for negative reviews regarding the quality of the food.

2 Online food delivering in the time of Covid

Internet shopping boomed in 2020, especially as the response to the coronavirus pandemic. The World Health Organization has declared coronavirus a pandemic disease that causes high mortality and human-to-human transmission. This happened in particular on March 11, 2020.[6] States around the world have amended their laws and ordinances to restrict movement, and many businesses, including restaurants, have been forced to close. This has had a negative impact on industry and has resulted in job losses. OFD services have been a way for many restaurants to survive. Although the OFD market grew even before the pandemic itself, even more people used OFD services during the pandemic, as evidenced by a report from the NPD Group, which revealed that the number of OFD orders increased by up to 67% in March 2020 compared to March 2019.[2] The market size of the global online food delivery sector was 107.44 billion U.S. dollars in 2019 and 111.32 billion U.S. dollars in 2020. The slow growth in 2020 was mainly due to the economic slowdown across countries owing to the coronavirus pandemic and the measures to contain it. However, by 2023 the market was expected to have grown to reach 154.34 billion U.S. dollars.[7]

At the time of the pandemic, new functions of OFD services were also gaining popularity. One of them is "contactless delivery", which helps consumers overcome the fear of infection

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[4] GAVILAN, D. et al: Innovation in online food delivery: Learnings from COVID-19. In *International Journal of Gastronomy and Food Science*. 2021, Vol. 24. [online]. [2021-10-02]. Available at: <https://doi.org/10.1016/j.ijgfs.2021.100330>.

[5] HORÁČEK, F.: *Vaříme zadarmo, zoufají si restauratéři. Za rozvoz platí 30 procent.* [online]. [2020-10-16]. Available at: <https://www.idnes.cz/ekonomika/domaci/restaurace-poplatky-za-rozvoz.A201015_202435_ekonomika_fih>.

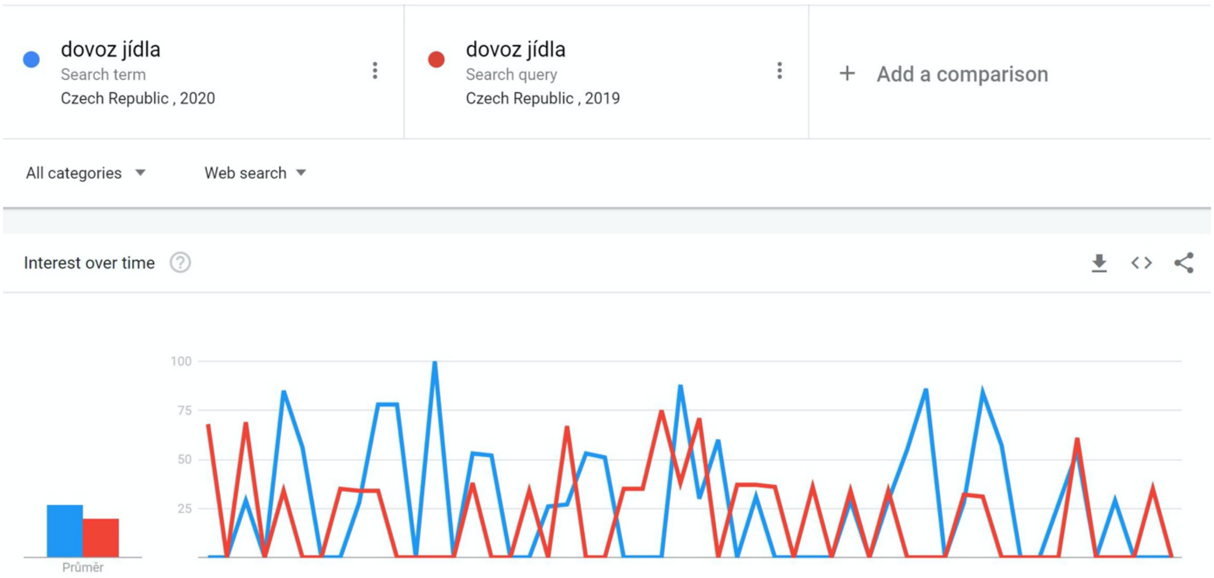
[6] *WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020*. [online]. [2020-03-11]. Available at: <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.

[7] *Online food delivery market size worldwide from 2019 to 2023*. [online]. [2021-10-02]. Available at: <https://www.statista.com/statistics/1170631/online-food-delivery-market-size-worldwide/>.

from the courier when delivering food. The courier simply leaves the order at the agreed place, for example in front of the house, and informs the customer about its delivery.[8]

3 Situation in the Czechia

In the spring of 2020, there was also a significant increase in online shopping, with the share of online shoppers increasing year-on-year from 39.0% to 54.0%.[9]As can be seen in Picture 1, an increased search for the phrase "food delivery" was recorded in the Czech Republic in 2020 compared to 2019.



Picture 1: Google Trends Comparison of the term "dovoz jídla" in year 2020 vs. 2019
Source: *Google trends comparison*. 2021. [online]. [2021-10-02]. Available at: <https://trends.google.com/trends/explore?date=2020-01-01%202020-12-31,2019-01-01%202019-12-31&geo=CZ,CZ&q=dovoz%20j%C3%ADdla,dovoz%20j%C3%ADdla/>.

In the Czech Republic, in 2020, consumers ordered the most pizza, fast food and dishes from Asian cuisine. In the Moravian-Silesian Region, the situation was the same in January and February 2020, but in the autumn of 2020, Asian cuisine was replaced in third place by traditional Czech cuisine. It was also found that most people order food at lunch time.[10]
The reasons for using OFD services are various, some state saving time that they can spend better than cooking. Many people have been accustomed to visiting restaurants during lunch breaks and food delivery is therefore a good alternative for them.[11] Nevertheless, during the pandemic, one of the reasons is the effort to help restaurants to overcome this difficult period.

[8] ANUSHREE, T. et al: Why do people purchase from food delivery apps? A consumer value perspective. In *Journal of Retailing and Consumer Services*, 2021, Vol. 63. [online]. [2021-10-02]. Available at: <https://doi.org/10.1016/j.jretconser.2021.102667>.
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Consumers therefore order from their favourite restaurants, and hence it is possible to see certain elements of loyalty and empathy.[12]

4 Methodics

The methodological part describes the method of marketing research and the method of data collection. The next subchapter deals with the questionnaire and the types of questions that were used. The last subchapters describe the sample of respondents, data collection and methods of analysis.

4.1 Method of data collection

The article works with primary and secondary data. The secondary data were used for the initial orientation in the issue and to find out the current trends and the situation on the market of OFD services with a focus on the market of ready meals. The fulfilment of the set goal was carried out by means of quantitative marketing research, which took place in the spring of 2021 in the Moravian-Silesian region. Data collection took place through online interviews, ie CAWI - computer-assisted web interviewing. This type of interview was chosen due to the geographical dispersion of the respondents and also the situation with the coronavirus, where personal contact was limited.[13] The aim was to get answers from at least 100 respondents who have experience with ordering ready-made dishes. Due to the different population density of the districts of the Moravian-Silesian region, there was an effort to obtain data from all districts in order to avoid data distortion. The authors assumed that the situation in more developed districts such as Ostrava or Frýdek-Místek may be different from the situation in Bruntál, for example. Quota selection was used for this purpose. Based on predefined quotas, the exact numbers of respondents from the districts of the Moravian-Silesian region were ensured.

4.2 The questionnaire

The questionnaire initially contained two filter questions. The first one filtered from the questionnaire respondents who stated that they do not order ready meals online. The second question concerned the district in which the respondent resides. This issue ensured that the established quotas were respected. Furthermore, the aim was to find out from the respondents the frequency of ordering meals (respondents had to choose exactly one answer), the reasons for preference for this service (multi response question) and in the last scale question their attitudes and preferences were ascertained. On a scale from 1 to 5, they had to express the degree of agreement, where number 1 meant absolute disagreement and 5 an absolute agreement. The arguments concern, for example, whether they order more often during a pandemic or whether they perceive certain risks associated with OFD services. This is for example, packaging in disposable packaging or the difference in the quality of food compared to consumption in a restaurant.

[12] *Češi podporují své oblíbené podniky, k okénku jich chodí téměř 70 procent*. [online]. [2021-10-02]. Available at: <https://www.idnes.cz/ekonomika/domaci/obceratveni-vydejni-okenko-rozvoz-pruzkum-up-ceska-republika.A201115_110706_ekonomika_misl>.
[13] TAHAL, R. et al: *Marketingový výzkum: postupy, metody, trendy.* Praha : Grada, 2017, p. 261.

4.3 The sample size

The basic set included all people in the Moravian-Silesian region with permanent residence who use food delivery and are over 15 years old. The sample then included respondents according to the population structure in the Moravian-Silesian region.[14] In total, the sample included 150 respondents. Table 1 shows the distribution of the population in the Moravian-Silesian region (MS region) and the sample of respondents by individual districts.

Table 1: Structure of inhabitants and respondents by districts of the MS region

District	Population in MS region	Population in MS region %	Number of respondents	Number of respondents %
Bruntál	91 248	7.6	11	7.3
Frýdek-Místek	214 763	18.0	27	18.0
Karviná	243 591	20.4	31	20.7
Nový Jičín	151 630	12.7	19	12.7
Opava	176 146	14.7	22	14.7
Ostrava-město	318 055	26.6	40	26.7
Total	1 195 433	100.0	150	100.0

Source: Own processing.

4.4 Data collection and methods of analysis

Data collection took place from 21. February 2021 to 7. March 2021. After data collection, the data matrix was inserted into MS Excel, where the respondents' answers were coded. The following analysis was performed using IBM SPSS software and the graphs were edited again using MS Excel. In classification of the second degree was used by a variable, which was the frequency of ordering meals online. The aim was to show the changes in the preferences of customers who order food online regularly and those who order only occasionally. Several statistical tests were used in the analysis, for example ANOVA and Chi-square test. Both tests used testing at a significance level of Sig = 0.05. The ANOVA test matches the agreement of the mean values in the groups created based on the categories of the explanatory variable. The differences in the means of the dependent variable between the groups were monitored using this test.[15] The Chi-square test is the basic test used to determine the interdependence of two categorical features. For this, we assume that if the two characters are independent, then the distribution of the frequency of occurrence in the contingency table is proportional to the row and column marginal frequencies of occurrence[16].

5 Analysis of consumer preferences

In the analytical part selected variables are being analysed using first and second level classification as well as statistical tests. First, attention is focused on frequency of buying ready-made dishes online. Then the reasons for ordering ready-made dishes online are analysed. Last, the average values of selected claims regarding to the purchase of ready-made

[14] *Obyvatelstvo v Moravskoslezském kraji v 1. až 3. čtvrtletí 2020*. [online]. [2021-10-02]. Available at: <https://www.czso.cz/csu/xt/obyvatelstvo-v-moravskoslezskem-kraji-v-1-az-3-ctvrtleti-2020>.

[15] HENDL, J.: *Přehled statistických metod zpracování dat*. Praha : Portál, 2015, p. 696.

[16] ŘEZÁNKOVÁ, H.: *Analýza dat z dotazníkových šetření (3. dopl. vyd.)*. Praha : Professional Publishing, 2011, p. 218.

dishes are defined and commented. ANOVA test and Chi-square test are also included in the analytical part.

5.1 Frequency of buying ready-made dishes online

The data reveal that most respondents (34.7%) order ready-made dishes online several times a month. The second most common group of respondents are those who make an order once a month. Altogether 25.3% percent of research participants expressed that they order food online once or several times a week. Finally, only 8.0% of respondents make orders less often. From these data (Chart 1) it is possible to conclude that people are used to order food online.

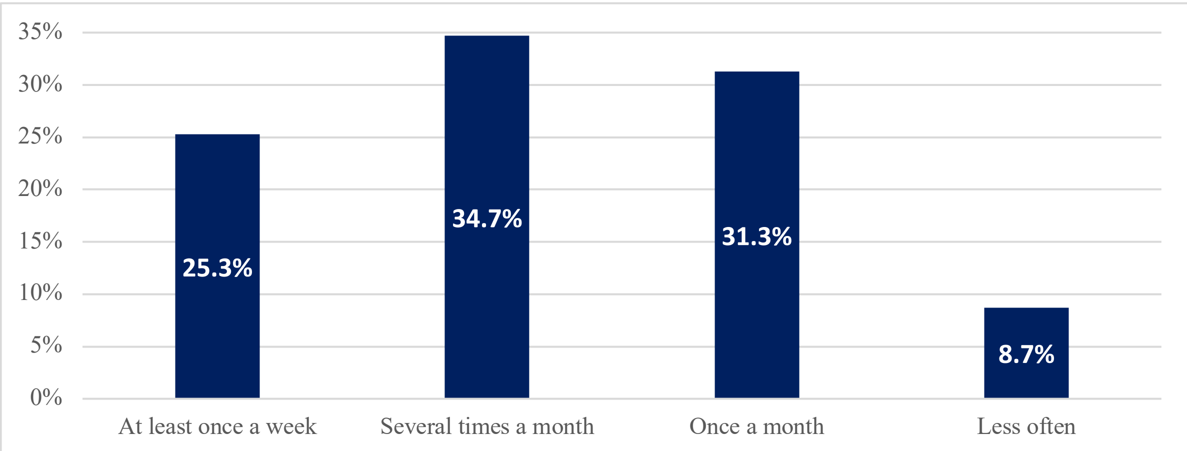

Chart 1: Frequency of buying ready-made dishes online
Source: Own processing.

5.2 Reasons for preference for ordering ready-made dishes online

In this question, it was investigated why consumers prefer ordering ready-made dishes online. The results are shown in Table 2. More than a half of the respondents (51.3%) order ready-made dishes online because they do not want to cook for themselves. Overall, 36.7% of respondents said that they order food over the Internet to save their time. In this case it is possible to state that modern people are probably often busy. Another common reason for making an order is wanting a specific type of food. It follows that almost a half of the respondents probably like to try interesting dishes and they are not able to prepare this food themselves (sushi, Czech cuisine, Thai cuisine etc.). Altogether 30.0% of respondents expressed that they want to support their favorite restaurant during a pandemic by ordering food online. This finding shows that people care about their favorite businesses and are trying to help them when crisis comes. Eventually the least frequent reason for ordering food was that people haven’t bought ingredients and they have to order ready-made dish (27.3%).

Table 2: Reasons for preference for ordering ready-made dishes online

Why do you order ready meals over the Internet?	Percent of Cases
I do not want to cook for myself.	51.3%
I want to order a specific type of food.	48.7%
I want to save my time.	36.7%
I order for more people (e.g. party).	30.0%
I want to support my favorite business during the pandemic.	30.0%

I haven't bought ingredients for cooking.	27.3%

Source: Own processing.

For respondents who are buying ready-made dishes at least once a week is the main reason for preference for ordering food online that they do not want to cook for themselves (65.8%), or they are trying to save time (50.0%). At the same time these respondents do not usually make orders for more people. Other three groups buy ready meals mainly because they want a specific type of food. Research participants who expressed that they buy ready meals less often are making orders for more people most frequently. It is possible to deduce that for these people one of the main reasons for ordering food online is making a big order for more people, for example when they are having a party. The results are shown in Table 3.

Table 3: Reasons for preference for ordering ready-made dishes according to the frequency of buying ready-made dishes online

Why do you order ready meals over the Internet?	At least once a week	Several times a month	Once a month	Less often
I do not want to cook for myself.	65.8%	50.0%	40.4%	53.8%
I want to order a specific type of food.	34.2%	53.8%	51.1%	61.5%
I want to save my time.	50.0%	26.9%	42.6%	15.4%
I order for more people (e.g. party).	7.9%	36.5%	34.0%	53.8%
I want to support my favorite business during the pandemic.	26.3%	34.6%	27.7%	30.8%
I haven't bought ingredients for cooking.	31.6%	38.5%	14.9%	15.4%

Source: Own processing.

In addition, the Chi-square test confirmed the statistical dependence between reasons for ordering ready-made dishes online and frequency of buying ready-made dishes online as the significance value was less than 0.05 (Table 4).

Table 4: Chi-Square Test

Pearson Chi-Square Tests	
Chi-square	41.335
df	21
Sig.	0.005*
Results are based on nonempty rows and columns in each innermost subtable.	
* The Chi-square statistic is significant at the .05 level.	

Source: Own processing.

5.3 Claims regarding to the purchase of ready-made dishes online

The claims are listed in the following table (Table 5), almost all these statements are rated above the average. This table shows the total (average) results and the results with respect to the order frequency. Respondents who are ordering ready-made dishes at least once a week agree most with the claim, that they were ordering ready meals during the pandemic more often (average value 4.11). This group of respondents also expressed the greatest agreement with the statement that they do not mind if the restaurant has set a minimum order value (average value 3.45). Respondents who make online food orders less often agree in the greatest extend with the claim that they perceive a difference in quality between imported food and food in a restaurant (average value 3.46). These consumers also most consent that they mainly order meals that they would not prepare at home and that it bothers them to get food packed in plastic boxes. Most faithful to the delivery service are those who make an online food order once a month. The total value is highest for the claim concerning ordering mainly ready-made dishes that consumers would not be able to prepare at home (average value 3.68). This result means that respondents agree with this statement to the greatest extend. In the contrary respondents least agree with the claim that it bothers them when they get food packed in plastic boxes (average value 2.68).

Table 5: Claims regarding to the purchase of ready-made dishes online

Claim	At least once a week	Several times a month	Once a month	Less often	Total
During a pandemic I was ordering ready-made dishes more often.	4.11	3.69	2.89	3.08	**3.49**
I do not mind if the restaurant has set a minimum order value.	3.45	3.31	3.28	3.23	**3.33**
I perceive a difference in quality between imported food and food in a restaurant.	3.16	3.40	3.21	3.46	**3.29**
When ordering I am faithful to one delivery service.	2.87	2.63	2.91	2.62	**2.78**
I mainly order meals that I would not prepare at home.	3.47	3.88	3.55	3.92	**3.68**
It bothers me when I get food packed in plastic boxes.	2.37	2.73	2.72	3.23	**2.68**

Source: Own processing.

Results of the ANOVA test show that dependence was confirmed by the claim "During a pandemic I was ordering ready-made dishes" (Table 6). The significance has a value of 0.01. In this case, respondents who buy ready-made dishes at least once a week rate this claim highly above average, unlike the other groups. Other factors (statements) are not statistically significant.

Table 6: ANOVA Test

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	(Combined)	35.446	3	11.815	7,769	<.001
Within Groups		222.047	146	1.521		
Total		257.493	149			

Source: Own processing.

Conclusion

The analytical part examined the preferences of consumers in the market for ordering ready meals in the Moravian - Silesian region. The frequency of use of this service was examined, where it was found that most consumers order regularly. It is possible to say that a total of 66% of consumers over the age of 15 order at least once a month, and even 25.3% of consumers order even more often, ie at least once a week. It can be assumed that this group includes people who were used to going to restaurants regularly for lunch before the Covid-19 pandemic. It was further investigated why consumers prefer this service. Consumers most identify with the statement that they do not want to cook for themselves, they want to order something special and also that ordering saves them time. Interestingly, almost a third of respondents (30.0%) stated the fact that they want to support their favourite restaurant during a pandemic as a reason. In the Moravian-Silesian region, it is therefore possible to see a certain empathy for local businesses. The Chi-square test showed significant differences between the reasons why consumers prefer ordering ready-made dishes and the frequency of ordering. It has been found out that people who order ready-made dishes at least once a week prefer this way of procuring food, as they do not want to cook only for themselves and at the same time, they want to save time. For groups with a lower ordering frequency, it proved to be an important reason that they want to order a specific food. The last part of the research concerned agreement with the claims. Based on the results, it can be said that the respondents identify with the statement that they order meals that they would not prepare at home (the mean was 3,68). This result only confirms the result that got the reason "because I want to order a specific meal". Consumers have also been shown to be aware of the negative of ordering food. Consumers stated that they perceived a difference between the quality of the food in the restaurant and the food ordered online (the mean was 3,29). It has also been found that the use of plastic packaging is not entirely easy for consumers. This claim received an average value of consent (the mean was 2,68). Consumers confirmed that they ordered ready-made dishes more often during a pandemic. It is therefore possible to say that the Moravian-Silesian region is also following a trend that is visible not only throughout the Czech Republic but also all around the world. At the same time, significant statistical differences were found in this statement using the ANOVA test regarding the frequency of use of the service. Those who order ready-made dishes at least once a week agree with the statement the most. It is possible to say that during the pandemic, respondents whose frequency of ordering is more regular, were making orders more often. Based on this, the authors are of the opinion that consumers who were ordering ready-made dishes occasionally before the pandemic and were used to cook on weekdays, did not adjust their consumption much, even during the pandemic. On the other hand, those who were used to just visiting restaurants, or already ordered food before the pandemic, continued to use the service, and increased it even more.

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RAISING MEDIA LITERACY SKILLS THROUGH MULTI-FOCUS TRAINING MODEL: CASE OF JEAN MONNET MODULE EU-INDY

Katerina Sirinyok-Dolgaryova – Olena Tupakhina

Abstract
The paper sums up the results of piloting a tailor-made Critical Media Literacy (CML) course developed under Erasmus+ Jean Monnet Module "European Media Standards and Values for Independent Journalism in the Post-Truth Era" and taught to a group of 20 students enrolled for Journalism training program at Zaporizhzhia National University (Ukraine) in 2020-2021 academic year. With low CML level still a challenge for young democracies like Ukraine, the relevance of this study is further determined by an urgent demand for raising Journalism training programs quality. Grasping a scope of topics from fact-checking techniques to conflict-sensitive writing, the course combined innovative methodologies (peer-to-peer learning, project-based learning, learning-by-doing) with flexible, cross-discursive module structure thus enabling a multi-focal approach to the topic and ensuring a more comprehensive, holistic vision of CML not only as a set of skills but as a value-charged practice deeply incorporated into journalism ethics and standards.

Key words:
Erasmus+ Project. European Media. European Values. Journalism Standards. Media Literacy. Ukraine.

Introduction and Background

Within the last decades, the global rise of media influence has been overshadowed by growing credibility gap in terms of mass media messages reception, with the newly coined 'fake news' term marking a new stage in media market development. In Ukraine, this disturbing tendency, particularly relevant for young democracies, has become part of hybrid war strategy fuelled by 2014 annexation of Crimea and ongoing conflicts in the Eastern part of the country that make local media quite biased[1]. Ukraine's entering the post-truth era is specifically challenging due to low public media literacy level (according to recent national survey, 42% of Ukrainians never check information for accuracy; in general, only 8% of adults possess high MIL level, with 15% and 33% scoring low and below average respectively[2]), underdeveloped civil society and an obvious lack of independent media performing in line with European professional standards, which results in overall low quality of national media product[3]. What can be viewed as a strategic threat in terms of securing national media mission as a watchdog of democracy is the fact that, due to a continuous disregard of professional standards on a national media market, the new generation of Ukrainian journalists feels disoriented in the ethical and professional guidelines[4] as distinguished by Ethical Journalism Network[5] and European Journalism Training Association[6]. Falling victims to one-sided approach to media literacy as a set of techniques

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[1] *Analysis Of Media-Situation In Southern And Eastern Oblasts Of Ukraine: Zaporizhzhya Oblast.* [online]. [2021-10-01]. Available at: <https://imi.org.ua/en/articles/analysis-of-media-situation-in-southern-and-eastern-oblasts-of-ukraine-zaporizhzhya-oblast-i1372>.
[2] NAUMOVA, M.*: Media literacy index of Ukrainians. Analytic report based on the findings of a complex research.* Kyiv : NGO Detector Media, 2021, p. 4-10.
[3] PORZGEN, G.: *Facing Reality after Euromaidan: The Situation of Journalists and Media in Ukraine.* Paris : Reporters Without Borders, 2016, p. 7-11.
[4] DOVZHENKO, O. (ed.): *Zhurnalistska osvita v Ukraini: chy pratsiue systema? Druge doslidzhennia zhurnalistskoi osvity.* Kyiv : Detector Media, 2018, p. 8.
[5] *About EJN. Our five core principles of ethical journalism.* [online]. [2021-10-01]. Available at: <https://ethicaljournalismnetwork.org/who-we-are>.
[6] DROK, N.: *Journalistic Roles, Values and Qualifications in the 21st century. How European journalism educators view the future of a profession in transition.* Windesheim, Zwolle : EJTA, 2019, p. 8-14.

and formal procedures rather than matter of values and professional identity, they fail to develop a holistic, integral vision of media literacy as a socially responsible attitude and practice. Together with the insufficient quality of journalism training continually reported by both national[7] and international monitoring agencies[8], this leads to considerable performance gaps in developing balanced, transparent, reliable, and responsible media environment in Ukraine. Facing the growing need of substantial reform in the field of both journalism training and raising public media literacy, this study explored the case of piloting a tailor-made Critical Media Literacy (CML) *EU-Indy* course developed under Erasmus+ Jean Monnet Module "European Media Standards and Values for Independent Journalism in the Post-Truth Era" as a means to answer the following research questions:
RQ1 – What is the actual media literacy level of students majoring in journalism?
RQ2 – To what extend could formal training influence the target audience's (TA) media literacy level?

1 Methods

1.1 Theoretical framework

The *EU-Indy* course was designed to provide students and teachers with educational and technical resources to create independent youth media, produce high quality talk content about events and people under-represented in mainstream media, and promote discussion, critical thinking and media literacy among wide public (via university online media and student public-service radio). As such, it is theoretically based on the concept of Critical Media Literacy also known as Media and Information Literacy (MIL) globally and in European context particularly. One of the well-known MIL definitions belongs to Hobbs and encompasses media literacy as "the full range of cognitive, emotional, and social competencies that include the use of text, tools and technologies; the skills of critical thinking and analysis; the practice of messaging composition and creativity; the ability to engage in reflection and ethical thinking; as well as active participation through teamwork and collaboration"[9]. The course team takes a UNESCO Media and Information Literacy Framework of five laws[10] also employed by the Council of Europe[11] and Deutsche Welle Academie[12] as a core for five course modules. These key aspects include five components of MIL: access, analyse, create, reflect and act.

1. *Access*: learning to use, comprehend, find information, and use texts, digital tools and technologies.

[7] DEMCHENKO, O.: Teaching Journalism in Ukraine: Between Formal and Non-Formal Education. In *Global Media Journal. German Edition*, 2018, Vol. 8, No. 2, p. 2-20.
[8] FOLEY, M.: *The Press and Democracy Building: Journalism Education and Training in Eastern and South Eastern Europe during Transition*. Dublin : Dublin Institute of Technology, 2010, p. 8-11.
[9] HOBBS, R.: *Digital and Media Literacy: A Plan of Action.* Washington D. C.: The Aspen Institute, 2010, p. 17.
[10] *Five Laws of Media and Information Literacy.* [online]. [2021-09-29]. Available at: <http://www.unesco.org/new/en/communication-and-information/media-development/media-literacy/five-laws-of-mil>.
[11] *Media and Information Literacy*. [online]. [2021-09-30]. Available at: <https://www.coe.int/en/web/digital-citizenship-education/media-and-information-literacy>.
CHAPMAN, M., OERMANN, M.: *Supporting Quality Journalism through Media and Information Literacy*. Strasbourg : Council of Europe, 2020, p. 10-15.
[12] REINECK, D., LUBLINSKI, J.: *Media and Information Literacy: A human rights-based approach in developing countries*. *DW Akademie Discussion Paper.* Bonn : DW Academie, 2015, p. 3-5.

2. Analyze: learning to interpret, analyze and evaluate print media, images, video and films, internet and social media.
3. Create: learning to create messages to express ideas using collaborative learning experiences with media production and digital tools.
4. Reflect: learning to develop the social and emotional skills that help them develop social responsibility and increase their awareness of media and technology as it affects people's attitudes and behaviors.
5. Act: being inspired to take action and use powerful voices to make a difference in the world.

To raise the MIL training efficiency, the course applies a methodological toolkit tailored for TA's needs and comprising such techniques as learning by doing, blended learning and peer-to-peer learning. The course implements a flipped classroom framework to secure the practical applicability of the course and soft skills development. A wide range of interactive learning methods was applied, including brainstorming sessions, role simulations and debates. The latter two are conceptually determined by Kohlberg's theory of moral reasoning[13], the Cognitive Developmental Approach denying values absolutism, and Shaftel's vision of role-playing as „the opportunity to explore through spontaneous improvisation…typical group problem situations in which individuals are helped to become sensitive to the feelings of the people involved“[14].

Close reading method, defined by Snow and O'Connor as „an approach to teaching comprehension that insists students extract meaning from text by examining carefully how language is used“, is applied throughout the course not so much as a teaching strategy but as a means „embedded within the larger motivational context of deep comprehension of complex and engaging topic“[15]. Deconstruction as a method of subverting core binary oppositions and hierarchies underpinning the media products' ideological framework to demonstrate its contextual determinacy and the relativistic nature of any possible meaning acquired from it was applied to reinforce the ethical dimension of the analysis, as suggested by Critchley[16]. To further enhance the practical component and to assess the skills students had acquired from the course, traditional summative assessment form was dropped in favor of a group project defense. The project must consider one of the socially important topics proposed by the teachers and be done in a form students find appropriate for their purpose – multimedia story/longread, radio talk, podcast, video etc.

1.2 Participants and procedure

The course was taught online to a mixed group of 20 students (3rd to 4th years of study and PhD students) majoring in Journalism, for 13 weeks (4 academic hours per week, 52 academic hours in total). The course comprises 5 modules, each of them focused on a specific issue and taught on a fit-for-purpose basis by an experienced staff member (6 in total, one module is co-taught by two staff members) with profound background in the field. Delivered by the team of trainers possessing considerable experience in international research and

[13] KOHLBERG, L., LEVINE, C., HEWER, A.: *Moral stages: a current formulation and a response to critics*. Basel, New York : Karger, 1983, p. 21.
[14] SHAFTEL, F.: *Role playing for social values.* Englewood Cliffs : Prentice Hall, 1967, p. 52.
[15] SNOW, C., O'CONNOR, C.: Close Reading and Far-Reaching Classroom Discussion: Fostering a Vital Connection. In *Journal of Education*, 2016, Vol. 196, No. 1, p. 1-8.
[16] CRITCHLEY, S.: *The Ethics of Deconstruction: Derrida and Levinas.* Edinburgh : Edinburgh University Press, 2014, p. 13-19.

education projects, the course synergistically incorporates the outcomes of multiple international initiatives, such as Erasmus+ KA2 CBHE DESTIN ("Journalism Education for Democracy in Ukraine: Developing Standards, Integrity and Professionalism") and Jean Monnet Modules "European Values in Literary Arts" and "Tailoring European Memory Politics for Peacemaking in Ukrainian Society". The structure of the course comprises the following modules:
Module 1, *Media culture in the European society,* introduces the students to the principles of media culture, its basic elements and ways of acquiring media literacy skills and information competencies.
Module 2, *European journalism standards: historical roots and current challenges,* provides sufficient background for understanding historical roots and core concepts of European Journalism standards, as well as explores the cases of their application and violation in modern Ukrainian media.
Module 3, *Conflict-sensitive journalism for radio and online media,* sets students to master basic theory of conflict-sensitive journalism and to communicate on sensitive topics.
Module 4, *Fact checking and verification in media*, helps students acquire basic media literacy skills in fact checking and verification for conscious and responsible consuming of media messages and user generated content in social media.
Module 5, *Communicating European values through opinion writing,* introduces student to European values concept and demonstrates a variety of persuasive writing techniques while simultaneously stimulating critical thinking over European values-related myths. This multi-focused structure is aimed at providing an integral, holistic vision of media-literacy not only as a set of skills, but also as a value-charged practice deeply incorporated into journalism ethics and standards. The compulsory learning-by-doing component of the course comprises airing a topical radio show (analytical story, feature story, interview or reportage voicing underrepresented and minority groups and active citizens from local communities) on the university's online student radio under module leads' supervision. The radio show is an educational and professional development platform for future journalists to master their skills in keeping professional standards and social responsibility as journalist. It also serves as a resource hub for practical tasks within the course modules: students use specific equipment to create and verify content. Each course iteration ends up with a public presentation of projects students should work upon in smaller groups (3 to 5 participants) for 10 weeks throughout the course (3 weeks being reserved for topic choice and setting project management issues), gradually applying knowledge and skills acquired in the class. The projects are subject to open discussion, technical expertise, and peer assessment. Taking advantage of the mixed nature of the pilot group, PhD students were encouraged to take lead of the groups working over the project as a part of peer-to-peer learning model, thus enabling horizontal experience transfer. Mentoring the undergraduates was also considered a suitable active citizenship case and leadership qualities development tool.

1.3 Assessment

To measure the course efficiency, the following forms of assessment were applied:

- Incoming assessment meant to measure TA's initial MIL level, based on Masterman's seminal MIL assessment model17 adopted and adjusted for specific TA (students majoring in Journalism). Students were issued a media product sample and asked to assess it in terms of professional standards compliance, i.e., to detect any possible cases of hate speech, fake, biased coverage, paid-for coverage, manipulative writing and propaganda,

[17] MASTERMAN, L.: *Teaching The Media.* Abingdon, Oxon : Comedia Publishing Group, 1985, p. 25-27.

mixing facts and opinions, disbalanced writing etc. This incoming assessment type allows not only to measure TA's MIL skills but also to identify possible performance gaps in terms of MIL training.

- Standard formative assessment throughout the course.
- Peer-to-peer formative assessment concluding each module and comprising oral feedback and reflections upon other students' performance.
- Outgoing assessment meant to deliver an integral vision of students' progress and thus comprising two types of assessment: standard (anonymous) course quality assessment performed online and final group project assessment. The latter comprised evaluating methodology relevance, content quality, professional standards compliance, technical, digital, and specific MIL skills (such as fact-checking).

2 Results

Due to a lack of referential background (no surveys measuring Journalism students' MIL level have been conducted so far in Ukraine), the results of the incoming assessment were projected on general Media Literacy Index conceptual model designed by Detector Media analytical group[18]. Percentagewise, the TA's MIL level correlation corresponds to that detected nation-wide: half of the group (10 out of 20 students) possess average MIL level, with 7 out of 20 scoring below average. Only 3 out of 20 students (2 of them enrolled for PhD training program) possess MIL level qualified sufficient for professional career in Journalism. The incoming assessment results analysis proved that, while seemingly experiencing no troubles with fact-checking or identifying fakes, at the same time, the students obviously struggled with such professional standards violation cases as disbalanced reporting and mixing opinion and facts. They also proved particularly incompetent in terms of detecting hate speech on conflict sensitive topics (mostly dealing with ethnic stereotypes and war conflict in the Eastern Ukraine); however, their sensitivity to gender-related hate speech turned out to be significantly higher, which can be explained by growing presence of gender equality topic on the national media radar. Another challenging aspect arising from incoming assessment results analysis deals with value-related issue. Most students experienced considerable difficulties with detecting and decoding value-shaping messages in the media products under analysis. In particular, their European values awareness turned out to be superficial and fragmented, clearly lacking the link between verbal announcement and real-life practice. With this picture in view, the topical scope of practical tasks issued throughout the course was redefined, with particular attention paid to performance gaps identified. I.e., the range of radio show topics comprised:

- life of internally displaced people in Ukraine,
- success stories of local citizens,
- social entrepreneurship and innovations,
- social responsibility of citizens in their local communities,
- climate change and environmental issues,
- educational reform in Ukraine,
- responsible parenthood,
- bulling,
- social media and internet dependence etc.

[18] NAUMOVA, M.: *Media literacy index of Ukrainians. Analytic report based on the findings of a complex research.* Kyiv : NGO Detector Media, 2021, p. 12-14.

To furthermore raise students' awareness in the values-bound aspects of media literacy, to boost their critical thinking competencies and to help them master basics of deconstruction analysis, they were engaged in a few Oxford debates on provocative and ethically challenging issues. The topics of debate sessions comprised:

- the necessity of professional standards compliance for Ukrainian journalists,
- the social responsibility of media,
- commercial profitability as a measure of success on media market,
- value-related messages of modern Ukrainian pop-culture,
- stereotypes-based hate speech in media as a means to raise tension in the society, etc.

Role simulations implemented throughout the course were aimed at developing students' emotional intellect and sensitivity alongside with improving their rhetorical skills and ability to deliver complex ideas to various types of audience. The role simulation types applied during the course included:

- explaining the necessity of media literacy to a 5-year old,
- teaching elderly people the basics of fact-checking,
- communicating conflict-sensitive issues to a biased or vulnerable audience.

The topical scope of group projects prepared and defended by a pilot group successfully bridged topic urgency criteria with the course priorities. The projects highlighted such burning issues as gender equality (podcast "Gender discrimination: Women underrepresentation in local political discourse"), fighting fakes (analytical longread "COVID-19-related fact-checking of local politicians' statements"), cyberbullying (multimedia story "Cyberbullying at school and HEI") and professional standards violation in local journalism. Focused predominantly on local context, the projects demonstrated the necessity of media literacy as here-and-now practice, thus bridging the gap between theoretical concept and real-life experience. On the other hand, they significantly raised students' awareness of active and responsible citizenship by assigning them socially important roles of researchers and investigators and providing practical dimension to the results of their activities. The projects' public defence demonstrated significant growth in terms of students' awareness of diverse and balanced source-base reporting. All the projects submitted for assessment represented alternative points of view: the students interviewed local experts in gender issues, recorded vox-populi videos surveying students about their experience in cyberbullying on campus, applied the fact-checking techniques while checking fakes and misinformation in the COVID-related statements of the local officials shared on social media. With PhD students appointed mentors and group project leaders, the undergraduates not only acquired the necessary level of pre-submission quality expertise, but also efficiently improved their professional skill sets, which was specifically highlighted in the outgoing assessments. Assigned a variety of tasks accomplished together with their mentors, they conducted social surveys and expert interviews, mastered rules of conflict-sensitive writing, prepared and recorded podcasts and radio shows and otherwise enhanced their digital competencies. As for the mentors themselves, they pointed out significant soft skills growth in terms of leadership, responsibility, and communication. The results of outgoing standard quality assessment demonstrated overall satisfaction with the course content and performance. The vast majority of course attendants not only felt positive about the course but also stated a considerable growth in terms of hard and soft skills. In particular, 76% reported raising their sensitivity to falsified media content, 71% - to hate speech, 56% - to manipulative propaganda writing. 64% felt more confident when writing on conflict-related issues and 55% found it easier to decode value-charged messages and to subsequently use opinion journalism to promote European values. Almost 90% stressed upon the professional standards compliance importance, with 81% claiming to have enhanced their understanding of media literacy as a value-based practice. Among the strong points of the course as defined by students, its practical component was pointed out by 100% of attendants. The students specifically praised the balanced and multi-focused structure of the course that allowed them to make immediate use of theoretical concepts they learned (78%), radio show assignments (71%) and project assignments (68%). In-class teamwork as a tool for social skills improvement was considered yet another course benefit (54%).

Conclusion

Focused on a specific target audience (students majoring in Journalism and presumably equipped with media literacy skills sufficient to pursue a career in media), the study demonstrates that measuring the actual level of TA's media literacy upon enrollment for Journalism training program might be very helpful when designing tailor-made courses aimed at covering specific MIL comprehension and performance gaps. The study has shown that the actual MIL level of students majoring in Journalism might, in fact, be lower than expected, which allows to raise the question of an entrance MIL test and subsequent training for the 1st year students. It has been proved that core MIL skill and competencies serve as a groundwork students' professional skills and standards would be built upon and, as such, require specific attention on the part of curriculum designers. The study's point that formal training could significantly influence the TA's media literacy level has been supported by the outgoing assessment results. It should be noted, though, that not all the methods and techniques applied during *EU-Indy* course (such as peer-to-peer learning and mentoring in mixed groups of students) seem suitable for routine implementation in a traditional study process – at least, in Ukraine's highly regulated HE system. Another challenge arising from piloting the course and questioning its wider applicability concerns the staff. The multi-focused approach applied by *EU-Indy* course with its flexible module structure requires internationally experience trainers with profound understanding of both formal and informal teaching methods and considerable practical experience in the field. The course piloting proved that MIL issues are of a high interest among students. Even though the course is optional, it is quite popular among its TA: with 20 slots available for the second semester 2021-22, 37 students applied. The *EU-Indy* project has two more years of teaching the course to mixed groups of students (that is, including students from faculties other than Journalism). This way, the project team plans to collect and process unique empirical data on the way non-Journalism majors experience MIL under Journalism majors mentoring to raise the course's applicability nationwide.

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PERSONNEL MARKETING DURING THE PANDEMIC

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Abstract
Personnel marketing is focused on active recruiting employees on the labor market. This activity is considered an independent part of marketing with a strong link to personnel and strategic management. Like marketing, which is focused on products and services, HR marketing is focused on the promotion of employees and employers. Today, the Internet is mainly used for personnel marketing. During the pandemic, some companies did not have jobs for their employees. In some areas, on the other hand, companies were unable to find employees. Due to quarantine restrictions, most companies sought employees exclusively through the Internet. During coronavirus, we monitored the situation in the food industry, where companies searched in vain for employees not only from the Czech Republic but also from abroad.

Key words:
Covid 19. Chatbots. HR marketing. Internet. LinkedIn. Personnel and strategic management. Personnel marketing.

Introduction

In today´s turbulent times, companies need to embrace new business models and paradigms of B2B marketers, learn from the mistakes of others and get inspired by new ways and innovative ideas, as innovations represent a source of a long-term profit, business success and competitive advantage. Speed of innovations diffusion increases, there are new competitors, companies are consolidating; overcapacity and abundance of financial capital is a standard, technological progress is an accelerator, knowledge become an input capital, while sources are a problem[1]. Personnel marketing focuses on active recruiting employees in the labor market. This discipline on the border of management and marketing is considered an independent part of marketing with a strong link to personnel and strategic management. As well as product-oriented marketing, personnel marketing is future-oriented. It uses recruitment methods, such as advertising in most media. Today, however, the most common medium in the field of personnel marketing is the Internet. In online personnel marketing, it is important to respect the privacy of candidates. More on this topic Sigmund[2]. In personnel marketing and marketing in general, the customer is considered to be a key object of interest. In this case, the customer is a company that is looking for a suitable employee. First, it is important to define the needs of such a company. Unlike a regular customer who, for example, buys consumer goods, the needs of a potential employer are similar to the situation of an industrial customer. Based on the definition of the need, eg. through job analysis, this need is formulated in an advertisement that is available on the Internet. It is possible to advertise on the Internet directly or through a company that has this advertisement as a subject of activity. In this case, company is the seller and mediation is the product (establishing contact with the applicant). For this type of service pays, in most cases, only the employer. The employee does not pay for this service and from the point of view of law and ethics should not be paying either. Although a job seeker does not pay for this service, the

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[1] VANÍČKOVÁ, R., SZCEPANSKA-WOSZCYNA, K.: Innovation of business and marketing plan of growth strategy and competitive advantage in exhibition industry. In *Polish Journal of Management Studies,* 2020, Vol. 21, No. 2, p. 432.
[2] SIGMUND, T.: Model of Online Privacy. In *IDIMT-2017 Digitalization in Management, Society and Economy,* Linz : Trauner Verlag Universität, 2017, p. 175. [online]. [2020-10-22]. Available at: <http://idimt.org/wp-content/uploads/proceedings/IDIMT_proceedings_2017.pdf>.

company's promotional activities also focus on him. Of course, some common principles apply to newspaper advertising, as well as to advertising on the Internet. If an advertisement is used, companies should avoid vaguely naming the position that the candidate should hold, and the emphasis should be on clarity and comprehensibility. On the other hand, this recommendation is considered by some experts to be too conservative. Rather, they recommend that the advertisement should interest the job seeker in the first place. The necessary information can be obtained additionally by the job seeker. For these cases, it is appropriate to use the so-called gamification. Gamification is closely connected with the issue of HR marketing and it is a tool that is suitable not only for IT workers. Gamification is described as the introduction of game elements in a non-game environment and from the point of view of personnel marketing it can become a tool that will appeal to job seekers.

1 Methodics

As for the resources that directly concern our issue, personnel marketing during the quarantine and the reactions to Covid 19, it can be stated that till the submission of this is article to WoS or Scopus, no work on this topic has not been published. Therefore, a direct comparison with other studies is not possible. There are, of course, jobs that deal with a different situation in the field of personnel marketing just before quarantine, but the current situation in this case is diametrically different. Therefore, we were forced to use mainly methods of identification, analysis, comparison and synthesis.

2 Personnel marketing on the Czech market

As for the Czech labor market, it is currently marked by a reduction in economic activities to prevent the spread of Covid 19. The Czech labor market is currently petrified, among other things, by the government paying companies money to maintain jobs. At the same time, however, workers are missing in some areas, such as agriculture, food and health. This shortcoming is caused not only by the bad situation before quarantine, but above all by the current situation. In this situation, companies have to carry out many activities to attract suitable employees. For twenty years now, LinkedIn has been helping HR marketing, where so-called headhunters and other HR workers are looking for promising employees. "For headhunters, social networks are an excellent aid, which effectively helps them to identify the right candidate and enables them to establish contact quickly. For collection of information, we use LinkedIn, Google+ and Facebook, and the level of security and presentation of private profiles are important evaluation criteria."[3] These social networks are mainly used by young people, who according to suffer from a higher unemployment rate than the adult population. The labor market for young people is also more sensitive to fluctuations.[4] This research was done in car factories affected by the worldwide Corona 19 pandemic.[5] Rated by today's optics, engineering companies will rather lay off, which is also part of the life cycle of employees in case of "employee leaving the company" and companies should approach this very sensibly

[3] *Social Recruiting Survey Results.* [online]. [2014-12-11]. Available at: <http://web.jobvite.com/rs/jobvite/images/Jobvite%202010%20Social%20Recruiting%20Report_2.pdf>.

[4] REMEIKIENĖ, R. et al.: Youth Unemployment and Self-employment: Trends and Perspectives. In E*&M Economics and Management*, 2020, Vol. 23 , No. 3, p. 38. Available at: <https://doi.org/10.15240/tul/001/2020-3-003>.

[5] UNGERMAN, O.: Use of Social Networks in Personnel Marketing. In *Proceedings of the 12th International Conference: Liberec Economic Forum*, 2015, p. 41.

and should also think about their employees because of poorly executed "outplacement" they can severely damage their reputation.

2.1 The beginnings of this sector in the Czech Republic

There are many portals in the field of personnel marketing in the Czech Republic and not only there. We have been monitoring the situation in this area for a long time. In 1996 were established the first companies dealing with job advertising on the Internet in our territory. These were mainly LMC Jobs Ing. Libor Malý and Czech Job Bank of Amefa Project Consultants, s.r.o. Today, the following companies dominate the Czech market: LMC Jobs, which has become the market leader in this segment, Jobpilot, s.r.o., and CV-Online Czech Republic. Jobpilot penetrated into the Czech Republic from the Federal Republic of Germany, where it is one of the largest companies dealing with personnel marketing. CV-Online Czech Republic is a company operating mainly in Central and Eastern Europe. This company comes from Estonia, where it was founded in 1996. CV - Online no longer operates on the Czech market. The Internet advertising service is designed for both employees and employers. The costs are paid by the employer. This service is provided by all named companies. These services differ from each other in some aspects, such as the payment strategy. All advertisements in the Czech Labor Bank were free until the autumn of 96, after this date a fee of up to 8 CZK was charged for one advertisement and for one day of publication. It ought to attract potential clients who would use the services, they will already have as paid services. There is no reliable information yet on whether this strategy has been successful. Czech Job Bank no longer provides this service today. Another companies from the beginning has already introduced this service as paid. As for fees, they are individual at LMC Jobs and subject to company secrets. Some companies have a special offer for students, in the Czech Republic these are the so-called holiday jobs offered by LMC Jobs, an American companies are offering an internship, that may or may not be paid for. Most universities require these internships as part of their studies. [6] Very important for these companies are exclusive partners who represent a regular income for them. LMC Jobs has O2 as its exclusive partner. It is interesting that the company Czech Job Bank should have such a partner Vodní stavby, which is not a company that is connected with computer technology. Educational counselors at secondary schools could be entrusted to work with this network of job portals. There are so-called Career Centers at American universities, which mediate job opportunities for students and graduates. Some universities in the Czech Republic already have experience with such centers. Today, the tools to which HR workers are accustomed are not used to such an extent for these groups of employees, as in the past: i.e. advertising on job portals and the use of LinkedIn, Google+ and Facebook.

2.2 Diagnostic methods and their use in personnel marketing via the Internet

A controversial aspect of the Internet is the completely free movement of information. The problem, and the benefit at the same time, is that there is no censorship on the Internet. Important information can be found here, but also instructions for making explosive, etc. There are also some information in the field of personnel marketing, which free publishing could do more harm than good. These are, for example, psychological and performance tests. On one hand, knowledge of these tests can increase the candidate's chances of finding a job, depending on the fact that many employees will experience anxiety testing, especially if the

[6] SLÁDEK, P.: *Práce na dálku jako alternativa pro regionální rozvoj.* Praha, ČZU, PEF, Katedra humanitních věd, Doktorská disertační práce, 2006.

candidate has no experience with those tests. On the other hand, it is very short-sighted if some psychologists let the public see their laborious tests.

2.3 The situation in Czech agriculture from the perspective of HR

As we described above, the situation on the labor market has changed radically during the quarantine period. The whole situation was further complicated by the traditional shortage of workers in agriculture. One of the respondents had been arranged for many years with a family from Moldova, which could not come this season. The situation became so serious that the organization of arrivals of foreign workers began to be dealt with not only by the state through its representative bodies, but also by the Chamber of Commerce, Food and Agriculture. The situation in Czech agriculture from the point of view of HR has not been good for a long time. Even before the quarantine, the personnel dealt with the problem of the generational change of workers, when the old people left and the young did not come. One of the problems is also the lack of interest in studying at secondary agricultural schools. The solution to this problem would be to create a system of promotion of secondary agricultural schools. The strategy should focus primarily on the practical aspects of school marketing, which can be applied by the management of specific schools without greater demands on financial and human resources. It is also assumed that most activities will be done by school staff and only a small part will be provided by external suppliers, such as the creation of web pages. The strategy should include recommendations for further action by the end of the calendar year. Part of the action steps should be the elaboration of a handbook of practical marketing in schools, or the preparation of a seminar for secondary school staff. However, this solution is long-term and most companies are addressing staff shortages now. The solution is to use foreign workers. Regarding the employment of foreign workers, there are several programmes at the ministry level. We can mention, for example, the Extraordinary Work Visa (guarantor of the Ministry of Agriculture) and a Qualified Employee (guarantor of the Ministry of Industry and Trade). Specific employees are selected and the whole process is administered by the selected company.

Table 1: Number of issued work permits

Year 2020	**Number of issued work permits - total**	Work permit for short-term employment from total	Work permit for seasonal workers from total
February	**19 851**	19 225	301
March	**15 554**	14 997	268
April	**5 241**	4 533	81
May	**3 994**	3 384	358
June	**16 902**	13 830	2 764
July	**18 923**	12 943	5 541
August	**17 576**	11 831	6 279

Source: JISKROVÁ, B.: *Zaměstnávání cizinců v zemědělství.* [online]. [2020-10-22]. Available at: <https://www.zscr.cz/clanek/zaznam-z-online-konference-zamestnavani-cizincu-v-zemedelstvi-u-30-9-2020-praha-5498>.

Possibilities of arrival of foreigners
Non-listed third-country nationals may only arrive for both short-stay and long-stay visas in cases specified by the Minister of Health's protective measure of 18 September 2020. Short-term (Schengen) visas and stays – e.g.:
1. seasonal workers, workers in food production, health and social services,
2. scientific, key and highly qualified staff.
3. nationals of Ukraine - if they submit an application in Ukraine and do not exceed the maximum number of applications. [7]

Long-term visas and stays - e.g.:
1. special work visas, food workers and seasonal workers,
2. workers and their family members included in the Key and Research Staff Programme and the Highly Qualified Employee Programme,
3. employees included in the Qualified Employee Programme,
4. holders of a long - stay visa for the purpose of taking over a residence permit (under the Qualified Employee Programme applies to all professions).[7]

Another possible tool is the Special Work Visa, which is intended directly for Ukrainian nationals working in agriculture, food and forestry. This programme is intended for workers with the lowest qualifications, of which is currently great interest, because citizens of the Czech Republic and citizens of other EU countries are not interested in this work. [8]

3 Economic migration as a phenomenon of modern times

Economic migration is generally characterized as the movement of people from one region to another because living conditions or job opportunities are not suitable in their own country, and therefore these economic migrants are looking for other countries to improve their standard of living. The issue of economic migration has historical roots throughout the world, but its reasons are different at each historical stage. The population of the Czech lands, as well as the whole of Central Europe, also has extensive experience with economic migration in the past.

3.1 Economic migration and government programmes of the Czech Republic

Each country's migration policy should be an effective tool for ensuring the required match between supply and demand in the labor market. In the Czech Republic, this process of economic migration is regulated by government resolutions in order to address the requirements for skilled and less qualified workers from third countries. The reason for the demand for foreign workers is mainly the long-term shortage of domestic labor, but also the effort to enrich the labor market with highly qualified foreign workers. The programmes thus respond to the persistent deficit of workers on the Czech labor market, simplify and accelerate migration procedures and significantly expand the territorial focus of existing projects, systems and schemes. It is also important that employment agencies cannot be involved in

[7] PROKEŠ, L.: Fungování vládních programů ekonomické migrace v návaznosti na COVID-19. In *Zaměstnávání cizinců v zemědělství.* [online]. [2020-10-22]. Available at: <https://www.zscr.cz/clanek/zaznam-z-online-konference-zamestnavani-cizincu-v-zemedelstvi-u-30-9-2020-praha-5498>.
[8] ROMAN, P. J.: Mimořádné pracovní vízum. In *Zaměstnávání cizinců v zemědělství*. [online]. [2020-10-22]. Available at: <https://www.zscr.cz/clanek/zaznam-z-online-konference-zamestnavani-cizincu-v-zemedelstvi-u-30-9-2020-praha-5498>.

these programmes, there must always be direct employers. (Employment agencies can only mediate short-term work stays of foreign workers for 3-month so-called Schengen visas). Economic migration is one of the basic factors that support the development of domestic and foreign investment, contribute to the development of foreign trade, and increase the competitiveness of the Czech economy. In the Czech Republic programmes controlled economic migration operate due to approved government programmes, which are provided by the Ministry of Industry and Trade of the Czech Republic in close cooperation with the Ministry of the Interior and the Ministry of Labor and Social Affairs. The Ministry of Agriculture is also a co-guarantor in the field of recruiting workers for agriculture, food and forestry. It should be noted that there is no legal right to be included in these programmes. Government Resolution No. 581 of 26 August 2019 approved new programmes for controlled economic migration, which have been implemented since 1 September 2019. These new programmes have replaced and transformed all previous valid projects and systems.

3.2 New economic migration programs

Highly Qualified Employee Programme

The aim of this program is to provide support to direct employers who need to bring highly qualified foreign workers to the Czech Republic, who have the opportunity to obtain a long-term residence permit, including their closest family members. This program is not territorially limited and is implemented in all third countries. According to the CZ-ISCO job classification, these highly qualified employees perform activities in the main classes 1-3, i.e. legislators and managers, specialists, technical and professional workers (including medical professions). Responsible for the programme is the Ministry of Industry and Trade of the Czech Republic, which also handles applications for inclusion in the programme.

Key and Research Staff Programme

The aim of the program is to provide support to major Czech and foreign investors, research organizations, technology companies and start-up companies that need to import foreigners into the Czech Republic as statutory bodies, managers or specialists. According to the CZ-ISCO job classification, these foreign workers perform activities in the main classes 1-3, i.e. legislators and managers, specialists, technical and professional workers. The program is also not territorially limited, a long-term residence permit can also be obtained for immediate family members. The programme is managed by the Ministry of Industry and Trade of the Czech Republic in cooperation with the CzechInvest Agency.

Qualified Employee Programme

The aim of the program is to provide support to employers who need to import qualified foreign workers to the Czech Republic from Ukraine, Mongolia, Serbia, the Philippines, India, Belarus, Moldova, Montenegro and Kazakhstan. According to the CZ-ISCO classification of occupations, these foreign workers perform activities in the main classes 4-8 in the field of production and services and sales or in the public sector, i.e. officials, skilled workers in agriculture, forestry and fishing, craftsmen and repairers, machine operators and fitters. The foreign employee will receive an employee card, with a visa valid for 2 years of stay. The programme is managed by the Ministry of Industry and Trade of the Czech Republic; applications for inclusion in the programme are handled by guarantors from among business representatives (e.g. the Chamber of Commerce of the Czech Republic, the Confederation of Industry and Transport of the Czech Republic, the Agrarian Chamber of the Czech Republic and the Food Chamber of the Czech Republic).

Special Work Visa

This programme under the auspices of the Ministry of Agriculture is based on Government Resolution No. 219/2019 Coll. with effect from 1.12.2019. This programme works as a new tool for recruiting Ukrainian nationals working in agriculture, food or forestry. It is possible to include in the program both qualified workers (CZ-ISCO activity in main classes 4-8) and unskilled auxiliary workers (CZ-ISCO class 9). The guarantors through which applications can be submitted are representatives of the business representation, such as the Agrarian Chamber of the Czech Republic, the Food Chamber of the Czech Republic and the Forestry and Timber Chamber of the Czech Republic. The length of the residence permit is a maximum of 1 year, can be applied repeatedly.

3.3 Employment of foreigners at the time of coronavirus

The situation in the field of economic migration is very dramatic during the coronavirus crisis. At the time of the first state of emergency, on the basis of Government Resolution No. 194 from 14 March 2020 until the end of June, the reception of visa applications, temporary and permanent stays was suspended for all embassies of the Czech Republic abroad. There was also an immediate suspension of applications to all government economic migration programmes. Since July 2020, these government programmes have been reactivated. Ensuring certificates of negative COVID-19 infectivity and organizing the complex transport of mainly Ukrainian workers through Hungary and Austria remains a serious problem for foreign workers. The current situation still does not indicate that the number of requirements for the employment of foreign workers will be reduced, companies are interested in teaching and training these workers and maintaining them in the long term. Due to the unfavorable situation in securing qualified professions, there will be interest in this category of foreign workers in the future as well. The question is how the coronavirus crisis will affect the increase in unemployment in the Czech Republic, and thus in the possibilities of recruiting domestic workers for vacancies in industry, agriculture, food and services. There will also be a significant demand for extensive retraining of domestic workers in accordance with the requirements of the business sphere.[9]

4 Personnel marketing in other countries

4.1 Slovakia

There is similar experience in Slovakia, where they researched personnel marketing also in mechanical engineering.[10] As for portals dealing with personnel advertising, there are often "sisters" of Czech portals, such as www.profesia.sk and www.jobs.com. There are also Slovak companies, for example www.jenewein.sk. Historically, as in the Czech Republic, some bigger press media companies, such as www.sme.sk, also took part in this activity. This situation was already described in 2005 by Borsikova[11] in her survey of the same year.

[9] Press releases of the Ministry of Industry and Trade of the Czech Republic
Press releases of the Ministry of Foreign Affairs of the Czech Republic
Press releases of the Ministry of Agriculture
Press releases of the Czech Chamber of Commerce

[10] GOGOLOVÁ, M. et al.: The Use of External Personnel Marketing in Slovakia. In *Procedia Economics and Finance*, 2015, Vol. 26, No. 1, p. 135.

[11] BORSIKOVA, B.: Personálny marketing – výzva personálnemu manažmentu. In *Zborník z medzinárodnej konferencie Nové trendy v marketingu*. Trnava : FMK UCM, 2005.

4.2 Russia

A similar issue is also addressed in the article [12], which describes the implementation of personnel marketing in Russia. According to the author, the main reason is the rising level of job seekers and greater interaction between the labor market and educational institutions.

5 New trends in personnel marketing

An interesting innovation in this area is, for example, the possibility of an interview through the SKYPE or similar online communication platforms. This option is very suitable from a quarantine point of view today, but it is quite debatable when it comes to natural human communication. The use of technical innovations, such as video interviews with job seekers, are usually perceived by employers as a means of reducing time and costs. According to the survey[13], these interviews are not positively received by job seekers. Applicants usually preferred a face-to-face meeting with a HR specialist rather than a video interview. According to Horn and Behrend research [14], 89% of job seekers prefer personal participation in a job interview and 9% prefer a video interview. In South Korea went even further in this direction and there they run the possibility of a job interview with a robot. There are companies that offer courses on how to succeed in this interview. This possibility, which first appeared in South Korea, is already used in Sweden by L'Oréal, and even Russians are working on robot interviewing. In the European Union, however, this technology is being received with great embarrassment. One type of these robots are the so-called Chatbots, which according to the study [15] are very productive tools in the recruitment process of future employees. According to the same source, they are able to solve complex problems in the recruitment process. For these needs, a model based on VOBN (Variable-Order Bayesian Network)[16] is used and can provide HR professionals with both high accuracy and interpretability. As for HR professionals who rely on conventional methods of work, this model provides counterintuitive insights/knowledge that these HR professionals could overlook.

Conclusion

Changes in the field of personnel marketing before and during the quarantine caused by COVID -19 have a tradition of about twenty-five years in the Czech Republic. At the beginning, several servers were created here, from which eventually became the most dominant Libor Malý's Job.cz. At the beginning, the standard was to write conservative job advertisements with all the necessary information. Today, on the other hand, advertisers use playfulness and gamification to engage their ad. However, this playfulness concerns IT workers and other young professionals, and so far it has not reached the example of Czech

[12] POPKOVA, E. G. et al.: Implementation of the concept of personnel marketing in modern Russia. In *World Applied Sciences Journal*, 2013, Vol. 22, No. 3, p. 393.

[13] PROOST, K.: Applicants' pretest reactions towards video interviews: the role of expected chances to demonstrate potential and to use nonverbal cues. In *European Journal of Work and Organizational Psychology,* 2020, Vol. 30, No. 2, p. 265-273.

[14] HORN, R. G., BEHREND, T. S.: Video killed the interview star: Does picture-in-picture affect interview performance? In *Personnel Assessment and Decisions*, 2017, Vol. 3, No. 1, p. 55.

[15] NAWAZ, N., GOMES, A. M.: Artificial Intelligence Chatbots are New Recruiters. In *International Journal of Advanced Computer Science and Applications*, 2019, Vol. 10, No. 9, p. 4.

[16] PESSACH, D. et al.: Employees recruitment: A prescriptive analytics approach via machine learning and mathematical programming. In *Decision Support Systems*, 2020, Vol. 134.

agriculture, where workers are decreasing due to the generational change. One solution to this situation is to teach secondary schools, as the main suppliers of experts in agriculture, the principles of school marketing, but this journey is very lengthy. Farmers and food producers already need their employees today, which is why, as throughout the European Union and finally throughout the developed world, they bring their employees from other less developed countries. It is interesting, that this recruitment of foreign employees is again rather conservative and lacks any elements of gamification. On the other hand, there is debatable phenomenon in the developed world. This phenomenon is a video interview with a HR specialist - a robot. And this may be one of the changes in personnel marketing after COVID-19.

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TECHNOLOGIES IN MARKETING - WHAT THEY HAVE BROUGHT AND WHAT THEY CAN BRING TO US IN THE FUTURE

Natália Stalmašeková

Abstract
Technologies intervene in every aspect of our lives. They bring a change in the way we communicate, produce, spend our free time and also obtain and buy desired goods. It is the purchase of goods that is an activity that every consumer regularly encounters. For some it is a necessary activity and for others a favourite pastime. Purchasing process does not only concern the consumer but also companies, which on the one hand also act as users of the benefits of technology in the purchasing process but are also implementers of technology that affect the entire marketing mix. The aim of the paper is to describe what innovation have brought modern technologies to the components of the marketing mix, namely product, price, place and promotion, what benefits they bring to the consumer and what advantages, disadvantages and risks can consumer expect from modern technologies in the future. The paper also points to the fact that the future of technology in marketing is now and many technologies of the future are already in various stages of their innovation cycle.

Key words:
Marketing mix. Purchasing process. Shopping experience. Technologies.

Introduction

Nowadays, new generations of consumers are technology enthusiasts and appreciate innovative technological approaches regarding their purchasing decisions. Many companies have seized this opportunity and have embraced technology to its fullest potential since the main purpose of the business is to meet the customer's needs.[1] Some companies are just exploring the potential that technologies could bring them in terms of their marketing mix. Technologies undeniably have a major impact on marketing. What we buy, how we buy, the method of delivery and also how the product is presented to us is gradually changing thanks to new technologies. An important accelerator in the implementation of new technologies has been undoubtedly a pandemic of the new corona virus. For the new generation using technology in the purchasing process means a big step forward. Technologies save time and bring fun and opportunities for the consumer. For the company. they fundamentally change the production process[2] and enable the more cost-effective production.[3]

1 Marketing mix

The first use of the concept of the marketing mix can be traced to the Harvard university to late 1940 and is linked to the professors James Culliton and Neil Borden. The 4 Ps, in its modern form, was first proposed in 1960 by E. Jerome McCarthy and then was popularized and spread by Phillip Kotler.[4] Although nowadays, it has been extensively criticised by

[1] GRZNAR, P. et al.: Dynamic simulation tool for planning and optimisation of supply processdynamic simulation tool for planning and optimisation of supply process. In *International Journal of Simulation Modelling*, 2021, Vol. 20, No. 3, p. 441.
[2] SÁSIK, R. et al.: Development of the Assembly Set for the Logistic Transport Solution. In DYNYBYL, V., BERKA, O., PETR, K., LOPOT, F., DUB, M. (eds.): *The Latest Methods of Construction Design*. Cham, Switzerland : Springer International Publishing, 2016, p. 86.
[3] VAVRÍK, V. et al.: Design of Manufacturing Lines Using the Reconfigurability Principle. In *Mathematics,* 2020, Vol. 8, No. 8, p. 1227.
[4] McCARTHY, E. J., PERREAULT, V. D.: *Základy marketingu*. Praha : Victoria Publishing, 1995, p. 121.

scholars and practitioners, which has led marketing scholars to redefine the original 4P concept, expand the 4Ps with additional Ps and develop new concepts to replace the marketing mix.[5] For the purpose of this paper, we can work with the original elements of the marketing mix but the new concepts of the marketing mix are worth exploring in the next research for this subject. In the table 1 we can see various components of the marketing mix elements.

Table 1: Elements of the marketing mix

Product	Price	Place	Promotion
Design Quality Functionality Technology Convenience Packaging Services Availability Warranty	Strategy List price Discounts Payment period Payment agreement Payment methods	Trade channels Market coverage Locations Transportation Logistics E-commerce	Advertising Personal selling Sales promotion Public relations Direct marketing New forms of promotion

Source: Own processing.

The elements of the marketing mix are diverse, and technologies have influenced and will continue to influence them. Technological progress is synonymous with current and past changes.[6] Technologies such as artificial intelligence, the Internet of things, drones and others have an impact on the consumer experience along the entire marketing mix.

1.1 Technologies in the marketing mix

1.1.1 Product

In this chapter, several technologies will be briefly characterized and it will be describe what change and innovation have they brought to the element of the marketing mix and what potential they hold for the future.

Internet of things

The internet of things (IoT) represents a new era of communication between mankind and things and also between people with each other and things with each other. At present, IoT mainly represents the communication of two objects and data collection. Communication can be either one-way (data collection from various sensors) or two-way, where instructions based on human interaction can be sent remotely. This process could be automated in the future thanks to artificial intelligence. Haller Karnouskos and Schroth define the IoT as "a world where physical objects are seamlessly integrated into the information network, and where the physical objects can become active participants in business processes. Services are available to interact with these 'smart objects' over the Internet, query their state and any information associated with them, taking into account security and privacy issues."[7]

[5] GORDON, R.: Re-Thinking and Re-Tooling the Social Marketing Mix. In *Australasian Marketing Journal*, 2012, Vol. 20, No. 2, p. 122.

[6] CHINORACKY, R., ČOREJOVÁ, T.: How to evaluate the digital economy scale and potential? In *Entrepreneurship and Sustainability Issues*, 2021, Vol. 8, No. 4, p. 536.

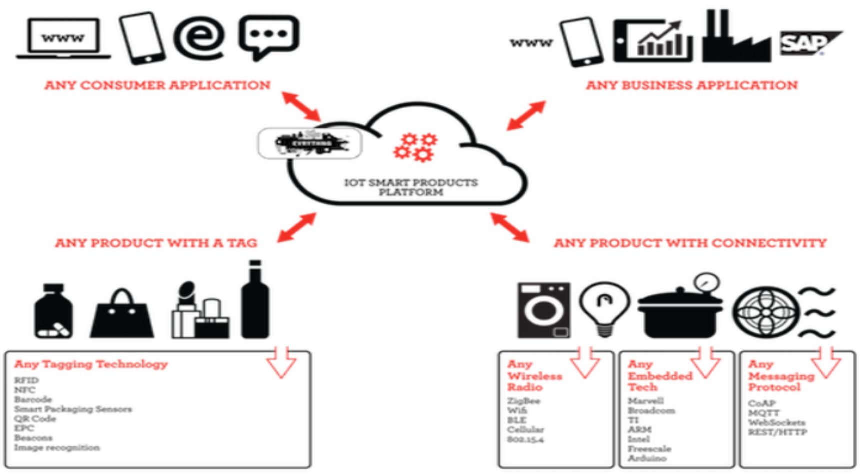
[7] HALLER, S., KARNOUSKOS, S., SCHROTH, C.: *The Internet of Things in an Enterprise Context*, FIS, 2008.

For customers

Unquestionably, the main strength of the IoT idea is the high impact it will have on several aspects of everyday-life and behaviour of potential users. From the point of view of a private user, the most obvious effects of the IoT introduction will be visible in both working and domestic fields. In this context, domotics, assisted living, e-health, enhanced learning are only a few examples of possible application scenarios in which the new paradigm will play a leading role in the near future. Similarly, from the perspective of business users, the most apparent consequences will be equally visible in fields such as, automation and industrial manufacturing, logistics, business/process management, intelligent transportation of people and goods.[8] Through the IoT, everyday objects (such as cars, refrigerators, umbrellas, etc. as well as more advanced, computer and information services) will be able to interact and communicate. „Things“ do not have to be products of higher technology – any one of the around 50,000 billion objects existing on earth can be introduced in the IoT. Beacon technology, 5G, sophisticated sensors, self-driving cars, smart wearables and smart homes all just mark the beginning of a world where almost anything powered by electricity may be connected to each other and with the all-encompassing web, opening up deep-reaching tracking and engagement opportunities for marketers.[9]

For marketers

Marketing is very data-driven nowadays, and the gold mine of Internet of Things data is very attractive to marketers. A recent Economist Intelligence Unit survey reported that senior marketers globally believe IoT will make the biggest impact on marketing in the next five years, ahead of other related technology trends like big data, real-time mobile personalized transactions, and customer experience. Meanwhile, CTOs and CIOs are working on IoT strategies from the perspective of technology infrastructure and platforms to support the enterprise.[10]



Picture 1: IoT platform

Source: *Marketing and the Internet of Things, closer than you think*. [online]. [2021-10-03]. Available at:<https://chiefmartec.com/2015/06/marketing-internet-things-closer-think>.

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[8] ATZORI, L., IERA, A., MORABITO, G.: The Internet of Things: a survey. In *Computer Networks*, 2010, Vol. 54, No. 15, p. 1389.

[9] CHOU, J.: *6 Technologies That Will Reshape Marketing In The Next Decade.* [online]. [2021-10-03]. Available at: <https://www.entrepreneur.com/article/344310>.

[10] *Marketing and the Internet of Things, closer than you think*. [online]. [2021-10-03]. Available at: <https://chiefmartec.com/2015/06/marketing-internet-things-closer-think>.

User experience

When creating and improving a product, the strategy to do so is usually now a customer-centric. The good company concentrate fully on its customers and their experience. Customer experience is the new buzzword running in marketing of digital products, but what does it really mean? User experience could literally be explained as the complex experience that users have before, during and after interacting with the product. The experience is fully focused on the user, who is in the middle of it, not the product, company or something else. This is essential mainly for emerging products, as their goal is to find solutions for users and their pain points. It is necessary to focus on the user and his experience first. Only then is it possible to deal primarily with the growth and evaluation of the idea. Steve Baty defines the concept of UX strategy as an experience strategy, which is a set of activities that a company chooses to deliver a series of positive and exceptional interactions to the user. These, if they form a whole, create a product/service that offers something extraordinary in a meaningful, difficult-to-copy form and that is unique and distinguishable from the competition.[11]

1.1.2 Price

Price disruption

New technologies undeniably brought the earthquake into traditional business models and disrupted prices in many industries. Very good example of the price disruption was arrival of the taxi companies that offers their services via mobile app. These companies have brought not only lower prices for their customers but also greater transparency in the pricing system, where the customer always knows in advance how much the ride will cost him, whereas the company calculates the optimal driving route in advance via the mobile application and evaluates it.[12] The continual innovation process pushes companies to incorporating new technologies to their marketing mix and bring new solutions for the customers.

Payment models

From movie passes and printer ink to data storage and clothing, a growing number of products and services are available on a subscription or flexible consumption basis. The modern customer is increasingly asking for those models because of perceived benefits such as convenience, scalability, and cost-efficiency, but there can be significant value for sellers as well. Subscription and flexible consumption models can provide customer data about the initial purchase as well as ongoing usage. This can enable sellers to gain deeper customer insights, generate constant and more reliable revenue streams, and improve the efficiency of production runs. Pricing these new and non-traditional offerings requires understanding the customer-specific value drivers and defining the right price metrics (for example, per use or per unit of time) so the customer experiences a strong connection between the value of the offering and the price.[13]

Future of payment

The inconsistent application of digital identity today means that in some countries, people are able to transact freely and easily while in others, where it is harder to verify identities and assets, there is much greater friction in the payments system. These barriers will diminish as

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[11] *Evaluating UX.* [online]. [2021-10-03]. Available at: <https://www.uxmatters.com/mt/archives/2009/01/evaluating-ux-incorporating-ux-design-in-a-project-using-flash-on-a-home-page.php>.

[12] ČOREJOVÁ, T. et al.: The Impact of Using the Digital Environment in Transport. In *12th International scientific conference of young scientists on sustainable, modern and safe transport.* Conference Proceedings. High Tatras : TRANSCOM, 2017, p. 233.

[13] MEEHAN, J., GRUYAERT, E.: *6 Disruptive Trends in Pricing***.** [online]. [2021-10-03]. Available at: <https://deloitte.wsj.com/articles/6-disruptive-trends-in-pricing-1519966937>.

nation-states and payment providers work together to establish internationally agreed digital identity standards, increasingly leveraging biometrics, including facial recognition, fingerprints and implants. Meanwhile, social media represents another area where western markets will learn from their emerging economy counterparts; the convergence of social media and payment services, already firmly established in China, will spread internationally. This will create new opportunities for payment providers and their customers – for example, for merchants to engage with individual consumers at scale through such networks.[14]

1.1.3 Place

Drones

The term "Unmanned Aerial Vehicle" (UAV) gives the impression that these vehicles have no pilot, but in most cases they have a pilot, whom control them remotely. The term "drone", which is not exactly correct, is often used in connection with unmanned aerial vehicles. The word drone has many meanings. According to the Oxford Reference Dictionary, however, it is best described as a snarling sound. The correct definition of the term drone is: "A fully autonomous aircraft capable of flying without a pilot, equipped with an independent control system that does not allow interference with the control of the flight by a person who controls plane.[15] However, we will also use the term "drone" in this paper, due to shortness of the term and its establishment among the general public. Different drones are capable of traveling varying heights and distances. Very close-range drones usually have the ability to travel up to five kilometers and are mostly used by hobbyists. Close-range UAVs have a range of around 50 kilometers. Short-range drones travel up to 150 kilometers and are used primarily for espionage and intelligence gathering. Mid-range UAVs have a 650 kilometers distance range and could be used for intelligence gathering, scientific studies and meteorological research. The longest-range drones are called "endurance" UAVs and have the ability to go beyond the 650 kilometers range and up to 900 meters in the air.[16] Drones have huge potential in shipment delivery and last mile logistics. Legislation must change in order for this to happen in the commercial drones industry. This legislation is far from uniform in the world, and therefore drone delivery will be an area that will move slowly and gradually in the world. In a limited form, this delivery is available in the USA and has the greatest potential for its development there. Several companies spearheading the advancement of drone delivery. All are developing their drone delivery systems and services. The most famous of these is Amazon with its service Prime Air. It will deliver packages up to 5 pounds in 30 minutes or less using small drones. Amazon has been developing and testing the platform through Prime Air development centres in the U.S., the U.K., Austria, France, and Israel. In August 2020, Amazon received approval from the FAA to operate its Prime Air delivery drones to "safely and efficiently" deliver packages to customers.[17]

Virtual and augmented reality

Virtual reality (VR) is the use of computer graphics systems in combination with various display and interface devices to provide the effect of immersion in the interactive 3D computer-generated environment. We call such an environment a virtual environment.[18] VR

[14] *10 predictions for the future of payments*. [online]. [2021-10-03]. Available at: <https://assets.kpmg/content/dam/kpmg/uk/pdf/2019/11/10-predictions-for-the-future-of-payments.pdf>.

[15] *Dopravný úrad SR. Rozhodnutie č. 2/2019 zo 14.11. 2019.* [online]. [2021-10-03]. Available at: <http://nsat.sk/wp-content/uploads/2019/11/R2-2019.pdf>.

[16] *Drone technology*. [online]. [2021-10-03]. Available at: <https://builtin.com/drones>.

[17] UELAND, S.: *8 Commercial Drone Delivery Companies.* [online]. [2021-10-03]. Available at: <https://www.practicalecommerce.com/8-commercial-drone-delivery-companies>.

[18] PAN, Z. et al.: Virtual reality and mixed reality for virtual learning environments. In *Computers & Graphics*, 2006, Vol. 30, No. 1, p. 20.

gives users a simulated experience that can be similar to or completely different from the real world. This technology could change the real estate sector. The customer no longer needs to travel great distances to attend the showing of the offered property, but simply takes the tour of the property in the virtual reality. It saves customer the time and also money. The VR property showing will not push out the classical property tours of the market rather than expand the world of real estate to this new comfortable opportunity. The covid pandemic outlined the world in the online mode and everybody in the market must be ready to be happening it again.[19]

Augmented Reality (AR) as a real-time direct or indirect view of a physical real-world environment that has been enhanced/augmented by adding virtual computer-generated information to it. AR is both interactive and registered in 3D as well as combines real and virtual objects.[20] Customers have always wanted to try products before purchasing them. This have always required customer to come to the store and us the fitting room or cosmetic samples. But augmented shopping can change the way how customers will get to their product. Using AR, customers can model and try on makeup, clothing items, and a wide range of home-related products without needing to directly interact with them. AR negates the need for a large physical inventory to allow customers to try on or sample dozens or even hundreds of items in search of the one that best meets their needs. The applications of augmented reality in this sphere have already begun to multiply as more businesses realize the benefits AR presents. As might be imagined, Facebook has been keen to pioneer AR applications. Its augmented reality offering allows users to digitally sample makeup and accessories, allowing them to model how they look with them before buying anything. The first Facebook AR-related advertisement let potential customers try on virtual sunglasses with the aid of their device's camera. The cosmetics industry has also been enthusiastic about embracing augmented reality in recent times. Brands like Sephora, L'Oreal, and Perfect Corp have created partnerships to allow their customers to see how the makeup would look on them digitally. Augmented reality is particularly valuable for online sales strategies involving cosmetics, as consumers almost always need to judge a given makeup item by modeling it on themselves. Another area where AR has the potential to shine is in creating a virtual fitting room or dressing room. When it comes to purchasing clothing, dressing rooms are a necessary evil. Customers are required to lug stacks of clothing items to the dressing room and then employees are constantly needed to restore discarded items. In addition to this, a store is limited by the inventory on hand when it comes to offering clothing for customers to try on. The augmented reality changing room dispenses with much of that hassle, allowing customers to tap into a digital library of clothing items at the tap of a finger. Brands like Topshop and Timberland have been at the forefront of developing AR fitting and changing rooms to give their customers a virtual experience in helping them select clothing items.[21]

[19] HUNSAKER, Ch.: *4 ways virtual reality has reshaped marketing real estate.* [online]. [2021-10-03]. Available at: <https://www.control4.com/blog/614/4-ways-virtual-reality-has-reshaped-marketing-real-estate/>.

[20] CARMIGNIANI, J., FURHT, B., ANISETTI, M. et al.: Augmented reality technologies, systems and applications. In *Multimedia Tools and Application,* 2011, Vol. 51, p. 343.

[21] *5 ways to use Augmented Reality in your marketing strategy*. [online]. [2021-10-03]. Available at: <https://www.smartinsights.com/digital-marketing-platforms/augmented-reality/5-ways-to-use-augmented-reality-in-your-marketing-strategy/>.

1.1.4 Promotion

Drones

Video footage and still images captured by drones provide dramatic aerial views that are unprecedented when compared to a regular photo or video shoot from the ground. In the table 2 we can see possibilities of using drones in the promotion.

Table 2: Usage of drones in promotion

Usage of drones in promotion	
Video footage	**Still images**
Website and landing pages	Website
Social media channels	Social media channels
Commercials	Print materials (brochures, direct mail, flyers, etc.)
Presentations	Annual reports
Blogs	Trade show displays
E-newsletters/e-blasts	E-newsletters/e-blasts
Digital advertisements	Blogs
	Outdoor advertisements (billboards, benches, etc.)
	Environmental branding

Source: *How Drones Can Elevate Your Traditional & Digital Marketing Campaigns.* [online]. [2021-10-03]. Available at: <https://www.appletoncreative.com/blog/how-drones-can-elevate-your-traditional-digital-marketing-campaigns/>.

Chatboats

Even technologies that are still in early stages of development, such as artificial intelligence (AI), have made their way into promotions and any other marketing efforts originating from big brands and well-developed companies. As an example, many companies have developed AI-powered chatbots that will interact with consumers in the digital world.[22] A chatbot refers to a chatting robot. It is a communication simulating computer program. It is all about the conversation with the user. The conversation with a chatbot is very simple. It answers to the questions asked by the user.[23] Since the majority of modern consumers leverage instant messaging apps, companies made these apps a home for chatbots. These computer programs that leverage AI machine learning, deep learning and natural language capabilities can actively interact with consumers 24/7, providing them with exceptional customer service and support while promoting products or services based on consumer preferences that chatbots previously gathered about each individual user.[24]

2 Future of technologies in marketing

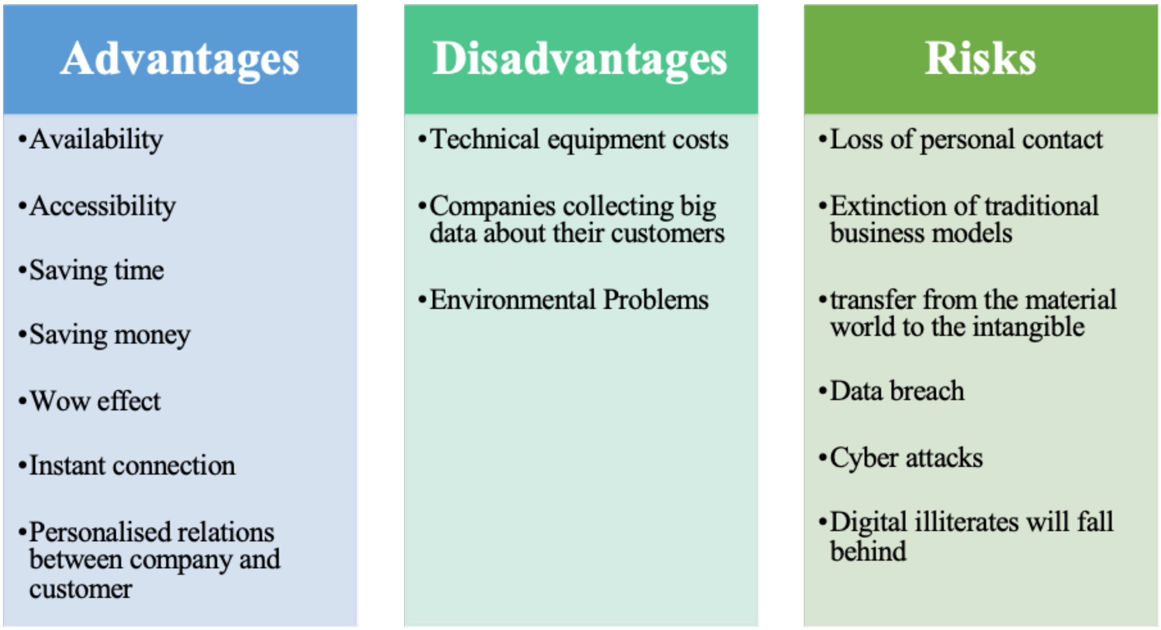
The penetration of technology into various elements of marketing is something we cannot avoid, and technology will be increasingly emphasized in assessing the attractiveness of a company for the customer. Whether it is for the pleasure of the customer, or even the necessary essence of using products and services. The COVID-19 coronavirus pandemic has

[22] MILLER, E.: *How Technology is Changing the Promotional Landscape*. [online]. [2021-10-03]. Available at: <https://innovationmanagement.se/2019/06/20/how-technology-is-changing-the-promotional-landscape/>.

[23] DAHIYA, M.: A Tool of Conversation: Chatbot. In *International Journal of Computer Sciences and Engineering*, 2017, Vol. 5, No. 5, p. 158.

[24] MILLER, E.: *How Technology is Changing the Promotional Landscape*. [online]. [2021-10-03]. Available at: <https://innovationmanagement.se/2019/06/20/how-technology-is-changing-the-promotional-landscape/>.

shown us that technologies need to be in back up, because the shift in the status quo can happen suddenly and uncontrollably.[25] When we talk about the future of technology in marketing, we can say that the future is now. Everything that awaits us in marketing in the near future is already designed and it is in test operation and sometimes in uncertain legal conditions. We can say that the today's world is influenced by digital technologies.[26] In the picture 2 we can see advantages and disadvantages that are, will be and may be affecting our lives when our consumer behaviour would be largely linked to the use of technology.



Picture 2: What could technologies cause in marketing
Source: Own processing.

Conclusion

The shopping experience for the customer is nothing as it used to be before. Society is constantly evolving, as are its needs.[27] Technologies and its advancements are encouraging changes in whole marketing mix and they even change it from the inside. The way companies and consumers interact with each other has changed irreversibly and it will only get more "tailor-made" and innovative for both parties. Companies that want to be successful need to jump on the train of technological change and be transported to new possibilities that are opening up for companies and customers. A smart customer should take advantage of all the benefits that technology brings and minimize the effects that can occur due to the negative impacts and risks that technology brings.

[25] STALMAŠEKOVÁ, N., GRZNÁR, P.: Shifts in the behaviour of businesses due to the pandemic situation. In KVETANOVÁ, Z., BEZÁKOVÁ, Z., MADLEŇÁK, A. (eds.): *Marketing identity Covid-2.0. Conference Proceedings*. Trnava : FMK UCM in Trnava, 2020, p. 575.
[26] COREJOVA, T., CHINORACKY, R.: Assessing the Potential for Digital Transformation. In *Sustainability,* 2021, Vol. 13, No. 19, p. 11040.
[27] GRZNAR, P. et al.: A system to determine the optimal work-in-progress inventory stored in interoperation manufacturing buffers. In *Sustainability*, 2019, Vol. 11, No. 14, p. 1-36.

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UELAND, S.: *8 Commercial Drone Delivery Companies.* [online]. [2021-10-03]. Available at: <https://www.practicalecommerce.com/8-commercial-drone-delivery-companies>.
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VISUAL ASPECTS OF COMPOSITION IN WEB COMMUNICATION: NON-VERBAL SUBTEXT OF WEB COMMUNICATION.

Anton Szomolányi

Abstract
Using image communication on the web has become a part of everyday life. Voice communication in conjunction with image communication has become more authentic. The image in communication makes the subject's presence felt. The image of the respondents enhances their communicative mutuality and can to some extent serve as a substitute for a meeting in real life. But what is the difference between real communication and audio-visual communication? To what extent is the quality of visual means of expression useful in web communication and when does that quality disrupt that communication or even have considerable negative impact on the perception of sound? Our study focuses on image artefacts that influence communication in front of the webcam. We will examine the compositional visual elements characteristic of this visual depiction, the technical aspects for communication cameras. We will attempt to give recommendations based on technical arguments not only for users of web communication, but also for developers and designers of camera technology for this type of communication. For our study we have analysed more than 250 self-depictions of respondents.

Key words:
Angle of view. Composition. Light. Online communication. Point of view. Self-depiction. Webcam. Webcam noise.

Introduction

The world of the audio-visual reality of television culture is attractively arranged in a magnificent scenery of diverse simulations, visual images that effectively evoke diverse fascinations, emotions, ideas, experiences and pleasures in the recipients.[1] Whether they are to meet for business or pleasure, people in ordinary communication show their attitude to their surroundings through their appearance. In a real-life meeting, probably nobody lies down or has their chin resting on the table or their feet propped up on the conference table. In real-life communication, we manage to sit upright in a chair for hours. Is this also the case in front of a webcam, which is placed in a fixed position on a computer? The webcam is mostly of inferior technical quality, having a poor operating software. This leads to an inadequate attitude of the users themselves to the visual culture of self-depiction in this type of communication. As if the participants in the self-presentation did not care about their own self-depiction. The participants in the communication are placed in the image area in an undignified manner. For example, from beneath, their faces look bent by the wide-angle point of view of the webcam and have different colours of skin tones or they are in a technically unsuitable image. To this we can also add the attitude of candidates to personal grooming, not to mention the space behind the participants in a communication. In this text we explore the possibilities of improving the quality of self-depiction in web communication. We analyse natural compositional solutions of film language and, based on comparative research, we attempt to define suitable solutions for image composition so as to enhance the communication of the non-verbal expression of video conference participants. As part of our research, we will also propose technical solutions suited to developers of software and hardware, which could improve the quality of web communication. The period of 2020 – 21

[1] HUDÍKOVÁ, Z., PRAVDOVÁ, H., BLAHÚT, D.: Post-Lockdown Metamorphoses of Television Culture. In *Media Literacy and Academic Research*, 2021, Vol. 4, No. 2, p. 88-99.

ushered in a new phenomenon of communication through the web interface on a massive scale in almost all walks of life. The claim that the world of television culture reflects the mental setting of a real socioculture can also be defended on the basis of understanding the human situation of late-modern societies' people.[2] Cameras, which until now were only some mandatory equipment of computers, have suddenly become a necessary part of life. People have become obligatory players in the reality in front of the camera for long stretches of time. They have turned into camera operators filming themselves without any knowledge of composition, light and technical aspects of capturing with a computer camera. We do have an image in communication, but it is as if its content and form were not necessary. However, in audiovisual communication, image and sound run in parallel, while each of the components of expression, whether it be visual or acoustic, has a different meaning and emphasis in various intervals of communication. The perception of such communication is tied to the alternation of image and sound perception. As a result, if they are in the right position relative to each other, without distractions, both components increase the communication ability.

1 Visual aspects of web communication

Every day ordinary viewers watch audio-visual content produced for them by visual professionals and talented creators who spent years developing a specific visual communication language. A dynamic image composition is inherent in this language. Web communication focusing on the image works as a single-shot account in front of the camera. We can say that it is very similar to television journalism or film documentaries, the difference being that the person in front of the camera is in a continuous shot without cuts or inserts. This makes web communication unique. Another problem is that most respondents use built-in technical means for communication – a camera and a microphone, which are part of laptops or tablets. Their parameters are incomparable with professional equipment, although they declare that some of them are the same. This causes poor quality of the captured image and sound. We consider the above facts to be an objective cause, but there are also subjective circumstances that affect the quality of transmission. These include the level of technical skills of the respondent, whether they can set up the application and other controls of the computer correctly so that the transmission of multimedia content is optimal. It is understandable and tolerable that e.g., a virology specialist does not have detailed knowledge of the IT field or of audio and editing programs and, thus, the form of their transmitted statement will be of lower quality. But it is less understandable, even striking, if we see such shortcomings in a contribution provided by a spokesperson for an institution, a professional.[3] Our research involved the observation of more than 250 participants from all age brackets. We had university students, web conference participants, children's workshops, but also management meetings. In this regard we have considered the following basic aspects of image communication:

- the subject's image composition, which was about how the respondent was placed in the image field, the face size relative to the image area, the camera height with respect to the respondent's view;
- image composition of the background — tonality, structure, light, colour and background space;

[2] HUDÍKOVÁ, Z., PRAVDOVÁ, H., BLAHÚT, D.: Post-Lockdown Metamorphoses of Television Culture. In *Media Literacy and Academic Research*, 2021, Vol. 4, No. 2, p. 88-99.
[3] Ibidem.

- the subject's activity while consciously controlling the compositional elements of the image field's content;
- technical aspects of depiction such as camera settings, lighting, image noise, sharpness;
- the position of the camera and the position of the subject in space; and
- conscious or random changes with respect to the length of communication.

Based on the analysis of these aspects, we will attempt to propose improvements in web communication for the subjects of that communication as well as for the manufacturers of communication software and hardware.

1.1 The basis for examining the issue

As for the image composition, we were inspired by the article in the professional journal American Cinematographer, 12/2020, where a professional cinematographer set the parameters for communication from a typically cinematic compositional construction of a close-up. The lenses and cameras used were similar in parameters to shooting a movie film with the possibility to manually control all parameters such as aperture, exposure time, sensitivity and zoom lens. The image space was lit up separately for the foreground and separately for the background.[4] The light made for a light level that created optimum light conditions for camera parameters because of minimum noise, while the light was creatively composed. The compositional arrangement of the close-up was asymmetrical. This means that half of the participants were on the right and the other half on the left. All the conference attendees had cameras with similar parameters and the lighting was from similar sources, and they attempted to create a common image form in the way an image form is designed in a conceived project, for example, in a movie film. From an experimental viewpoint on the final image, the conference was really well handled visually. All participants were in a formally unified environment of one conference. When alternating their inputs, even the shots of the participants switching between each other were cut as if in a movie film. They had a lighting ratio for their faces, which is the difference between light and shadow; the light was always coming from the side and was made up by the main light, which constituted the dominant light source. The supplementary light was not defined in the resulting image, so the scenes were very natural and the observer did not perceive an artificial light construction. The background always formed the depth and the background's structure did not interfere with the close-ups of individual participants in the conference. We have verified this style of design for image communication ourselves in studio conditions. Of course, such a shot build-up is not possible in daily conference work of all participants. Film equipment is expensive and it takes up a lot of real space. We cannot require from participants in conferences and online classes to have the so-called 'film look' constituted by means characteristic of narrative film. In this regard normal users are mostly laypersons and professional equipment is generally not available to all. Web communication or conferencing does not know the perception of the cut in the typical cinematic sense.[5] The image changes are not defined by editing logic, but by automatic alternation of participants, which is mostly determined by sound: Whoever speaks is in the picture. The composition is difficult to formalise as, for example, the image format changes with an uneven number of participants and the format is 'clipped' mainly from the sides. Furthermore, participants in ordinary communication have different cameras with different aspect ratios. The light in the resulting image is controlled by automatic exposure and not by the optimum tonality of the subject. We used this as a basis to define achievable

[4] HOLBEN, J.: Who´s Zooming Who? In *American Cinematographer,* 2020, Vol. 12, p. 12-16.
[5] Ibidem.

optima for the standard image expression in web communication. We have established the basic communication parameters for the webcam image:

- image composition of a close-up and medium close-up in front of a webcam;
- golden ratio;
- angle of view of cameras;
- the background behind the subject;
- the light area in front of the camera;
- light and shadow — shape and space;
- light level and the minimum amount of light,
- the location of the web conference;
- the view of the subject talking in front of the camera;
- camera for web communication; and
- electronic image editing.

1.1 Image composition of the subject

Film composition is based on asymmetrical principles of shot contrast, which means that the compositional weight after the next two shots should be the opposite. With a webcam we expect only one view of the subject, even though cuts do occur, with regard to communication. If another conference participant speaks, there is a cut: a shot exchange between two subjects. For this reason, too, we should not place the primary composition in the middle, but slightly to the side. Here, however, it would be optimal to place every conference participant into a different part of the picture than the others. But this is not entirely possible with a larger number of participants. Furthermore, in web conferencing, the format is automatically clipped when there is a 'multi-image' of several participants. This entails the risk that if we compose the subject more to the side, the defined format clipping will lead to unnatural clipping of the face from the side of the image.

1.1.1 In the film composition of a facial close-up and a medium close-up,

the eyes are placed close to the line of the upper third of the image. The eye level is usually determined by dramatization and the subject's expression for the specific content of the shot. For heightened dramatization, the eyes are placed above the third and for a dramatically 'lightened' expression, the eyes are placed below the line of the top third of the image field. The problem with webcams is that respondents naturally place their eyes in the middle of the image and have a lot of passive space above their head, with their chin touching the bottom edge of the image when they are communicating. Such chin bumping carries negative connotations for the perception of the subject. However, if the respondent tries to compose his or her face correctly, in the spirit of film expression and the compositional language of film, he or she has to move the display when using a laptop, so that he or she then struggles to read the text on the screen. The camera is positioned at the top of the laptop monitor, and with the camera's correct viewing position, the composition has empty space overhead. The basic position of the camera lens for shooting a close-up for a film should be at eye level: basic angle — camera height. If we prop up the laptop, for example with books, we can get the lens at eye level and then we can also view the display and have the subject's face composed in the basic position, with eye level on the line of the top third of the image field.

1.1.2 The golden ratio

is mentioned very often in connection with film composition. Its determination and significance are rather given for static image compositions than for the dynamic composition of audio-visual works.[6] For the web composition, we had very good perceptual results, especially with placing the subject in the line of the vertical golden ratio, which is closer to the middle of the image than when the image is split into thirds. It is precisely because of what we have stated above that in web communication there can be automatic format clipping, so the position closer to the centre is safer from the compositional aspect. Similarly, the positioning of the eye line in the horizontal plane of the golden ratio appears to be natural and leaves a sufficient margin for a format change in web communication.

1.1.3 The angle of view of cameras
is almost always wide for this type of cameras. We consider a wide angle of view to be greater than 45 degrees from the axis of the camera (axis between the subject and the camera). This is probably because the participant always needs to be in the frame, when he or she is placed in front of the device regardless of the geometric quality of the person's depiction. Mobile phones offer a wider range of possibilities in this regard, as they can use digital zoom to control the size of the camera's angle of view. As if the equipment of computers and especially laptops was behind the times in this respect. Even more expensive computers usually have cameras with HD resolution or less. When we even zoomed in a bit to the so-called normal angle of view, the camera noise increased significantly and the sharpness decreased. The basic operating software does not even have this option on most computers. From this perspective, the optimal approach is to position the subject at a greater distance from the computer camera. The basic rules can include the distance from the camera, which should not be less than 50-60 cm, the outstretched arm distance. This will prevent deformation of the face or other unwanted defects, such as distortion.[7] Here we experimentally determined the extension of the outstretched hands onto the keyboard. It is impractical for communicating and typing on the keyboard at the same time. However, the facial image became more natural at this distance and the optical distortion of the face characteristic of wide-angle lenses was reduced. To capture a standard facial close-up during filming, one almost never goes closer than at a distance of 1.5 m. In web communication we get from arms' length distance to a medium close-up. When working on a laptop, if you need to type during a conference, it is advisable to use an external keyboard and mouse. I would like to point out that we have already mentioned the positioning of the webcam at eye level and now we also increased the distance and so working on the laptop in this configuration is very uncomfortable.

1.1.4 The background behind the subject
forms a compositional expression at the moment when we have got to the medium close-up, we very significantly included the space behind the subject, i.e. the background, in the expression of communication, i.e. the shot.[8] Background elements can thus considerably distort facial expressions. For example, a distinctive background line that passes through the eyes, a light source in the background that is connected with the subject, or if they overlap, etc. The shallow depth of focus is characteristic of film narration in the close-ups of the subject. It is not possible with a webcam given the wide-angle lens. It is optimal to position the subject so that no background elements are associated with the facial structure. Distance, or more specifically, the distance from the background, also plays a vital role here. The

[6] SZOMOLÁNYI, A.: *Kamera! - Běží...".* Bratislava : Citadella, 2016, p. 170.
[7] HUDÍKOVÁ, Z., PRAVDOVÁ, H., BLAHÚT, D.: Post-Lockdown Metamorphoses of Television Culture. In *Media Literacy and Academic Research*, 2021, Vol. 4, No. 2, p. 88-99.
[8] SZOMOLÁNYI, A.: Using non-verbal means in movie and dance film as an appropriate form of movie language learning. In *Cinematography in Progress - A publication from the International Joint Research group.* [online]. [2021-09-24]. Available at: <https://cinematographyinprogress.com/index.php/cito/article/view/7>.

background constituted by a plain white wall proved to be inappropriate. The one in the subject's medium close-up, for instance, makes the face darker. The space behind the subject is mainly important for the orientation of the observer. It needs the control of horizontal and vertical lines for undisturbed image perception. The background and its light area should correspond to the exposure range of the camera. This means that the light conditions of the background should match the core of the shot: the depiction of the subject. Due to uneven lighting, clean areas such as a white wall form 'shade stairs' in web communication. They are the result of high signal compression. When there is a lack of light or a high level of background light, exposure is corrected, which adversely affects the subject's facial image. The face is either dark or bright. The dynamic range of video cameras for web communication is low and these cameras are not able to display large light differences adequately. In tests of multiple devices, we determined a maximum difference of 1:4 using physical measurements. This ratio represents the difference between light and shadow. With a larger difference, unpleasant noise began to appear in the dark parts of the image and the drawing of the dark parts looked technically disturbing, or if the automatic correction properly equalised the dark parts of the image, the bright parts of the image, especially the face of the subject, were then without structure and unnaturally overexposed — overlit.

1.1.5 Light area in front of the camera
is essential for webcam images.[9] The quality of light is determined by the spectral composition of the dominant source and the spectral composition of secondary light sources. Secondary light sources may also be reflections of light from coloured surfaces in the capturing area. If we use a type of modern LED source, e.g., a LED bulb, it is advisable to have a CRI of at least 90 or more. Modern pulsed light bulbs may not contain all parts of the spectrum and the depiction of skin tones, the perception of which is crucial to web communication, may not be correct. Secondary sources of incorrect light can also be inappropriate coloured areas close to the subject that introduce unnatural light colour into the scene.

1.1.6 Light and shadow
are important for shape and space in image composition. We are also able to perceive mood, spatial shapes and relations in their mutual ratio. When using scenic sources, i.e. real lamps in a captured scene, the image space can be lit unevenly. These problems also get even bigger in constantly changing sunlight. It can happen that you start a lecture without direct sunlight shining into the room, and after a while, the sun starts shining on the subject or on the background. This radically changes the light composition of the image. Inherent in webcams, automatic exposure equalises the illumination of the image area always to the tonality of medium grey (the sum of all brightness values of the image field is always medium grey for automatic exposure — it is the set optimum for the average image).

1.1.7 The light level
represents the basic amount of light that will meet the camera's minimum requirements for a correct image.[10] Lighting is a big problem, which is one of the main attributes of a high-quality image of the respondent. It follows from the written that the communicator can adjust many things before recording the answer or conversation.[11] When measuring the sufficient

[9] HOLBEN, J.: Who´s Zooming Who? In *American Cinematographer*, 2020, Vol. 12, p. 12-16.
[10] Ibidem.
[11] HUDÍKOVÁ, Z., PRAVDOVÁ, H., BLAHÚT, D.: Post-Lockdown Metamorphoses of Television Culture. In *Media Literacy and Academic Research*, 2021, Vol. 4, No. 2, p. 88-99.

exposure level of different webcams (we examined 5 types), we concluded that the minimum scene illumination level for a webcam should be 100 lux. At this value the noise and the colour rendering of all cameras seemed acceptable. This is roughly equivalent to a 100-watt incandescent light bulb from a distance of 2.5 m. And that is just the light shining on the subject. The background should have its own source of lighting.

1.1.8 The location of a web conference
should not be a south-facing room. Direct sunlight results in a large dynamic range between light and shade in the room. In our latitudes the sun is a very variable source depending on cloud movement and the time of day. The subject in front of the webcam should have a space behind him or her that evokes a real presence and at the same time, this background space does not attract unnecessary attention with distracting elements that negatively contribute to the composition of the subject. The room is behind the captured subject, not the subject in front of the room, i.e., in front of the wall. In the perception of an image, orientation in space is important, and the subjective notion of this space is crucial to the perception of the content. To feel secure, people need to know subconsciously the spatial relations that provide them with information about verticals and horizontals. The direction of light, light and shadow, give the subject the ability to define the mass of space. The subject is constantly seeking subconscious identification with the space where he or she is. This is similar to the virtual space transmitted by a webcam. The subject should not have a heavily overlit object in the background such as a window, which does not form any structure due to intense backlight, just a "burnt" white area. A dark space, without a sufficient light level, can create unwanted technical noise in the image, which negatively affects the perception by its uncoordinated movement in the image structure.

1.1.9 The gaze of the subject talking in front of the camera
is usually not fixed on the camera lens, but next to it. When conducting our research, we did not encounter a single participant who would perceive the position of the camera lens. All participants perceived the image area of their monitors, where they interacted with other conference participants. Fixed gaze on to the camera lens thus also turned out to be unnatural for the filmed subject talking in front of the camera. It is especially close to the account in front of the camera in documentary film or television journalism. Individual research participants were never aware of the position of the lens on their devices and always communicated with conference attendees, gazing directly at the screen area. The communication directly into the camera and thus to the person spoken to was clear by looking into the camera lens if the webcam was an external auxiliary device. However, this was only the case in very few moments and the participant had to be fully aware of the need to emphasize direct eye contact. From this perspective, quite naturally, individual respondents are not aware of the position of the camera as a focal point of communication. Occasional eye contact, look into the camera, is a must for a lecturer who needs to use it to keep the attention of his or her audience for a long time. The look into the camera constitutes the view of the student no matter what part of the field of view he or she is in. The perception of the camera lens and the gaze into the camera should be the training subject for this way of communication. Looking away from the camera lens, out of contact with the student, can in reality represent, as it were, a passive contact[12] with the class and may have a significant impact on the negation of communication.

[12] KATZ, S. D.: *Film Directing Shot by Shot.* Stoneham : FocalPress, 1991, p. 475.

1.1.10 A camera for web communication,
whether built in a laptop or being an external device of a computer, is a technical device that has its limitations. These are determined by the price of the equipment, the design intent and the primary technical characteristics specific to the camera's use. For instance, the design of the camera on the laptop does not envisage its use for daily photography or filming, but only its occasional use for web communication, unlike mobile phone cameras, which are replacing the so-called consumer class of cameras and video cameras in terms of quality and are able to transmit images in a quality very similar to professional recording. Of course, provided that a few limiting technical aspects are respected. However, what all these capturing cameras have in common, or similar, is the operating software, which is designed for optimum use of a sensor without the direct influence of users themselves. The automatic setting mode takes into account the basic view of the person in front of the camera. It does not have any of the modern conveniences of automatic exposure that take into consideration scene structure and subject recognition from the surroundings, therefore it has the ability to prioritise the quality of skin tones, or handle changes in the dynamic range of the scene, etc. For even a somewhat decent image, it is important to respect the low native sensitivity of webcams with a sufficient light level to illuminate the scene.

1.1.11 Electronic image editing
is an accessory of all communication software. This software offers, for example, background editing by a digital trick. Separating the subject from the background is the most common edit applied by web communication users. However, blurring the background, inserting a different background, etc. has a problem in image quality. If noise in the contours of the subject becomes apparent, there is a decrease in attention when such an image is perceived for a prolonged period of time. Webcams work with high data compression and for these 'tricks or special effects', there is usually not enough image information. The predefinition of these effects is very universal. The blurring of the background, for instance, looks very unnatural. If a 'trick' is to be used, it is appropriate to illuminate the subject with a sufficient level of light, at least as the one mentioned above, or to add a slight backlight to accentuate the contour of the subject. The subject separation then seemed to us quite a bit more credible.

2 Non-verbal subtext in web communication

The look away from the camera lens and the look into the camera was checked in two equal groups, where the same topic was discussed. In group A we maintained eye contact with the camera all the time and in group B we did not fix our gaze on the camera lens, but mostly looked at the monitor screen or out of the field of view of the camera. We then assigned students to write an essay that was linked to the content of the lecture. The listeners had no textual preparation and had to draw only from the memorised content of the lecture when writing the essay. The difference in evaluation for group A versus group B was of one and a half marks out of six, to the detriment of group B. We would like to point out that in the past there has not been a significant difference in the evaluation of the two groups for similar work. For a direct look into the camera, we recommend to teachers, as an aid, marking the camera point with, for example, a photograph of a fictitious student; we made the opening for the camera in this photograph in the middle at eye level. The photograph was only 6x9 cm in size. This modification helped people naturally fix their gaze on the camera. We compared more than 250 webcam views of the subjects, evaluating the compositional aspects of the views and the technical quality of the subjects' self-depiction. Composition proved to be an essential tool for holding people's attention, at least within the established compositional rules of the so-called professional convention known from mainstream film and television production. Views of subjects from beneath, distracting background elements, chaotic image structure, distorted verticals, incorrect depiction of skin tones, image noise, overlit background points, unnatural image colouration, facial distortion and dark images are elements of non-verbal communication that we evaluated subjectively based on our knowledge of the effects of compositional schemes for dynamic and static image compositions. It is historically proven that there is a communicative and expressive reason for the breach of these schemes.[13] The standard observer cannot define the reasons for the negation of image composition, but subconsciously loses contact with the overall content of the audio-visual communication. Some subjects intentionally opted for 'attractive composing' or not composing a self-depiction, believing that it would promote their 'personal uniqueness'. The opposite side of the respondents, however, is unable to recognize this uniqueness as they are flooded by the chaotic image composition. These subjects were put for comparison equally among those who approached their presentation unconsciously. Subjects who portrayed themselves using a clean composition, as a result of talent or knowledge of composing an image, attracted much more attention, and when evaluating the conference, we found that they were even asked more questions by conference attendees. From that we concluded that with even minimal composing in the spirit of the 'professional convention' applicable to dynamic composition, the compositional quality of the image is capable of delivering a communication of better quality and improving the perception of content. A detailed objectivisation of the influence of image composition would mean further research in this field, but this was not the aim of this study. The idea was to implement elements of dynamic image composition used in television and film production in web communication and thus improve its quality.

3 Recommendations for software and hardware designers and users

3.1 What would be necessary to have for a quality web image at a conference:

- more sensitive webcams with lower noise level, higher resolution of at least 1:2 for a possible zoom;
- the quality of cameras on laptops should at least match the quality of cameras on mobile phones;
- a desirable feature is also the option to tilt the cameras on laptops and place them as far up as possible;
- the operating software for webcams should have the option to manually control the aperture number, or light tonality and sensitivity;
- the software could show light sufficiency regarding image quality;
- the operating software could include golden ratio guides for eye positioning;
- it could be useful to have auxiliary facial figures as a 'compositional optimum' where the subject could be placed, these could be dynamic, i.e. they would be changing their position slightly; and
- the software could alert the subject that he or she is being filmed from beneath.

There are numerous possibilities for the compositional and technical quality of the image and such features are already integrated into the operating software of consumer recording devices such as mobile phones. All it takes is to adopt them.

[13] SZOMOLÁNYI, A.: *Kamera! - Běží...".* Bratislava : Citadella, 2016, p. 170.

3.2 Recommendations for users of web communication regarding image:

- correct balance of the composition, using the golden ratio;
- space for web communication with sufficient lighting;
- for proper depiction of skin tones, high-quality spectral composition of the light that illuminates the subject;
- minimise the light differences between the background and the foreground by adjusting the lighting intensity,
- control the distance from the webcam and prevent facial distortion, i.e. an optical distortion due to the wide-angle view of the webcam lens;
- the webcam should be at eye level, for example, prop the laptop up with books or place an external webcam at eye level;
- make also use of the look into the camera, which is a direct view of the participants in the communication;
- control background elements in relation to the subject, i.e. remove distracting elements such as lines and background lines that 'go' through the subject's eyes or houseplants that 'grow' out of a person's ear, etc.;
- do not use "imperfect" electronic effects; and
- align the webcam in the horizontals and verticals, including in relation to the background.

Conclusion

As a basic method, we used the system of comparing individual subjects in front of a webcam during online lectures at the university, business meetings and administrative meetings. We had the opportunity to compare more than 250 subjects and their intuitive webcam self-depictions. As part of the research, we also instructed a certain number of subjects and explained compositional meanings to them and observed how they would apply this knowledge. We attempted to evaluate and compare facial images made with a webcam to facial images filmed in accordance with basic compositional rules. We tried to look for optima for a web image in comparison with the perfect purity of the professional convention of composing a facial close-up in film. In a single shot, this comparison is possible, but we did not examine the dynamic composition within a series of shots of film language. Here we would have to have participants viewed by multiple cameras who edit their communication. We chose to examine some basic compositional aspects of image composition. There are many more in the image culture of dynamic composition. We tried to select the most important ones that directly affect the quality of web communication. The result of our research is that if web conference participants use the image area in accordance with logical composing, that is, if they place their eyes at the top of the image area near the golden ratio line, if they use the look into the camera, if they are positioned asymmetrically, not in the centre, if the webcam is positioned at eye level and they are not viewed from beneath, if they are sufficiently illuminated by good-quality light with full spectral composition and positioned in front of a distant, poorly structured background that forms the image space, the quality of their communication is much better. The main advantage is in keeping the attention of the audience. With the right image quality, participants in web communication also show each other mutual respect and reverence. The culture of expression in web communication must find its space among users and we especially need to be aware of the fact that it is a different space of communication, the result of which should be similar, if not the same as in a standard face-to-face meeting.

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CREATIVE TOURISM PRODUCT AS A MODERN TOOL FOR MARKETING COMMUNICATION - INTRODUCTION OF INSTAGRAM ART

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Abstract
The article describes the Instagram tourism, which has grown along with the growing popularity of social networks. Instagram tourism understands paper as tourism whose primary purpose is to capture photography. In this case, a visitor to a destination is a person inspired by another photo on social networks to visit the place. A frequent goal of such tourism is a solitary element of art, which in this case acts as a tool of marketing communication. This paper describes the successful adaptations of art in the object of tourism and its subsequent transformation into a tool of marketing communication in tourism. The article describes in detail the various types of such art, capable of losing the object of marketing communication, as well as their effect and values in terms of sustainable development of tourism based on Instagram tourism, as well as positive effects for communities.

Key words:
Art. Communication. Culture. Instagram art. Tourism marketing.

Introduction

In an age of exponential technological advancement in communication technologies, marketing communication is adapting to the challenges it faces in many ways. This paper describes the phenomenon of instagram tourism. The authors of this article introduce the concept of instagram tourism and understand it as tourism stimulated by the consumer experience with a tourist destination, which he performs by interacting with a photo of a tourism object to create his own photo of a tourism object, which he most often shares on the same social network. the initiative was acquired. The authors of the article focus on the specific situation of solitary elements, created for the purpose of "photogenicity", which may be called art. This paper also seeks to answer the question of whether solitary "insta art", which the authors call elements in the country create in order to raise awareness of the destination, is sustainable.[1,2] Tourism in Europe is currently facing several challenges, in particular volatile economic conditions and fiscal pressures, the need to strengthen its share of the world tourism market, growing competition from other destinations such as BRICS countries (Brazil, Russia, India, China, South Africa), changing traveler´s behaviour, climate change, seasonal fluctuations, etc.[3] The Covid-19 pandemic can undoubtedly be ranked among the most significant threats today.[4] According to the World Tourism Organization (UNWTO), tourism accounts for 3-5% of global GDP, employment for 7-8% and export for 30%.

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[1] BEC, A., McLENNAN, C., MOYLE, B.: Community resilience to long-term tourism decline and rejuvenation: A literature review and conceptual model. In *Current Issues in Tourism*, 2016, Vol. 19, No. 5, p. 431.
[2] JARÁBKOVÁ, J., HAMADA, M.: Creativity and rural tourism. In *Creative and Knowledge Society*, 2012, Vol. 2, No. 2, p. 15.
[3] ALAM, M. S., PARAMATI, S. R.: The impact of tourism on income inequality in developing economies: Does Kuznets curve hypothesis exist? In *Annals of Tourism Research*, 2016, No. 61, p. 126.
[4] DARÁZS, T., ŠALGOVIČOVÁ, J.: Impact of the corona crisis on marketing communication focused on tourism. In *Communication Today*, 2021, Vol. 12, No. 1, p. 161.

1 Understanding tourism and culture

For a multi-contextual relationship between tourism and culture, its definition is a complex process where both the cultural and economic aspects of tourism need to be considered and a broad-spectrum understanding of culture and tourism.[5] The relationship between tourism and culture can be understood from different perspectives:

- Culture is understood as a hierarchically higher system – we understood tourism as a product of a person who is part of the culture.
- Culture is understood as a hierarchically lower system - we understand the culture in tourism as a product and tourism is a determinant of culture.
- Culture and tourism together form one equal system - both represent two complex systems where we identify mutual intersections and functions.

The goals of connecting tourism with culture are based on its cultural context. Here we find the fulfilment of the consumer's cultural needs supplemented by economic goals that are on the side of the provider of tourism services.[6,7] This fact complements our expectation of the intertwining of tourism goals with culture. It also implies the need for knowledge of cultural laws among tourism professionals. If we look at culture as a way of life of a particular community, tourism, the activity of people connected with spending their free time, belongs directly to this category.[8] The bearer and creator of tourism is the human being. Everything we can think of, what man has created, we understand as part of a particular culture.[9] From this context, the connections between tourism and culture are derived. Thus, tourism activities ensure meeting different cultures and the exchange of cultural values in a particular region/territory. In the life and culture of residents, tourism gets various forms. For the local community, it can represent leisure activity (e.g., participation in a festival attended by locals and tourists), source of income (in major tourist destinations it even becomes the primary job), direct or indirect encounter with foreign culture bringing cultural exchange, source of economic, social and cultural development on a regional scale. For culturology, tourism is proof of the development of human society.

2 Marketing and culture in tourism

Cultural marketing aims to ensure the largest possible market share, maintain or increase the number of visitors, and create a set of satisfied clients.[10] The following principles apply in cultural marketing:

- Inside – Out process, predetermining the initial production of a specific product and then its placement on the market.

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[5] RICHARDS, G., MARQUES, L.: Exploring creative tourism: Editors introduction. In *Journal of Tourism Consumption and Practice*, 2012, Vol. 4, No. 2, p. 11.

[6] CARBALLO, F. R.: Tourist experience, image, security and cultural centres. Doctoral dissertation summary. In *European Journal of Tourism Research*, 2015, Vol. 11, p. 193.

[7] ANASTASIA, V.: The causal relationship between GDP, exports, energy consumption, and CO2 in Thailand and Malaysia. In *International Journal of Economic Perspectives*, 2015, Vol. 9, p. 42.

[8] BRAMWELL, B., LANE, B.: Towards innovation in sustainable tourism research? In *Journal of Sustainable* Tourism, 2012, Vol. 20, No. 1, p. 7.

[9] BRAMWELL, B.: Opening up new spaces in the sustainable tourism debate. In *Tourism Recreation Research*, 2017, Vol. 32, No. 1, p. 9.

[10] JONES, P., CLARKE-HILL, C., COMFORT, D., HILLIER, D.: Marketing and sustainability. In *Marketing Intelligence & Planning*, 2008, Vol. 26, No. 2, p. 130.

- Artistic goals are at the forefront of cultural marketing and are subordinate to other goals. A key attribute for marketing is its proper timing and launch. It is necessary to consider the difference between consumer-attractive products and projects that are interesting from an artistic point of view within marketing culture.
- Marketing in culture, which intends to apply to a specific region, should be based on its independence (we mean mainly independence from market influence), but on the other hand, it is necessary to pay attention to the consumer and his interests.

In general, we can define a product as anything we can offer in the market and subsequently satisfy the needs of the customer buying it.[11] A product in culture can have a tangible (monuments, museums, attractions,..) and an intangible (festivals) character. A specific feature of tourism in the context of culturology is that local residents supplement the target group of tourism participants, i.e., tourism is also intended for the local community/population. Fodness argues that the most critical characteristic distinguishing a product from a product in culture is its uniqueness.[12] In culture, every product is very particular and therefore unique, as is its perception by individual customers or consumers. The product in culture can be analysed from different perspectives, involving four different levels: the core of the product, the product itself, the expected product, and the extended product.[13,14] The core of the product is the benefit that the cultural good or service brings to the consumer. It is, e.g., an artistic, aesthetic, emotional or social experience. The product itself represents a specific offer of a place or region, and thus it is primarily about the offer towards the target market. Within the region, historical monuments or other attractions artificially created to make the area more attractive can be presented.[15] The expected product includes the consumer's regular expectations regarding the product. Visitors expect from the product, e.g., its fast availability, attractiveness, photogenicity, etc. The extended product consists of other products, services or benefits that the consumer would not expect as a standard. Many products in culture have the nature of services. For example, a theater performance, a visit to a gallery or a museum. Services have certain features that physical products lack, but they can affect other tools of the marketing mix in some ways. We classify cultural services among the „quintary" services.[16] Their main feature is that somehow they change and improve their recipients, such as education and recreation. Within education, it can also be educational trails, which are built artificially in the region with the purpose of education.

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[11] LI, H., CHEN, J. L., LI, G., GOH, C.: Tourism and regional income inequality: Evidence from China. In *Annals of Tourism Research*, 2016, Vol. 58, p. 99.
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3 Good practice combining art and tourism capable of triggering action to increase regional traffic

The combination of culture, art and tourist attractions in these countries shows that even with relatively small resources, art and culture can be used as an offer and a tool of promotion if aligned with community requirements even in relatively unattractive places.

3.1 Slovakia

Forest sauna in Spišský Hrhov
At the foot of the forest in Spišský Hrhov, in an old orchard with a view of Spišský castle, there is a sauna, original in its architecture and concept. It is accessible free of charge to anyone who books it. The sauna has an unconventional shape on the outside, but inside it is built according to traditional techniques. There is no electricity, heated by wood-burning and cools with water from the stream. The sauna was built based on a public collection, with a lot of volunteer work done. The village of Spišský Hrhov introduced this revolutionary idea, the forest sauna project together with the "Čierne diery" association and created an object interesting for its architecture.[17] A municipal enterprise carried out the whole construction. Architects from the Woven association created the design. This attraction is an example of how to connect various subjects using the potential that the environment offers for tourism.

Picture 1: Forest sauna in Spišský Hrhov with the unique view over the Spišský castle
Source: *Spišský Hrhov*. [online]. [2021-10-03]. Available at: <https://www.archinfo.sk/diela/exterier/lesna-sauna-spissky-hrhov.html>.

Forest sauna and ladder to heaven in the village Dúbravica
Dúbravica is a village in the district of Banská Bystrica. The village has less than 500 inhabitants and outside the district can be considered unknown. Nevertheless, it hides several interesting tourist attractions, also a unique architectural piece of art. Interesting works in Dúbravice were initiated by the civic association "Peripheral Centers", the aim of which is, among other goals, to connect art with the local unique natural environment. The civic association calls its local effort "Kunstdorf", a cultural village. Artists from all over Slovakia and from across the border cooperate mutually in Dúbravice.[18] The result is art installations, which also serve as tourist attractions, increasing the region's awareness and increased visits.

[17] *Spišský Hrhov.* [online]. [2021-10-03]. Available at: <https://www.archinfo.sk/diela/exterier/lesna-sauna-spissky-hrhov.html>.
[18] *Dúbravica.* [online]. [2021-10-08]. Available at: <www.oazy.sk>.

Picture 2: Work in Dúbravica – Forest sauna
Source: Forest sauna. [online]. [2018-10-10]. Available at: <https://perifernecentra.com/sauna-pod-horou-medvedinec/>.

Forest megaphone in Zlatá Baňa

To increase the forest's attractiveness for tourists in eastern Slovakia, four young men from the civic association Hlas lesa (Sound of the forest) came with the brilliant idea. When a person sits in it, the sounds of the surrounding nature multiply. One hears birds singing, the hum of trees or the sound of the forest. The municipality contributed with land to the civic association and the local beer brand covered the financial costs of building a megaphone by the amount of 2905€.[19] The construction demonstrates that creating art as an attraction of tourism can be done in various ways, but essential in this case was the activation of a small group of people's endogenous potential.

Picture 3 Forest megaphone and its founders
Source: *Forest megaphone*. [online]. [2018-10-10]. Available at: <https://www.severovychod.sk/>

Observation tower, barrel-shaped

The dominant of the Tokaj wine region in Slovakia is a 12-meter high observation tower, shaped like a wooden barrel. Together with a gazebo and a children's playground, a tower is a resting place for tourists, cyclists, and families with children. When climbing to the top, a view of the Tokaj region and its vineyards is incredible.[20] This element is a demonstration of harmony while combining the art, tourist attractions and the environment.

[19] Zlatá Baňa. [online]. [2021-10-08]. Available at: <https://www.severovychod.sk/>.
[20] *Observation tower*. [online]. [2021-10-08]. Available at: <https://www.aktuality.sk>.

Picture 4 Observation tower, barrel-shaped
Source: [online]. [2018-10-10]. Available at: <https://www.aktuality.sk>

Love bench

Love bench as an element completing the synergy effect of other attractions The bench above the village of Poníky offers a view of the natural scenery and complements the region's offer, which unfortunately has no significant tourist “attraction”[21] but several small attractions, showing the ability of natural promotion based on their photogenicity.

Picture 5 : Bench of love
Source: *Bench of love*. [online]. [2018-10-10]. Available at: <https://www.aktuality.sk>.

„Megabench“ Gardeon in Kláštor pod Znievom

The bench on the hill above the village of Kláštor pod Znievom is an example of how a business entity's activity can reach the development potential of the entire region. The bench is the initiative of a local businessman in construction, as his tribute to respect the memories of walking trips with his father on the hill where he had the bench built. Due to its

[21] *Lavička Lásky*. [online]. [2021-10-10]. Available at: <https://www.aktuality.sk>.

photogenicity,[22] the bench can attract visitors to the village, where the relatively unknown castle to the visitors is located, or the beautiful alpine nature and the associated tourism.

Picture 6: Megabench Gardeon
Source: *Megabench*. [online]. [2018-10-10]. Available at: <www.slovago.sk>.

Bench on the top of Čipčie hill

The bench on the Čipčie hill is an example of the region's development through imaginative groups, as mentioned by Govers. Volunteers placed the bench on the hill with the intent to develop tourist opportunities in their area.[23] These volunteers chose a picturesque view, which can be reached after about two hours of hiking along the route, which they also marked very well.

Picture 7: Bench on the top of Čipčie hill
Source: *Bench.* [online]. [2018-10-10]. Available at: <www.turisticky.sk>

[22] *Megalavička Gardeon.* [online]. [2021-10-10]. Available at: <www.slovago.sk>.
[23] *Lavička na vrchu Čipčie.* [online]. [2021-10-10]. Available at: <www.turisticky.sk>.

3.2 Czech Republic

Open door at the top of Pancír hill

Pancír hill and its surroundings offer visitors several attractions and points of interest. However, the hill does not have an official peak point, so the local association decided to design the local environment with a door that opens into the surrounding nature and creates a symbolic peak.[24] This door is another example of activating the endogenous potential of the community

Picture 8: Door at the peak of Pancír hill
Source: *Door*. [online]. [2018-10-10]. Available at: <www.kudyznudy.cz>.

Architectural viewpoint Salaš

A private investor initiated the viewpoint. It is unique in its architecture, having the potential to increase the interest of tourists in this attraction, the nature in the area and architecture as well.[25]

Picture 9 : Architectural view Salas.
Source: *View Salas*. [online]. [2018-10-10]. Available at: <www.rozhlednasalas.cz>

Trail above vineyards

The observation tower is architecturally unique, it stands out in the surrounding country more visible than usual and as one of the few observation towers in the Czech Republic, it is

[24] *Pancír vrch.* [online]. [2021-10-10]. Available at: <www.kudyznudy.cz>.
[25] *Rozhľadňa salaš.* [online]. [2021-10-09]. Available at: <www.rozhlednasalas.cz>.

barrier-free.[26] Through aesthetic processing, it offers a unique type of experience in a unique place for people who are often facing barriers in their lives and every wine lover.

Picture 10 : Trail above vineyards – Kobylí
Source: *Trail above vineyards*. [online]. [2018-10-10]. Available at: <Magazine INTRO, 2019>.

Bell tower in Horečky and municipal inn - Rekovice

The bell tower in Horečky is an example of a small detail set in picturesque nature, offering many tourist attractions. However, it is an excellent example of successful cooperation between the municipality and modern architectural design. The cooperation began with the reconstruction of changing rooms in the village's sports facilities, but the result of its success are many small examples[27] of the harmony of modern architecture with nature, such as the local village inn, bell tower, or other buildings and details in the village and its surroundings.

Picture 11: Belltower
Source: *Belltower.* [online]. [2018-10-10]. Available at: <www.mrva.net>.

Goethe Viewpoint - Karlovy Vary

Viewpoint from 1889 in the neo-Gothic style. A great example of the fact that even a hundred years ago, architects made sure that the tourist attractions matched the surrounding environment, as with this building, complementing the visitor's possibilities to Karlovy Vary.

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[26] Barényi, K.: Tail about vineyards. [online]. [2021-09-09]. Available at: <https://www.asb.sk/architektura/chodnik-nad-vinohradmi>.
[27] *Zvonica*. [online]. [2021-10-10]. Available at: <www.mrva.net>.

Picture 12: Viewpoint close to Karlovy Vary
Source: *Viewpoint*. [online]. [2018-10-10]. Available at: <https://mmkv.cz/cs>.

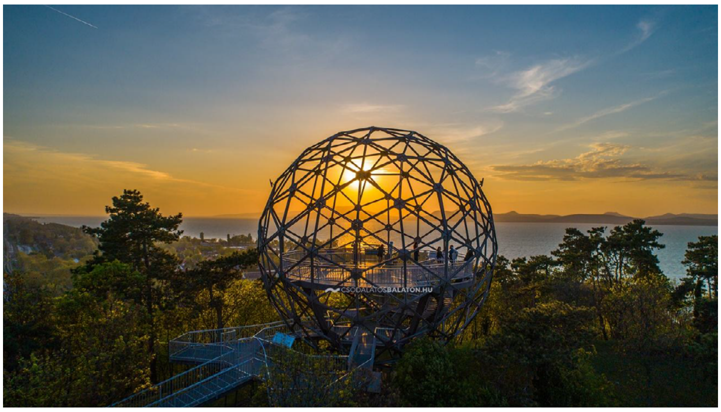
Observation place Durch
The idea and implementation is the activity of the family company Jánošík, producing windows under the hill where the Durch observatory is located. "I was thinking about redesigning our billboards. In the end, the desire to revolt against unclean nature was combined with advertising with our corporate philosophy of clean views. Overnight, we canceled all the billboards and began to create the Durch Observatory with the money we saved – expressing our support for a clear view."[28] This attraction is a successful example of how a company engaged in activities other than tourism can develop an activity that develops tourism and a demonstration of the positive externality of business in the region.

Picture 13: Observation place Durch
Source: *Observation place.* [online]. [2018-10-10]. Available at: <www.archinfo.sk>.

3.3 Hungary

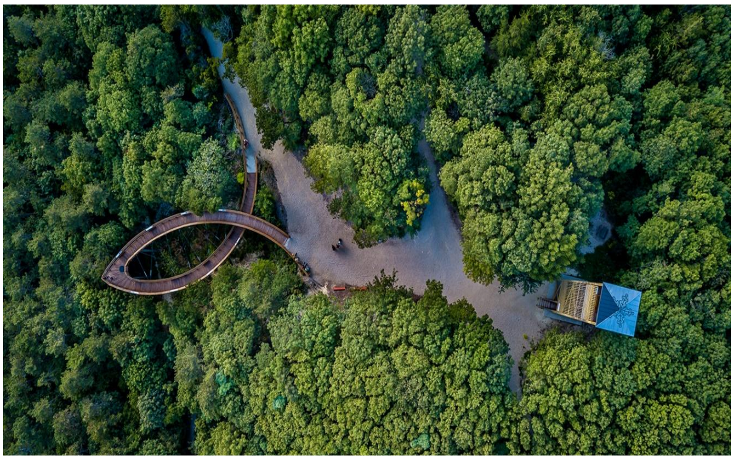
Round shaped sightseeing – Balatonboglár
In the 1950s, the political leadership decided that an aluminum structure that used to be part of the Hungarian stand at the World's Fair in Brussels in 1956 would be a suitable tourist "attraction" for foreign tourists bringing the foreign exchange to the country.[29] Even after many reconstructions, tourists enjoy the magnificent view from this building, connecting the turbulent history, architecture, and direct intention of developing tourism on the shores of Lake Balaton.

[28] *Durch výhliadka*. [online]. [2021-10-12]. Available at: <www.archinfo.sk>.
[29] *Balatonboglár*. [online]. [2021-10-12]. Available at: <https://csodalatosmagyarorszag.hu/>.



Picture 14: Sightseeing Balatonboglár.
Source: *Sightseeing*. [online]. [2018-10-10]. Available at: <https://csodalatosmagyarorszag.hu/>.

Bridge in the sky – Observation point – Panonhalma
The view from the hill in the shape of a church symbol above the village of Pannonhalma in Hungary is an example of community cooperation, bringing together the church, the municipality and the administrator of locally protected forests to provide a tourist experience, a more accessible path and the possibility of easier reachable inner peace of believers.[30] A perfect example is this building, bearing a historical person's name and emphasizing the importance of the site.



Picture 15: Boldog Mór Kilátó
Source: *Kilátó*. [online]. [2018-10-10]. Available at: <www.csodalatosmagyarorszag.hu>.

3.4 Austria

Sternenbalkon
The „Star balcony" might not even appear on this list because similar examples of good practice such as this one have already been shown more when the local community caught on and built something. However, the Star Balcony above the alpine lake, surrounded by local farms, is unique in that the community has made it the core of the product and an extended product. The local farmers cooperated and offered the possibilities of experiential gastronomy. [31]It is done by local farmers creating a unique „dinner package" or another meal type according to the preference of the guests preparing it for a set hour at this particular

[30] *Panonhalma.* [online]. [2021-10-12]. Available at: <www.csodalatosmagyarorszag.hu>.
[31] *Sternenbalkon.* [online]. [2021-10-12]. Available at: <www.millstaettersee.com>.

attraction. Thus, this attraction is an example of the explicit economic development of local farmers thanks to a tourist attraction.

Picture 16: Viewpoint Austria
Source: *Viewpoint*. [online]. [2018-10-10]. Available at: <www.millstaettersee.com>.

3.5 Albania

Benja Thermal Pools
Albania is not at the top of the European chart, neither by size nor by the countries' economic development. However, it works with symbols. In the case of Albania, it is a bridge. Albania is characterized by stone bridges, the most important of which is in the city of Mostar. An example of a thermal spring, which is a tourist attraction based on its natural potential, is not included in this paper based on its characteristics, but on the Bridge that Albania recently built close,[32] thus forming a natural part of nature, and the symbol of Albania in the photo documentation of tourist guides.

Picture 17: Natural thermal lake and bridge in the background
Source: *Natural thermal lake and bridge in the background*. [online]. [2018-10-10]. Available at: <https://www.intoalbania.com/>.

3.6 Ukraine

Swings in the Transcarpathian part of Ukraine
Ukraine, like Albania, is one of the well visible examples of unused natural potential. Nevertheless, this country can boast many sights, especially of a natural origin. The swings,

[32] *Albania thermal pools*. [online]. [2021-10-08]. Available at: <https://www.intoalbania.com/>.

located on the Ukrainian Carpathians' hills, that the local people can develop and beautify their environment.[33] Nature and technique used, correspond to their financial capabilities. However, the existence of “bottom-up” pressure to build new values and sites is essential to our research.

Picture 18: Mountain swings in Ukraine
Source: *Swings.* [online]. [2018-10-10]. Available at: <www.unsplash.com>.

Conclusion

Art, culture and aesthetics are even more critical in social networks in the tourism environment than ever before. The examples presented in this paper illustrate the number of individual initiatives that were able to raise the profile of a particular site and attract capital to the sites in increased traffic. The given examples are interesting not only by their appearance but especially by their motivations or story. They show that communities can voluntarily have the desire to uplift their surroundings and entrepreneurs who, following the Keynesian economy, can enrich the community around them. We should not forget the aesthetic experiences through which these attractions can bring new elements and values to their surroundings and the additional development when proactive individuals can seize opportunities and perceive the attraction of tourism as an essential product that seeks to expand. This paper deals with art as a possible tool suitable for identification of the right solution to sustainable tourism; therefore, this paper provides not only a theoretical search of fundamental principles but also presents good examples from the tourism practice in which art has become a product, but also a communication tool. These examples are more than just inspiration for effectively combining art with tourism. However, they describe the various forms of such activity that can be initiated by the local municipality, citizens, and entrepreneurs of local communities in a cycle that they can benefit from.

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Albania thermal pools. [online]. [2021-10-08]. Available at: <https://www.intoalbania.com/>.

[33] *Transcarpathian swings*. [online]. [2021-10-08]. Available at: <www.unsplash.com>.

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CHANGES IN ONLINE MARKETING COMMUNICATION CAUSED BY THE INFLUENCE OF THE "GROUNDSWELL"

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Abstract
The paper focuses on changes in online marketing communication, which occur as a result of the interaction of the so-called "groundswell". The groundswell can be described as a significant factor that has a huge impact on marketing communications but also on the market environment as such. The term groundswell refers to all people who influence business entities and marketing communication through various activities. In this paper we deal with aspects of the interaction of the groundswell with the subject and with the help of content analysis we evaluate whether these are favorable or unfavorable changes. At present, business entities focus on interactive communication with the customer. Entities actively seek customer feedback on and satisfaction with their products. Thus, building long-term stable relationships becomes one of the business goals. However, sometimes the subject's views may conflict with the customer. The paper focuses on the ways in which the groundswell can affect the subject and in the context of the findings points to the possibilities of improving the subject's communication with the groundswell. The empirical part of the paper focuses on a comprehensive content analysis of selected campaigns, while the researched factors are the actors of the groundswell and the business entity. Based on the analysis of selected case studies, we speak of the groundswell as an important factor that can cause the activity to make the campaign viral. We also focus on the response of the subject, which can be an incentive to expand the groundswell network degrading the brand. We also address the question of whether the digital customer can influence and indicate changes in the marketing communication of entities. The aim of the paper is to point out the advantages of the subject's cooperation with the groundswell.

Key words:
Discussion. Groundswell. Changing brand perception. Change of marketing communication. Online marketing. Social media.

Motto

"The beginning is always different and the means are always difficult. But the end is always simple and the same. In the end, someone always comes, someone leaves, someone dies and someone stays. "

Meir Shalev

Introduction

With the growing popularity of new digital platforms, which aim to gather and sustain the social community, we can talk about changes in the usual patterns of behavior of digital consumers. WOM marketing (world of mouth) is becoming more and more trendy, with which we can often meet especially on social networks. According to Madleňák, social media are a unique means of maintaining contacts and at the same time they are necessary to ensure the dissemination of information.[1] Social media has become a vital marketing tool for businesses and institutions[2] regardless of the area in which the entity operates and with which target group it interacts in communication campaigns. Social media has become a vital marketing tool for businesses and institutions, regardless of the area in which the entity operates and with which target group it

[1] MADLEŇÁK, A.: Social media as an opportunity for s-commerce development at the time of COVID-19 pandemic. In KVETANOVÁ, Z., BEZÁKOVÁ, Z., MADLEŇÁK, A. (eds.): *Marketing Identity COVID-2.0.* Trnava : Univerzita sv. Cyrila a Metoda v Trnave, 2020, p. 397.
[2] APPEL, G., GREWAL, L., HAIDI, R., STEPHEN, A. T.: The future of social media in marketing. In *Journal of the Academy of Marketing Science*, 2020, Vol. 48, p. 79. [online]. [2021-09-18]. Available at: <https://doi.org/10.1007/s11747-019-00695-1>.

interacts in communication campaigns. Attributes such as social engagement, obtaining new information on a daily basis and, last but not least, entertainment can undoubtedly be included among the main advantages of social networks and communication through them. The reason why we address the issue of social media in the introduction to the article is simple. If we want to talk about changes in the online environment, it must not be forgotten that social media, of which social networks are a part, offer a starting point for the expansion of the "groundswell". Groundswell was defined by the authors of "Groundswell" Bernoff and Li as *"a social trend where people use technology to achieve what they need from each other and not from traditional institutions such as companies."*[3] The groundswell found in an online environment could be interpreted as a unique way of swirling information in intangible space that can "ripple" or move dramatically. In our opinion, the dominance of the groundswell depends on the actors who create it; because it may happen that the groundswell may not have a significant life cycle and therefore will not affect business entities. On the other hand, and we encounter this situation especially in the current online space, we can say that there is more and more negative information in the online environment. This phenomenon arises as a result of aggressive behavior and, last but not least, decent moral absent. Of course, in this context, we are talking about people, that is, actors in the groundswell who can create, enlarge and change it by their behavior. The paper points out the presence of the groundswell in the online space and focuses on defining its ability to change the current online communication of business entities as well as the behavior and opinions of its actors.

1 Theoretical Background

People are more online than ever before. The causes of the digitizing world can be debated, but the aim of our contribution is to think critically about the changes that the groundswell brings and also about the benefits that arise for the business entity as a result. We observe that there are more and more active recipients of information on social networks (they themselves are actors in the groundswell and usually spread it uncontrollably and unconsciously). While observing social network users, we noticed one important fact, and that is that social media users are more confident, feel that their opinion is generically valid, and if they encounter misunderstandings, form a groundswell that combines aggression and its actors bring negatively oriented attitudes, which usually result in derogatory and offensive discussions full of vulgarism and finger-pointing. The conclusion of our presentation, which we have described, is sad, especially in view of the growing technological progress at the global level or the ever-increasing level of education, both at the level of primary education and at the university academic field. We are currently witnessing that some social media users are losing all justice and directly commenting and hurting other users of a particular social media with their comments, but also damaging the reputation of businesses (including extremely growing attacks on executives as political representatives of the Slovak population). In this part of the paper, we determine the basic theoretical aspects of the groundswell and define how its creation can affect (not only) online communication of business entities.

1.1 People think (write, read, discuss, criticize, praise) online

Consumer behavior is changing due to different life and societal situations. At present, however, as a result of the global pandemic, it is possible to argue about a global change in consumer behavior, and it is not possible to determine precisely the uniform pattern of this change and

[3] LI, CH., BERNOFF, J.: *Spodná vlna.* Bratislava : Eastone Books, 2010, p. 10.

also its future direction. We observe that the *wave* of digital users is growing from year to year. The latest statistics from the datareportal.com portal point to a current phenomenon, which is the interconnection of social media technologies, e-commerce, content streaming and video games. Based on the results of these statistics, we further analyze two key findings focused on the Internet in general and the specific platform of the online environment - social media.

- **Internet:** in January 2021, the number of Internet users worldwide was 4.66 billion, which is 316 million, or 7.3% more users than last year. Global internet penetration is currently at 59.5%.[4]
- **Social media:** currently (2021) there are 4.20 billion social media users worldwide. However, the number of social media users has increased by 490 million in the last year, which represents a year-on-year increase of more than 13% of users. The total number of social media users currently represents more than 53% of the world's population.[5]

We reported that the worldwide number of visitors to the online space as such increased by an average of 7.3% of users and the number of social media users increased by more than 13% globally. For comparison, we present current statistical findings aimed at Internet and social media users living in the Slovak Republic.

- **Internet:** If we want to quantify the current state of the digital environment in the Slovak Republic, we are based on statistics according to the European Statistical Office Eurostat, which states that in 2020 the number of Internet users increased by 6% year-on-year to more than 90%.[6] Compared to global data, Slovakia does not lag behind other countries and the data do not differ significantly from a global scale.
- **Social media:** to define the current classifying users of social media in Slovakia, we present the results of statistics conducted by the agency Go4insight. The survey was conducted on a representative sample of 1,000 respondents aged 15 to 79 years. In Slovakia, 86% of the population uses some of the social media at least once a month, while 61% of the Slovak population uses social media on a daily basis. We believe that an interesting finding is the fact that the use of social media is the most popular activity of most Slovaks. We interpret this information from statistics conducted under the auspices of Go4insight. Based on the results, we want to point out the fact that the use of social networks is one of the most common activities that Slovaks perform in the online space.[7]

By interpreting the previous statistics, we determined the current state of social media use and spending time in online space on a global scale in comparison with Slovak data, it helped us to understand the current state. Based on the synthesis of these statistics, we state that not only in Slovakia but on a global scale can be observed increased interest in the online environment is growing, which is reflected in the growing number of new social media users, active or passive forum visitors, YouTube video watchers and customers shopping online.

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[4] KEMP, S.: *Digital 2021: Global overview report*. [online]. [2021-09-25]. Available at: <https://datareportal.com/reports/digital-2021-global-overview-report>.
[5] Ibidem.
[6] *Internet používa 9 z 10 Slovákov. Najčastejšie vyhľadávame informácie o koronavíruse a ako finančne zvládnuť pandémiu.* [online]. [2021-09-29]. Available at: <https://www.finreport.sk/ekonomika/internet-pouziva-9-z-10-slovakov-najcastejsie-vyhladavame-informacie-o-koronaviruse-a-ako-financne-zvladnut-pandemiu/>.
[7] *Koľko Slovákov je na sociálnych sieťach?* [online]. [2021-10-14]. Available at: <https://www.go4insight.com/post/ko%C4%BEko-slov%C3%A1kov-je-na-soci%C3%A1lnych-sie%C5%A5ach>.

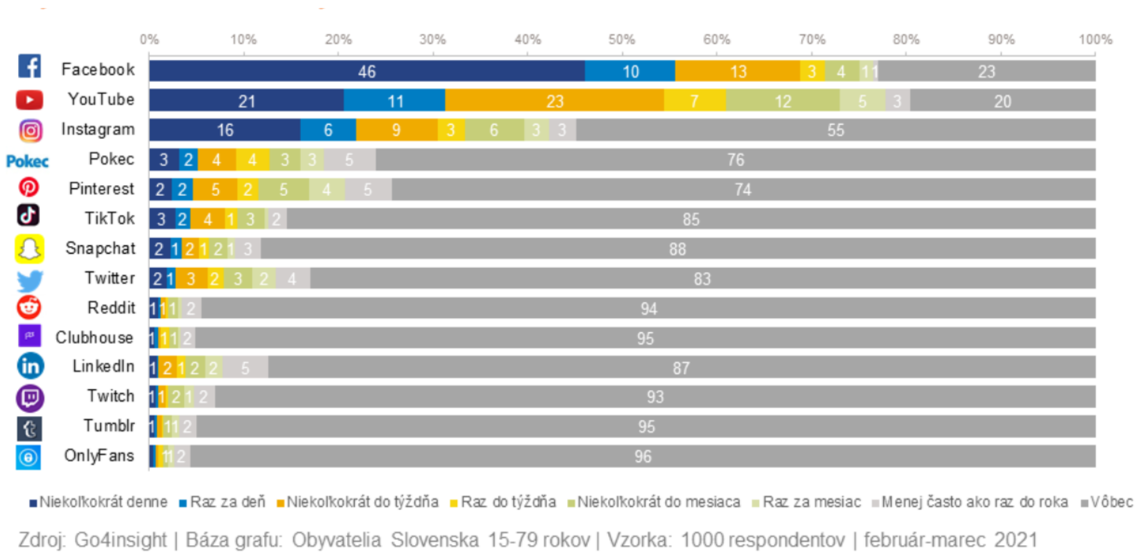

Chart 1: The result of statistics on the use of social networks by Slovaks
Source: *Koľko Slovákov je na sociálnych sieťach?* [online]. [2021-10-14]. Available at: <https://www.go4insight.com/post/ko%C4%BEko-slov%C3%A1kov-je-na-soci%C3%A1lnych-sie%C5%A5ach>.

Social networks are based mainly on sharing emotions, opinions but also the experience of users[8] with other users of a particular social network or a selected community of people. According to Tseng and Wei, the growing number of customers who buy and communicate online represents new opportunities especially for building and maintaining long-term relationships, but also for getting feedback quickly. It is beneficial for businesses to share positive reviews and write reviews based on their own experience with the product on social media or business websites.[9] Communication via social networks is often automatically associated with a number of expectations for clients. Some expectations may be so far "fulfilled", but there are cases where social networks can have the exact opposite effect than we had hoped for.[10] It is also interesting for social media users to leave room for their own "creation" of content. Customers feel that their opinion is so important that it can influence other users of the social media community. Through communication created by social media users, it is possible to interact with other customers in the form of comments or direct messages), a tool for communication with the audience. They also help in the development of civic journalism - by obtaining tips on various topics[11], or based on comments from potential customers, which also supports the building of the brand and increases its awareness.[12]

[8] BEZÁKOVÁ, Z., TOMOVÁ, M.: Online marketing communication of restaurants in context of Covid-19 pandemic. In KVETANOVÁ, Z., BEZÁKOVÁ, Z., MADLEŇÁK, A. (eds.): *Marketing Identity 2020. COVID-2.0.* Trnava : FMK UCM in Trnava, 2020, p. 25.
[9] TSENG, C. H., WEI, L. F.: The efficiency of mobile media richness across different stages of online consumer behavior. In *International Journal of Information Management*, 2020, Vol. 50, p. 355. [online]. [2021-09-17]. Available at: <https://doi.org/10.1016/j.ijinfomgt.2019.08.010>.
[10] BEŇO, I.: Zabudnime na mýty spojené so sociálnymi sieťami. Nemusíme byť aktívni všade a stále, buďte tam, kde je aj váš zákazník. In POLGÁRI, Š. (ed.): *123 typov pre online a affiliate marketing.* Bratislava : Affliate sieť Dognet, 2020, p. 33.
[11] KAČINCOVÁ PREDMERSKÁ, A., ŠVECOVÁ, M.: Komunikácia novinárov na sociálnych sieťach: vlastná iniciatíva alebo povinnosť? In BUČKOVÁ, Z. KAČINCOVÁ PREDMERSKÁ, A., RUSŇÁKOVÁ, L., (eds.): *Megatrendy a médiá 2019 – Digital Universe*. Trnava : FMK UCM in Trnava, 2019, p. 141.
[12] BEZÁKOVÁ, Z., TOMOVÁ, M.: Online marketing communication of restaurants in context of Covid-19 pandemic. In KVETANOVÁ, Z., BEZÁKOVÁ, Z., MADLEŇÁK, A. (eds.): *Marketing Identity 2020. COVID-2.0.* Trnava : FMK UCM in Trnava, 2020, p. 25.

Recognizing that customers have become much more likely to be in the digital environment over the last two years is a key finding for businesses that should motivate them to rethink current communication strategies. Through observation, we found that several business entities began to create their own e-shops as part of their business activities, or applied digital platforms to their marketing activities. Many businesses have realized that if they only apply offline marketing communication tools as part of their business, they can lose regular and occasional customers, especially at a time marked by a coronavirus pandemic. In our opinion, it is essential to realize that as the use of digital platforms and special social media has become increasingly popular in the last 2 years, it can be predicted that this trend will continue and social communication platforms will continue to rise. Based on these studies, we can predict that in the next 5 years, the phenomenon of social media use will continue to grow rapidly, which is related to the prediction of greater representation and demonstration of the groundswell in online space. There is strength in unity, so it can be further assumed that if the groundswell learns of mutual cooperation, it can become a strong negotiating aspect in the process of business conformity in relation to customers. In addition, we assume that the groundswell can later significantly affect and change the way information is provided, which may represent further changes in the online communication of the business entity.

1.2 Changing customer behavior (not only) in the online environment and business compliance

Social networks are being criticized. We believe that people who use social media have never been as critical as they are now. To determine a change in customer behavior, we must first outline the attributes that can lead to a change in behavior. In the introduction, we believe it is important to mention that people usually do not change their behavior just for no reason. People's behavior can change in the short term or in the long run. Among the factors that influence a person to change the usual pattern of behavior, we can include emotional influences, especially negative ones. If something unfavorable happens, we usually start to think and re-evaluate more, or we try to immediately come to the heart of the problem, which can again evoke only unfavorable emotions, as a result of which we change our behavior. According to Cennamo, Dagnimo, Minin and Lanzolla, digital technologies can offer new means of collaboration with other companies, which can help the entity retain its customers by introducing new inter-company routines to share information and resources, and create collective outputs that can offer customers new or enhanced value offers. [13] Human behavior can also be affected by a natural or societal disaster (e.g., the spread of COVID-19). In the next part of the article, we will discuss the current causes indicating changes in customer behavior.

In an article by Forbes, we read that the most significant change in consumer behavior is a reassessment of the purchasing process. While shopping centers were overcrowded before the outbreak of the pandemic, a significant drop in people shopping in brick-and-mortar stores can be observed during the pandemic. Customers want to shop, this need is not lost, but they do not want to endanger themselves and their loved ones or friends, so they prefer to buy from the comfort of home.[14] In addition to making online shopping safer (in order to eliminate the risk of coronavirus infection), online customers can shop virtually anywhere (internet connection

[13] CENNAMO, C., DAGNINO, G. B., DI MINI, A., LANZOLLA, G.: Managing Digital Transformation: Scope of Transformation and Modalities of Value Co-Generation and Delivery. In *California Management Review*, 2020, Vol. 62, p. 10. [online]. [2021-09-17]. Available at: <doi:10.1177/0008125620942136>.

[14] *How Consumer Shopping Habits Are Changing This Year*. [online]. [2021-09-25]. Available at: <https://www.forbes.com/sites/square/2021/02/26/how-consumer-shopping-habits-are-changing-this-year/?sh=341497e73714>.

and laptop, tablet or mobile device are sufficient). Other benefits of online shopping include delivery (not everyone owns a car and can travel) access to information, but also the ability to share your opinion of the product with other people and, conversely, the ability to read, comment and share ongoing discussions (reviews).[15] As we mentioned in the previous section of this post, the number of digital enthusiasts moving around the world on a daily basis is still growing. It follows that if people can and do shop on the Internet to an increased extent, it is possible to expect that they will also be interested in product evaluation and enriched by their own self-confidence (gaining knowledge of more information, which is not always correct) whether by their own user experience, they either join the discussion or become the participants in the discussion themselves, thus beginning to swirl *groundswell*. We know that digital technologies are encouraging consumers to build brands in creating a viral sensation, according to Adamson[16] and Sučanský[17], because often the creation of a humorous situation on social media is a reason to attract attention, which results in increased sales of the site / social network of the subject. By observing user behavior on social media and in the online space as such, we can predict that digital users will not only passively engage in ongoing discussions (that is, by reading only), but will become actors in new and new discussions, as a result may come at an *increasing groundswell current*.

The online world is more dynamic today and offers a number of stimuli in one space at once. The user of the Internet, and therefore also of social media, can much more easily gain a sense of security when establishing relationships, arguing or building a position in the virtual social ladder, because everyone wants to be in a society where they respect and are interested in their opinion. In the online space, it is easy at first glance. If we are not uncomfortable with someone, we can simply remove them from friends or (in the case of a social network user that we do not have in friends) block the non-sympathetic person or report their profile. If none of the above works, we still have the option to sign out or permanently delete your profile.[18] The digital transformation undoubtedly brings a number of benefits for both customers and businesses. These benefits include the ability of digital creations to support generativity - the ability of a technology system to produce unsolicited changes driven by a large audience that can be determined as part of a groundswell.[19] In connection with the interpretation of the advantages of digital technologies, it is also necessary to mention some disadvantages that the online world undoubtedly offers. An interesting finding of pitfalls on the Internet is stated by the author Koltaiová, according to whom dangerous and harmful content on the Internet is a serious problem.[20] However, it is extremely important that entities create and distribute brand-related content to meet one or more consumer motives for brand interaction. The stronger the needs of consumers can be met through specific media content, the higher their perceived value, which

[15] ESTAY, B.: *16 Online Shopping Statistics: How Many People Shop Online?* [online]. [2021-09-25]. Available at: <https://www.bigcommerce.co.uk/blog/online-shopping-statistics/>.

[16] ADAMSON, A. P.: *Digitálna značka: Ako sa najlepšie značky presadzujú v digitálnom svete.* Bratislava : Eastone Books, 2011, p. 27

[17] SUČANSKÝ, M.: *4 metódy, ako čo najrýchlejšie zvýšite predaj na webe.* [online]. [2021-9-25]. Available at: <https://www.marketinger.sk/free-times/4-metody-ako-co-najrychlejsie-zvysite-predaj-na-webe>.

[18] MOLIN, K.: Virtuálna generácia a reálne násilie. In MADRO, M., HOLÍKOVÁ, B. (eds.): *Virtuálna generácia. Sme dnes iní ako kedysi?* Bratislava : Fakulta psychológie Paneurópskej vysokej školy v Bratislave, 2015, p. 45. [online]. [2021-09-27]. Available at: <https://www.paneurouni.com/wp-content/uploads/2017/03/virtualna-generacia-sme-dnes-ini-ako-kedysi-zbornik.pdf>.

[19] CENNAMO, C., DAGNINO, G. B., DI MINI, A., LANZOLLA, G.: Managing Digital Transformation: Scope of Transformation and Modalities of Value Co-Generation and Delivery. In *California Management Review*, 2020, Vol. 62, p. 6. [online]. [2021-09-17]. Available at: <doi:10.1177/0008125620942136>.

[20] KOLTAIOVÁ, A.: Komunikácia v online prostredí – komunikácia generácie Z. In BUČKOVÁ, Z., KAČINCOVÁ PREDMERSKÁ, A., RUSŇÁKOVÁ, L. (eds): *Megatrendy a médiá 2019 – Digital Universe.* Trnava : FMK UCM in Trnava, 2019, p. 280.

comes from the media (e.g. community) interaction. In addition to the motivation outlined, the importance of regular rewarding of digital consumers in order to build a favorable groundswell towards the entity is also essential.[21]

2 The groundswell as the driving force of the subject's activities

The groundswell is a way of communicating to the general public in an online environment that can influence other people's opinions. It is therefore a phenomenon of the present and a social trend. In the following part of the paper, we interpret important theoretical definitions from our point of view, which are related to the creation and growth of the groundswell. In the second part of the article, we analyze a selected campaign that was published on the social network Facebook, and thanks to this (and previous) video-contributions of the subject, we observe a dynamic swirl of the groundswell.

2.1 The groundswell network in online space is growing

As mentioned, groundswell defines an ever-changing community that can influence businesses in an online environment through its behavior. The question is whether or not businesses have to adapt and change under the influence of groundswell flow. If companies adapt the offer of products and services to the real requirements of customers, several facts may signal this. One of the reasons why businesses can (and not only) transform the way they communicate based on groundswell activities is the perception of groundswell by businesses. Businesses, for which customers present more than just statistics in spreadsheets, create opportunities for customer involvement in communication and give them space to express feedback. The online environment offers many ways to interact with customers. At present, social networks offer a number of tools (and social media tools are constantly being innovated) with which it is possible to involve the online public in communication. One of the Slovak experts on social networks Beňo states in the article that *"social networks are largely a review that plays an important role in the purchasing process, and therefore the time devoted to customer care is definitely not negligible."*[22] However, communication via social networks can also be beneficial for its users. Author of the article *Social media: Why to focus on them?* Shagambayeva says that engaging customers in communication is one of the main benefits that social media offers.[23] Through this interaction, people can share information and content with each other. This information can be provided in the so-called "Circles". Sharing is possible with each other within the private environment of acquaintances and friends, and it is also possible to publish content to the general public. We get the feeling that the information does not come from traditional media, but from users.[24] Vasil adds that the key to successful communication on social networks is to pay attention to the communication of competitors, the communication of the target group and

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[21] KAUR, H., PARUTHI, M., ISLAM, J., HOLLEBEEK, L. D.: The Role of Brand Community Identification and Reward on Consumer Brand Engagement and Brand Loyalty in Virtual Brand Communities. In *Telematics and Informatics,* 2020, Vol. 46. p. 3. [online]. [2021-09-29]. Available at: <https://doi.org/10.1016/j.tele.2019.101321>.

[22] BEŇO, I.: Zabudnime na mýty spojené so sociálnymi sieťami. Nemusíme byť aktívni všade a stále, buďte tam, kde je aj váš zákazník. In POLGÁRI, Š. (ed.): *123 typov pre online a affiliate marketing.* Bratislava : Affliate sieť Dognet, 2020, p. 35.

[23] SHAGAMBAYERA, D.: Sociálne médiá: Prečo sa na ne zameriavať? [online]. [2021-10-04]. Available at: <https://www.prognessa.com/socialne_media/>.

[24] KUBOVICS, M.: Využívanie technológie NFC označovania v solomo marketingu. In MADLEŇÁK, A., MURÁR, P., LABUDOVÁ, L. (eds.): *Quo Vadis Massmedia & Marketing.* Trnava : FMK UCM in Trnava, 2020, p. 97.

the established fan base of the subject.[25] At the same time, he adds that by observing these groups, the business entity can obtain the necessary information and can also learn which way of communication is attractive to them and, conversely, which is not.[26] The transformation of communication adopted as a result of the dominant aggressive communication of the groundswell actors may or may not be beneficial for the company.[27] However, businesses should know how the groundswell pressure can be neutralized and, at best, benefited from it. In relation to the interpretations made, in our opinion it is appropriate to state the basic advantages that distinguish social media from other forms of online and face-to-face communication. These are: visibility, perseverance, manageability and coherence. [28]

In connection with the increasingly common phenomenon of groundswell, it is also appropriate to define the time that users spend on a specific social medium. In 2019 and 2020, the average daily use of social media by their users was expressed in units of 145 minutes per day.[29] These statistics are generalizing in the context of the global average, but if we want to define how much time their users in Western Europe spent using social media, we can say that according to the statistics available for statistics, it was a 79% social media penetration rate.[30] With the above statistics, we wanted to point out the fact that not only in Slovakia can we see an increased interest in social media, but on the contrary, these media are gaining new and new users who are willing to devote a lot of free time to them worldwide.[31] Although we do not deny the results of this study, we want to draw attention to the fact that not all the inhabitants of the planet will (probably) be in the online space. Therefore, in our opinion, interaction with customers through IMK (Integrated Marketing Communications) is important.

2.2 Building online marketing and creating groundswell conflicts

Audience interactions on social networks are no longer measured solely on the basis of click-through conversions (in the case of social statuses, click-like). According to Reiter, *"Facebook is not just about likes at all"*[32], thus users clicking „like button on this social network“. Another way in which groundswell actors can interact with businesses is to comment on posts and stories.[33] Commenting on social networks is currently experiencing great popularity. This interaction of the audience interprets to us that the user of the social network is willing to devote his time to contributing to the discussion (here we observe the meeting of the groundswell).

[25] Authors' note: The community on the social sites is a groundswell that is changing dynamically.
[26] VASIĽ, M.: *Komunikácia na sociálnej sieti – musíte sa prispôsobiť.* [online]. [2021-10-04]. Available at: <https://www.h24studio.com/komunikacia-na-socialnej-sieti/>.
[27] On the issue „a primer on threats and responses on social media,“ see also HORN, I., TAROS, T., DIRKES, S. (eds.): Business reputation and social media: A primer on threats and responses. In *Journal of Direct, Data and Digital Marketing Practice*, 2015, Vol. 16, p. 193-208. [online]. [2021-09-17]. Available at: <https://doi.org/10.1057/dddmp.2015.1>.
[28] SUBRAHMANYAM, K., FRISON, E., MICHIKYAN, M.: The relation between face-to-face and digital interactions and self-esteem: A daily diary study. In *Human Behavior and Emerging Technologies*, Vol. 2, No. 2. p. 118. p. 116-127. [online]. [2021-09-07]. Available at: <doi:10.1002/hbe2.187>.
[29] *How much time do people spend on social media?* [online]. [2021-10-04]. Available at: <https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide>.
[30] Ibidem.
[31] Ibidem.
[32] REITER, M.: *Kauza Facebook Files: Chceme na vás zarobiť a na vás kašleme, ale nie tak celkom.* [online]. [2021-10-04]. Available at: <https://touchit.sk/kauza-facebook-files-chceme-na-vas-zarobit-a-na-vas-kasleme-ale-nie-tak-celkom/374127>.
[33] PATEL, N.: *What Types of Posts Get Shared the Most on Facebook?* [online]. [2021-10-04]. Available at: <https://neilpatel.com/blog/shared-the-most-on-facebook/>.

Posts with a more controversial nature usually receive more comments.[34] We can state that it is the function of commenting on posts that can create and increase the strength of the groundswell on social networks. Social network users (we mean especially the most popular social network Facebook[35]) they not only communicate with their friends but we observe that they are increasingly asking, arguing, pointing, arguing and criticizing. All defined activities can be created by the groundswell, i.e. the social trend that defines the ever-changing community of social media users) by commenting on posts or Facebook Stories, or by creating your own posts in which the groundswell trend can develop again. According to Olejárová, there is also the exploitative influence of social networks, within which there is room for the development of user creativity and further sharing of ideas, but there is also a commodification of attention, activities or user data.[36]

As part of the interpretation of a selected article in which the presence of the groundswell can be observed, we decided to critically describe and interpret one of the video articles published on the social network Facebook of the well-known Hollywood Burger. In the beginning, we would like to make it clear that the mentioned business entity actively communicates on social networks, especially on the social network Facebook, where it has built a wide base of its fans with the number of 39,029 followers.[37.] Due to the current situation (lockdown and state of emergency declared due to the rapidly growing number of patients infected with the new coronavirus Covid-19 caused by the SARS-CoV-2 virus), several businesses in Slovakia are forced to close their business to the public. However, the owner of that establishment refuses to comply with that regulation because he wishes to prevent the dismissal of his employees and the closure of his business, and therefore regularly publishes contributions on the social media of his business aimed at promoting and defending gastronomy. In one of them, he says, *"Soon our districts will turn black. We were deceived again. And I'm asking business owners to finally take the balls. You cannot go inside, vaccinated or unvaccinated. So what freedom? What vaccine? I ask the owners to stop letting the state dictate what they can and cannot do in their own businesses. And whom they can and whom they cannot serve. We went into business so that we would not be dependent on anyone. This ceases to be true. So that's it."*[38] According to Klementis, businesses should respond to the contributions and comments of their fans (if the nature of the contribution and comment requires it) within a few minutes or hours if they want to arouse genuine interest in media users and their brand, and at the same time want to achieve favorable perceptions among the actors of groundswell. Reviews on social media can either in a positive or negative sense of the word affect especially those media users who do not know the subject, or visited the profile of the subject and the social network for the initial acquisition of information about the subject.[39] Through the publication of video posts in which the owner

[34]SZABLA, M., BLOMMAERT, J.: Does context really collapse in social media interaction? In *Applied Linguistics Review*, Vol. 11, No. 2, 2020, p. 255. [online]. [2021-09-07]. Available at: <doi:10.1002/hbe2.187>.
[35] Authors' note: See more at *Most popular social networks worldwide as of October 2021, ranked by number of active users.* [online]. [2021-10-02]. Available at: <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>.
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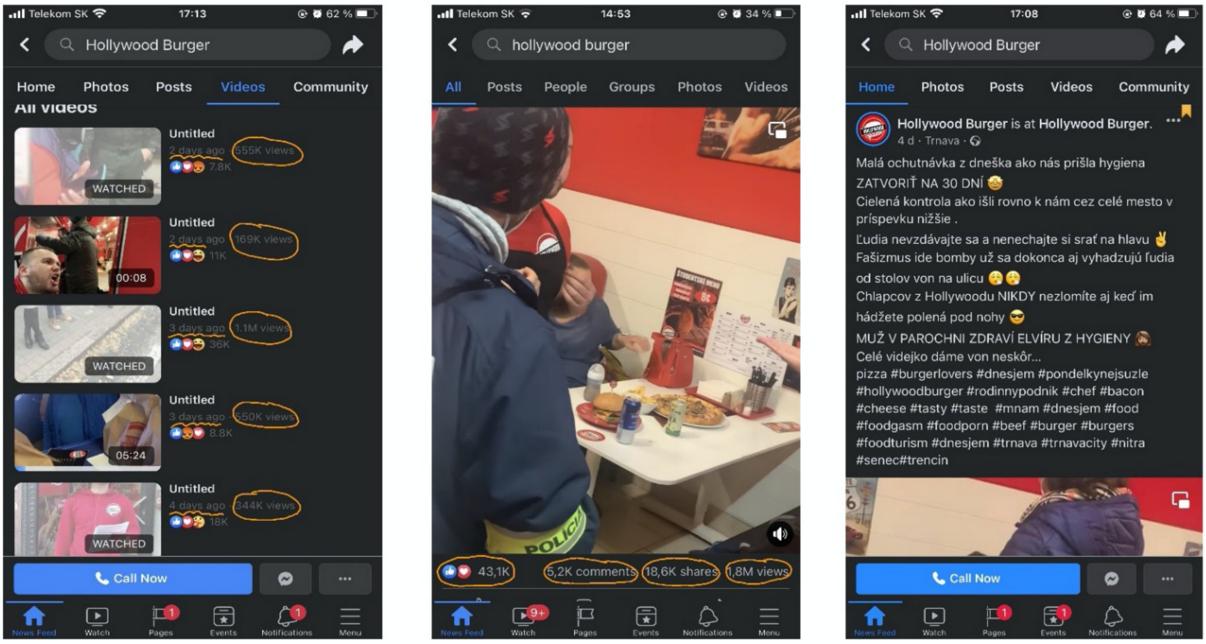
[37] Authors' note: The data is relevant as of 28. November 2021.
[38] FEDIČOVÁ, G.: *Majte gule a nenechajte si diktovať od štátu vo vlastných podnikoch, hovorí majiteľ prevádzky*. [online]. [2021-11-20]. Available at: <https://www.hlavnydennik.sk/2021/09/26/majte-gule-a-nenechajte-si-diktovat-od-statu-vo-vlastnych-podnikoch-hovori-majitel-prevadzky/>.
[39] KLEMENTIS, M.: Social Media Communication of Small Local Brands as the Future of Circular Economy. In KARPASTIS, Ch.; VARDA, Ch.: *Proceedings of the 7th European Conference on Social Media ECSM 2020.*

reiterates that he will not be intimidated and liquidated, and will continue to offer food to his customers, groundswell has begun to swirl on the social network in question. We will now clarify what types of groundswell actors we tried to observe. As we stated in the theoretical basis of this paper, we can most often meet two types of users (groundswell actors) on social media. These are passive and active users. While active users create the content themselves, share, comment or engage in discussions (most often negatively oriented, i.e. those in which there are aggressive conflict disputes between the participants in the discussion), passive users (groundswell actors) only "consume" this content and do not contribute their views into already turbulent or less dynamically changing debates. Through a selected business entity and samples of engaging video posts[40], that caused a heated discussion on the social network Facebook,[41] we try to point out changes in online marketing communication, which also extend to other offline activities of the business entity. The selected article (see Figure 1) was published on November 23, 2021. This is a video article with a text description in which the owner points out the fact that a worker from the Department of Hygiene came under the auspices of RÚVZ (Public Health Authority of the Slovak Republic) to inform him to close its operation for 30 days. This contribution can be described as extremely successful in the context of the obtained audience interaction. The interaction with the post was as follows. In 5 days, the video post (see Figure 1) received the following interactions: a total of 43.1 thousand responses (of which 35.4 thousand "Like"; 5.9 thousand "Love"; 577 "Angry"; 531 "Care"; 261 "Wow" 206 "Haha" and 173 "Sad." We also see 5.2 thousand comments in this post.) The contribution had up to 1.8 million views in 5 days.



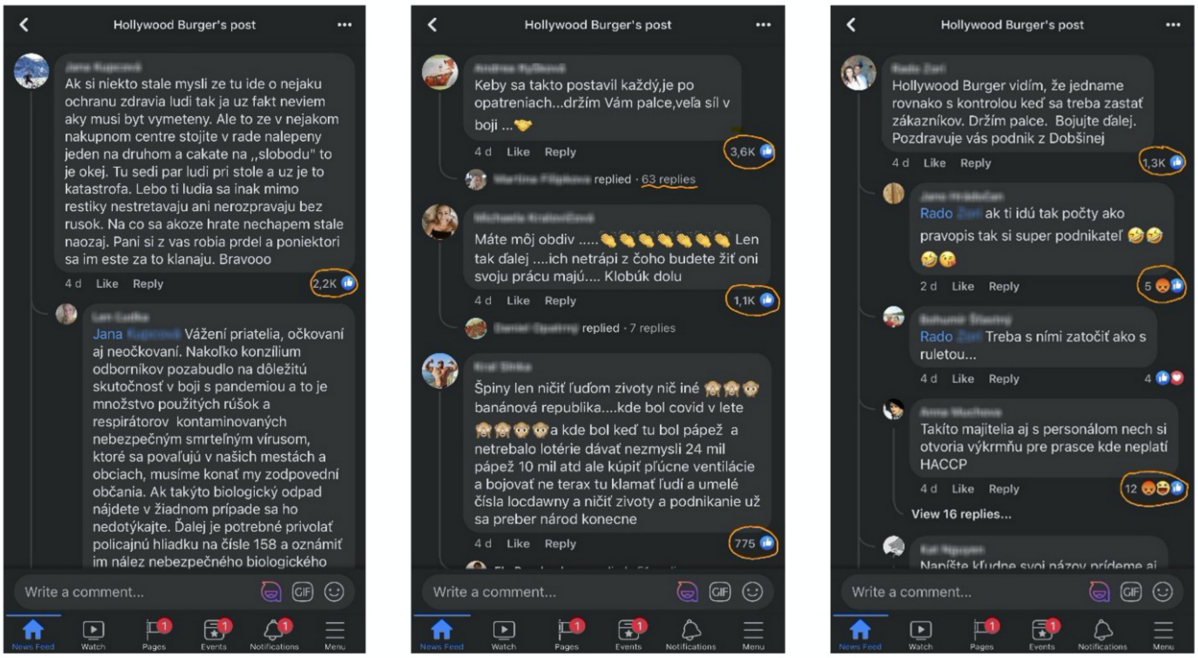
Picture 1: Video post with a text description of the Hollywood business entity
Source: *Facebook*. [online]. [2021-28-11]. Available at: <https://www.facebook.com/hollywoodburgertrnava>.

Cyprus : Academic Conferences and Publishing International Limited Reading, 2020, p. 340. [online]. [2021-10-3]. Available at: <http://toc.proceedings.com/55395webtoc.pdf>.

[40] Authors' note: For more information on the factors that appeal to social network users, see the subchapter *1.2 Zmena správania zákazníkov (nielen) v onlinovom prostredí a konformita podnikov.*

[41] Authors' note: We have noticed that the conflict between the owner of the operation and public officials or bodies of the police force of the Slovak Republic is escalating and more and more people are interested in it.

It is also interesting to examine the impact of how social media and especially the interactions of social network users can change consumer behavior and preferences. As we stated in the previous pages of the article, the emergence of new innovations and technology of the company significantly affects the purchase but also the thinking of customers. Consumer behavior has changed radically. As a result of the pandemic, we would expect people to be frightened, as a result of which they will interact with social media contributions. However, the opposite is true. Kaur, Paruthi, Islam and Hollebeek state in the article that companies are currently focusing on creating content that will be related to their business activities while meeting customer needs.[42] If a particular entity's customers interact with humorous videos (in the context of the business entity surveyed, we include the owner's videos here as a "man with a wig"), the entity should focus on creating this type of interactive content. The stronger the needs of consumers are met by specific media content, the higher their perceived value, which they further interpret as a groundswell community. In general, motivation is also important for all customers.[43] The owner of the Hollywood burger operation was forced (by public authorities) to close the stone operation, but even that did not stop him from continuing his business, i.e. he sold customers refreshments from his van, in which he and his employees prepared burgers and offered them to their customers for free. This move again triggered a discussion in a video post, in which the groundswell supporting the Hollywood Burger started (see Picture 2).

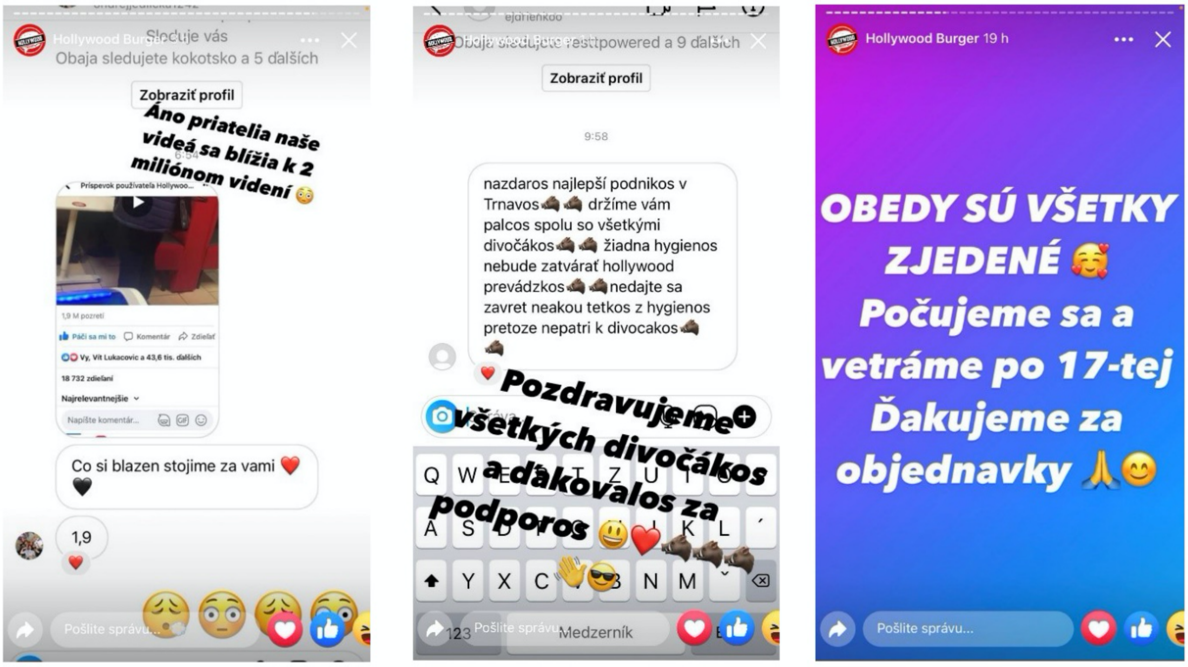


Picture 2: The flow of the groundswell in the discussion under the above video post by Hollywood Burger.
Source: *Facebook.* [online]. [2021-28-11]. Available at: <https://www.facebook.com/hollywoodburgertrnava>.

In Figure 2 we can see that users of the social network Facebook (assuming they are fans of gastronomy) support the owner of the operation in "fighting" with state officials, who due to applicable government regulations by enforcement means (fines for non-compliance with government regulations at the time of lockdown and crisis due to a pandemic) are forced to temporarily suspend their business. The author of one of the comments, on the already

[42] KAUR, H., PARUTHI, M., ISLAM, J., HOLLEBEEK, L. D.: The Role of Brand Community Identification and Reward on Consumer Brand Engagement and Brand Loyalty in Virtual Brand Communities. In *Telematics and Informatics,* 2020, Vol. 46. p. 10. [online]. [2021-09-29]. Available at: <https://doi.org/10.1016/j.tele.2019.101321>.
[43] Ibidem.

interpreted contribution of the owner of the operation, writes *"If everyone stood like this, any measures there will be no longer. I keep my fingers crossed for you, I wish you a lot of strength in the fight."*. This comment addressed a number of actors (passive or active) of the emerging groundswell (the post was rated as "liked" by 3.6 thousand users of the social network Facebook. We stated that in 5 days the post received up to 5.2 thousand comments. The users respond to the owner's support and wish him a lot of effort not to give up and fight even for those whose "corona crisis" has marked so much that they have had to close their operations and close their business. The subject responds to the support of its fans through daily stories published on the social network Facebook (see Picture 3).



Picture 3: Business response to fan posts and comments
Source: *Facebook.* [online]. [2021-30-11]. Available at: <https://www.facebook.com/hollywoodburgertrnava>.

If the business entity responds quickly, openly, professionally and in a language that is relevant to the target beneficiary, the overall perception of the entity's image may be favorable. In the above picture (Picture 3) we see that the business entity responds quickly to the contributions, messages and comments of its fans. Social networks have a significant impact on how people receive, communicate and also on the way they socialize and interact with each other.[44] From the above reaction of Hollywood burger, it can also be interpreted that the company appreciates the support of fans and customers, because thanks to their support, the Hollywood burger team has the energy and desire to continue its work despite the constraints with which (as well as other gastronomic establishments) to fight. In the article, Štubňová states that Facebook brings together a large part of the potential audience, which, if the right marketing practices are applied, can quickly transform into a community of fans.[45] Thus, we can say that the composition of the groundswell actors begins to creep here. Communication is the most

[44] NGHIA, L. T. M.; DUONG, Ng. M.: An Empirical Study of the Motivations for Intention to Read Brand-related User-generated Content on Social Media in Vietnam. In *VNU Journal of Science: Economics and Business*, Vol. 37, No. 2, p. 51. Available at: <https://js.vnu.edu.vn/EAB/article/view/4469>.
[45] ŠTUBŇOVÁ, V.: Offline a online marketingová komunikácia v praxi slovenských inštitúcií so zameraním na klasickú hudbu. In ČÁBYOVÁ, Ľ., BEZÁKOVÁ, Z., MENDELOVÁ, D. (eds.): *Marketing Identity 2019. Offline is the new online - aktuálne výzvy onlinovej a offlinovej komunikácie*. Trnava : FMK UCM in Trnava, 2019, p. 177.

important thing for achieving a successful Facebook page, not only in the form of publishing creative messages and texts, but also in the form of responses to private messages, questions or comments. Communication must take constant place and the site must be active, which is what we observe in the researched business entity.

3 Methodology

In the research part, we decided to apply content analysis as a qualitative scientific method to develop this paper. The authors usually apply content analysis when evaluating text documents, which is relevant in the case of our research problem - examining the behavior of groundswell in an online environment, as a result of which changes in the marketing communication of business entities can be observed. The campaign, which we decided in this article to analyze and interpret the findings in the context of the groundswell, is currently a popular phenomenon (especially) in recent day.[46] We consider the choice of scientific method to be suitable for interpreting the results, because the aim of the analysis is to provide a quantitative description of the selected sample, i.e. we describe the selected contribution and reactions of fans of the Hollywood Burger business with emphasis on the impulse. The theoretical findings that form the introduction of the paper were processed on the basis of available relevant sources and conducted scientific studies. We applied a deduction, with which we tried to interpret general knowledge, and then we proceeded to define the key issues of this paper, which are the observation of the groundswell and the interpretation of changes that arise in connection with its activities for businesses. We subsequently described the findings from literary studies using a description. The aim of the paper was to analyze the online campaign of a selected Hollywood Burger gastronomy service. During the analysis of this post and the reactions to it, we focused mainly on monitoring the so-called call to action, the interaction of the subject with the groundswell community and the subsequent creation of the groundswell, which built a strong base of the subject's supporters even in a short time. Within the methodological part of the paper, we have defined the following research questions:

1. What type of content did the owner of the Hollywood Burger run on Facebook?
2. What communication style does the business owner apply when interacting with their fans?
3. Does the surveyed subject respond to the comments of social media users?
4. What is the impact of the groundswell on the business entity that is currently fighting for its business rights?

In the empirical part of this paper, we applied synthesis, deduction, structured observation method and content analysis of a selected online platform. The object of our research, for the purposes of elaborating this paper, was online communication platforms through which the selected business entity interacts with its customers and (also) fans.

Conclusion

The article entitled *"Changes in online marketing communication caused by the influence of the" groundswell*" interprets aspects that can affect the entire marketing communication and the existence of a business entity. In the introduction, we have interpreted and discussed theoretical milestones, the interpretation of which is a basic prerequisite for scientific research. We are of the opinion that dynamic changes in online marketing communication can affect and condition

[46] Authors' note: The data is relevant as of 29. November 2021.

the overall existence of business entities, especially in the case of entities whose business activity is the provision of food to the general public. We have found that the dynamics of the swirl of the groundswell, by which we mean its propagation or, conversely, shrinking, are not generically conditioned and business entities cannot control its growth or extinction but can regulate it. Businesses should adapt to a communication style that is interesting and acceptable for their customer's fans. We observe that companies try to indicate the direction in which communication should develop, but from a marketing point of view, this may not be the appropriate method of interaction with customers. In this paper, we have interpreted several statistics produced by research companies at the national and transnational levels. Using these statistics, we have shown that the digitization of humanity is not something that awaits us, but that digitization began years ago and is progressing at a dramatic pace. Groundswell is a term that is not widespread at the moment and is addressed by only a few authors in their scientific research. The groundswell is here. It was here years ago and its growth rate has increased significantly now. In our opinion, there can be several reasons for the emergence and growing bargaining power of the groundswell. People are getting more and more tired, as a result of which they tend to be more irritated and we are seeing an increased level of aggression among social network users.[47] Businesses are finding it difficult to adapt to the groundswell, which is characterized by aggression, arrogance, intolerance and the spread of hoaxes. However, not all business entities are able to adapt to this trend and grasp it so that, due to the conflict of differing opinions, they get the most out of their business goals. The results of our analysis point to the fact that the subject may communicate in an inappropriate way, i.e. it may use derogatory expressions, vulgarities and a special form of humor if it is appealing to its customers and fans and they are willing to consume this type of content. Changes in the online communication of the researched entity have a positive effect on online and offline communication, because the number of followers increased, according to the owner (published on Facebook and Instagram Stories) the number of orders also increased. At the end of the article, we can say that the groundswell, which we recorded and observed on social networks, brought a number of interactions to the gastronomy and, by sharing the contributions of the subject, again increased the fan base of the investigated gastronomy.

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SUSTAINABLE TOURISM AS A RESTART OF TOURISM

Lenka Švajdová

Abstract
This article deals with the current and socially attractive topic of the development of sustainable tourism in the coming years. The period after the "clinical death" of tourism, which was caused by the COVID-19 pandemic, is taken as a turning point for the greater application of this kind of tourism. The author will evaluate the applicability of sustainable tourism both from the point of view of customers, specifically their attitudes and preferences to this type of tourism. The customers' attitudes towards sustainable tourism will be ascertained based on a questionnaire survey. The view and attitude of the destinations themselves. For these purposes, the author specifically chose those destinations that in the period before the COVID-19 pandemic faced excessive attendance of foreign tourists such as Barcelona, Mallorca, and Venice, which had a negative impact on the image of the destination, but also on the population living in the destination. In this case, the author will base the survey on the analysis of secondary sources, specifically on interviews with representatives of these destinations in professional publications focused on tourism.

Key words:
COVID-19. Sustainable tourism. Travelers

Introduction

Tourism has undoubtedly become a huge social and economic phenomenon of the last few decades. However, its "boom" was interrupted by the pandemic of the COVID-19 disease, which practically stopped international tourism. The paralysis of tourism was caused mainly by the intervention of state governments in restricting the entry of foreign tourists into their territory or setting the rules of entry too difficult for potential visitors to meet them. Of course, the steps of other providers of tourism services, such as carriers, also corresponded to the set restrictions. Tourism before the COVID-19 pandemic was indeed at its peak and was expected to grow further in the coming years. For some destinations, which were just looking for their favour with potential visitors, further expected growth was positive news. However, since 2018, pressures have been mounting in some destinations to limit the influx of foreign tourists. The main argument was the fact that such mass form of tourism in Barcelona, Mallorca or Venice was already difficult for local citizens to accept. From the point of view of tourism experts, the oversaturation of tourism destinations leads to negative impacts on the life of citizens, but also on natural attractions and historic attractions, which were the reason for the visit of foreign visitors to visit destination, and such tourism could not be described as socially responsible, let alone sustainable.

1 Sustainable Tourism

Attendance at tourism destinations beyond a reasonable level has also meant the emergence of considerable problems that accompany its implementation. One of the most frequently mentioned problem, in addition to the indisputable advantages that the development of tourism brought, was, above all, its negative ecological impact on the place where its implementation takes place. If we also take into account the fact that tourism is a so-called cross-sectional sector, i.e., that other subsectors of the national economy, such as hospitality, transport, accommodation services, etc., also participate in its functioning, its impacts on ecology can be really significant. The growing number of visitors often meant for destinations the search for new capacities for accommodation, increasing the transport capacity of airports or other transport options to the destination and in the hospitality industry, such as increasing the consumption of food raw materials and increasing waste. The construction of new or expansion of existing accommodation capacities very often took place, even though this had a negative impact on the landscape and nature. The sustainable tourism is defined as the maximum use that can be made of the economic, social, cultural, and natural resources of the destination area without reducing visitor satisfaction and without generating negative impacts on host society or the environment. It is one that meets the **needs** of today's tourists and the receiving regions, while protecting and increasing opportunities for the future. UNWTO strives to promote tourism development that equally supports the conservation of biodiversity, social welfare and economic security in host countries and communities. Sustainable tourism is defined as one that respects both the local population and the traveller, cultural heritage and the environment. It's about providing people with an exciting and educational vacation, which at the same time are beneficial to the chosen place. And it is based on:

- The conservation and sustainable use of resources- natural, social, and cultural – is crucial and makes long-term business sense.
- Reduction of over-consumption and waste avoids the costs of restoring long-term environmental damage and contributes to the quality of tourism.
- Maintaining and promoting natural, social, and cultural diversity is essential for long-term sustainable tourism and creates a resilient base for the industry.
- Tourism development is integrated into a national and local strategic planning framework, and which undertake environmental impact assessments increases the long-term viability of tourism.
- Tourism that supports a wide range of local economic activities and which takes environmental costs and values into account, both protects these economies and avoids environmental damage.[1]
- The full involvement of local communities in the tourism sector not only benefits them and the environment in general but also improves the quality of the tourism experience.
- Consulting between the tourism industry and local communities, organizations and institutions are essential if they are to work alongside each other and resolve potential conflicts of interest.
- Staff training which integrates sustainable tourism into work practices, along with recruitment of personnel at all levels, improves the quality of the tourism product.
- Marketing that provides tourists with the full and responsible information increases respect for the natural, social, and cultural environments of destination areas and enhances customer satisfaction.
- Ongoing research and monitoring by the industry using effective data collection and analysis are essential to help solve problems and to bring benefits to destinations, the industry, and consumers.[2]

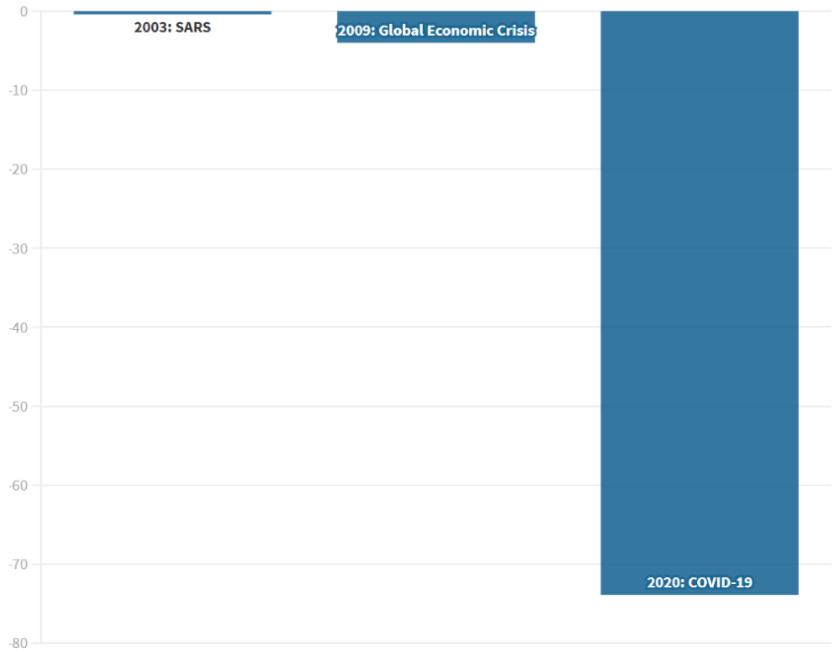
However, the concerns of tourism operators are understandable, as described above, tourism has become literally a social phenomenon in the last few decades, not only for its participants - tourists, but also for business entities that do business in it. Its popularity is based on a separate looser definition of tourism: "today, rightly often referred to directly as the tourism industry, it also forms an extremely wide range of activities and involves a number of entities. The aim of this field is to enable, organize and make the travel of citizens, whether recreational or

[1] *Suistanable tourism.* [online]. [2021-05-12]. Available at : <https://www.unwto.org/sustainable-development>.
[2] MOSCARDO, G.: Interpretation and sustainable tourism: functions, examples and principles. In *Journal of Tourism Studies*, 2003, Vol. 14, No. 1, p. 112-123.

sightseeing. The main subject in tourism is the traveling citizen. To satisfy his wishes and needs, a wide range of professions and professional businesses were gradually created. The breadth of the field of tourism thus brings a significant multiplier effect in its economic context. And like any such phenomenon, it brings with it a number of opportunities, such as economic (job opportunities, source of capital, craft development), social (e.g. revival of folklore) and environmental (ensures environmental stability); a number of costs, such as infrastructure, energy costs or waste disposal; and, of course, a number of risks, the most serious of which include environmental damage (noise, water pollution, forest fires) and socio-cultural changes to the site.[3]

1.1 Characteristics of tourism in COVID-19 in 2020

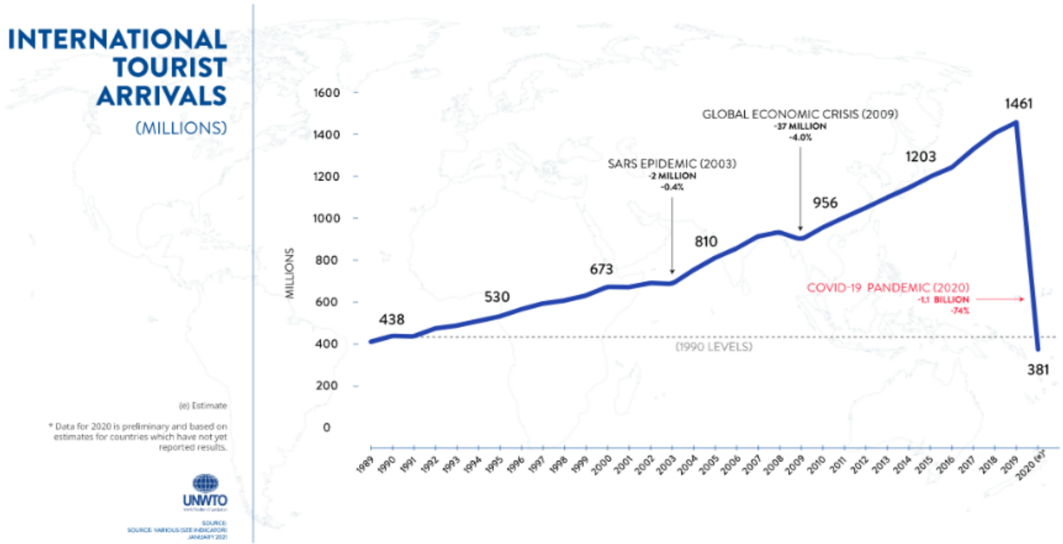
The year 2020 was marked by a significant decline of international tourism see Picture 1 Fall of international tourism and Picture 2 International tourist arrivals. The possibilities of foreign holidays were very limited, very harsh conditions were accepted for the travel and return of Czech tourists. Some countries then shut down organised tourism at all for example Spain, Italy, France. The offer for spending foreign holidays was thus relatively limited.



Picture 1: Fall of international tourism
Source: *International tourism and Covid 19.* [online]. [2021-05-12]. Available at: <https://www.unwto.org/international-tourism-and-covid-19>.

Many Czech tourists who were used to spending their summer holidays abroad before the pandemic were relied on the offer of Czech tourism, or if they wanted to go abroad, they did it more individually, without using the services of travel agencies – this was true for European destinations. For more distant destinations such as Egypt, the United Arab Emirates, Tunis, Turkey used the services of travel agencies at the time when it was possible.

[3] ZÁVODNÁ, L. S.: *Udržitelný cestovní ruch.* Olomouc : Univerzita Palackého v Olomouci, 2015, p. 83-87.



Picture 2: International tourist arrivals
Source: *International tourism and Covid 19.* [online]. [2021-05-12] Available at: <https://www.unwto.org/international-tourism-and-covid-19>.

1.2 Sustainable tourism after the COVID-19 pandemic

Tourism service providers and representatives of tourism destinations were at this time and still face a fundamental decision on how and for how much to regulate the number of incoming visitors and tourists, to a degree that will be affordable for residents and nature. The fundamental principle of this decision lies in the fact that a smaller number of tourists / visitors will also mean an increase in the price level of the services provided and a reduction in revenues to the budget of cities / destinations. The first may mean a decrease in the use of these services, the second may mean a reduction in investments, which are financed from tourism revenues. The primary issue that both tourism service providers and tourism destination managers should address is the attitude of visitors / tourists to sustainable tourism, which from the point of view of tourists / visitors will be different from what they are used to and especially more financially demanding. The answer to the question why to introduce the principles of sustainable tourism and set the so-called new rules right now is perhaps. Tourism has been virtually paralyzed for a period of more than a year from returning to "normal", which in the opinion of the expert should not have the same characteristics as in the pre-pandemic COVID-19, will be slow and seems an ideal opportunity to implement reform changes in tourism should operate on the principles of sustainable development. Sustainable tourism can be defined as the development of tourism that ensures the provision of current and future needs of tourism participants while helping to develop the territory. Considering to the careful use of natural and cultural values leads to long-term prosperity in the given areas. Because tourism very often uses public goods (water) for its development areas, forests, beaches, the sea) should have entities in it constantly keep in mind that their Prosperity and development should go hand in hand with the principles of sustainable tourism set out above.

2 Methods of Research

The questionnaire survey method will be used to achieve the goals of this article. The questionnaire survey will take place online and will be combined with personal interviewing. The selection file will contain 380 respondents. To obtain relevant data, the random selection will be used to select the sample this can guarantee maximum representativeness of the research. The selection will contain the entire structure of the surveyed file considering the age. The author aims to analyse the issue of sustainable tourism from two perspectives. From the point of view of customers' attitudes to the manifestations of sustainable tourism. The tools applied by tourist destination are based on secondary data analysis. A questionnaire survey was carried out in March and April 2021 to meet the target. 380 respondents participated in the questionnaire survey, of which 200 were women and 180 were men. The age range of respondents was from 18 years to 65+ with an even distribution into groups of 18 - 24 years, 25 - 34 years, 35 to 44 years, 45 to 54 years, 55 – 64 years and age category 65 +. The questionnaire survey, which will be conducted to determine the attitude of tourists to sustainable tourism, will focus on identifying attitudes to sustainable modes of transport, catering, accommodation services, restrictions on the number of visitors and price changes that are likely to accompany the change towards sustainable tourism. The presentation of the survey results will be based on a group of 320 persons, who declared in the first question their will to travel abroad.

2.1 Results of Research

The need to develop sustainable tourism arose from an awareness of the possible problems associated with overtourism. Overtourism describes destinations where hosts or guests, locals, or visitors, feel that there are too many visitors and that the quality of life in the area or the quality of the experience has deteriorated unacceptably. The situation is unprecedented. Within the space of months, the framing of the global tourism system moved from overtourism[4] to non tourism, vividly illustrated by blogs and newspaper articles depicting popular tourism sites in 'before' and 'after' photographs. While some commentators already speculate on "What will travel be like after the Coronavirus", with some unrealistically optimistic perspectives already having proven wrong the general belief is that tourism will rebound as it has from previous crises.[5] However, there is much evidence that COVID-19 will be different and transformative for the tourism sector. Governments only that, unlike other business sectors, tourism revenue is permanently lost because unsold capacity – for instance in accommodation – cannot be marketed in subsequent years, with corresponding implications for employment in the sector. Destinations that before the Covid-19 pandemic had problems with overtourism, such as Barcelona, Mallorca, Venice, Dubrovnik, identified and tried to use various tools to reduce the influx of foreign and especially one-day tourists, or tourists arriving for less than 3 days. Among the tools used by these and other destinations were the following:

- **Limits of Acceptable Change**

Identify key indicators for the destination which identify the emerging issues so that they can be addressed. The growth of unlicensed tourist accommodation and change of use for the housing stock, changing retail offer, rising local housing costs, litter, trampling, crowding... choose the locally significant issues and problems.

- **Preferential Access for Locals**

The positive discrimination for residents. For example, free access to some tourist attractions.

- **Temporary Residents**

Changing the nature of tourism and the visitor experience by managing the destination to attract visitors as temporary residents.

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[4] LAMA, R., RAI, A.: *Tourism Destination Management in a Post-Pandemic Context (Tourism Security-Safety and Post Conflict Destinations)*. Bingley : Emerald Publishing Limited, 2021, p. 233-244.

[5] GOSSLING, S., SCOTT, D., HALL, M. C.: Pandemics, tourism, and global change: a rapid assessment of COVID-19. In *Journal of Sustainable Tourism*, Vol. 29, No. 1, p 30.

- **Tourism Tax**

The problem of tourism taxes is that they are controversial. They are generally too low to deter visitors, but they do enable local authorities to raise money to fund the management of tourism, to repair damage to lawns and pay for the removal of litter. Taking in consideration that one of the aspirations of Responsible Tourism is that tourists should be treated as temporary residents then it is not unreasonable that overnight tourists and day visitors should contribute to the maintenance of the public realm which they are visiting and using.

- **Ensuring that local community´s benefit from tourism**

Acting is this way so there is no reason for the feeling of tourismophobia. The results of the research see table 1 Results of the research Consumer behaviour changes in tourism after COVID-19 present the attitude of passengers / visitors to the speeches that accompany the introduction of the above tools to reduce overtourism.[6]

Table 1: Results of the research Consumer behaviour changes in tourism after COVID-19 in %

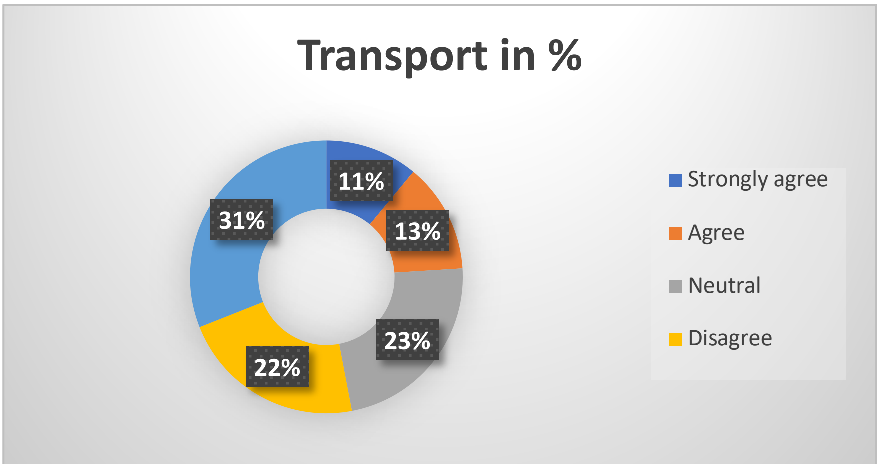
Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
If there is a possibility of transport to my chosen destination, which will be more environmentally friendly, for example, by rail instead of air despite the longer time i will spend on way, I will prefer it.	11	13	23	22	31
When choosing an accommodation facility, I will prefer the one that behaves ecologically responsibly (green energy, ecological means of cleaning, etc.) despite the higher price.	25	23	11	16	25
When choosing a catering facility, I prefer those that support local suppliers despite the higher price of the dishes offered.	28	29	19	13	11
When visiting the selected destination, I am willing to pay a fee, for example, for the entrance that the destination will introduce in order to reduce traffic, which will lead to a higher level of quality of my visit.	19	18	18	23	22
If the introduction of sustainable tourism will result in price increases of up to 15%, it will not discourage me from visiting a selected destination.	11	13	19	21	36

Source: Own processing.

2.1.1 Attitude of Travellers to transport

The Picture 3 Attitude of travellers to transport shows the preferences of travellers as for transport. The pressure to restrict air traffic is increasing, with many countries where the awareness of nature conservation and the minimization of the carbon footprint is high pressure on travellers to choose a different mode of transport than air for shorter and longer distances. France and Spain are considering introducing extra taxation on short domestic flights. Travel agencies in the Nordic countries even send high-speed trains with their clients on holiday to the north of Spain or Italy or the south of France. In the Czech Republic, travellers express a rather negative attitude, more than 50%, and prefer air transport. Travelers in the age group under 34 tend to express a greater willingness to travel to more distant destinations by train, rather without children and with higher education.

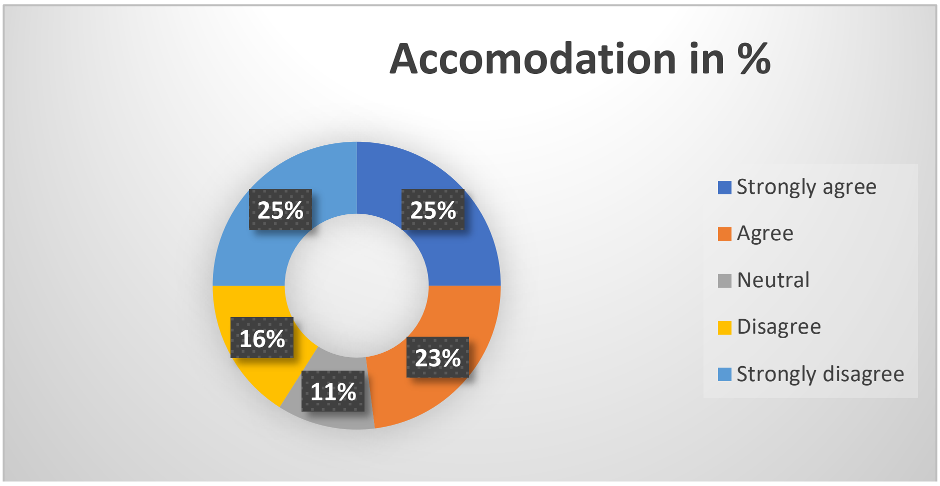
[6] GOODWIN, R.: *Overtourism Solutions: Strategies to Manage Mass Tourism.* [online]. [2021-05-12]. Available at: <https://responsibletourismpartnership.org/overtourism-solutions/>.



Picture 3: Attitude of travellers to transport
Source: Own processing.

2.1.2 Attitudes of travellers to accommodation services

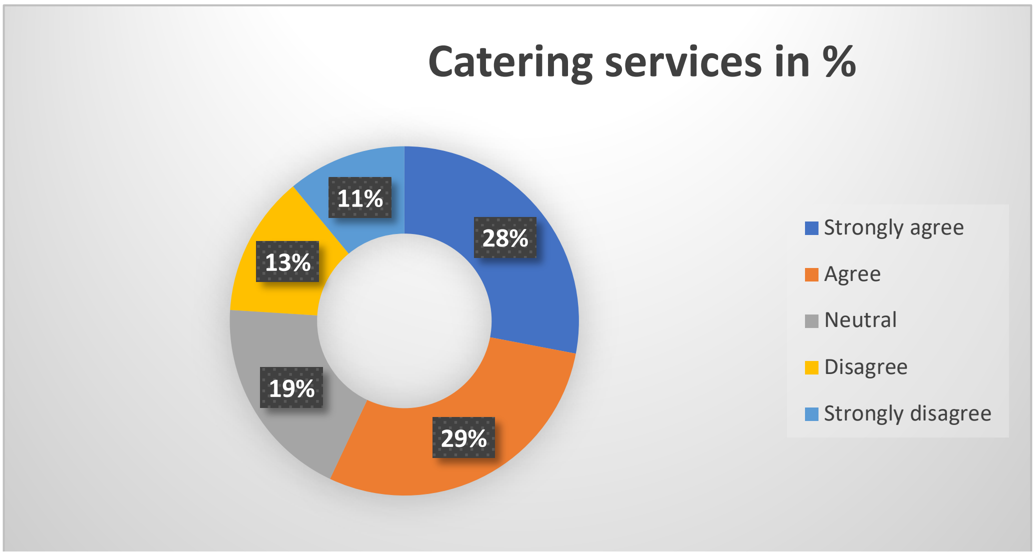
Due to the limited use of private accommodation for holidays abroad, except for Croatia, the issue of accommodation focused on the ecological footprint associated with accommodation services. The preference for accommodation capacities (Picture 4: Attitude of travellers to accommodation services) that try to minimize the impact on the environment is positively accepted by 48% of respondents, and they are able to accept a possible increased price that may accompany these efforts. The tendency to purposefully search for this type of accommodation was more evident in the age group up to 44 years, within these 48% of respondents people with a university degree predominated.



Picture 4: Attitude of travellers to accommodation services
Source: Own processing.

2.1.3 Attitude of travellers to catering services

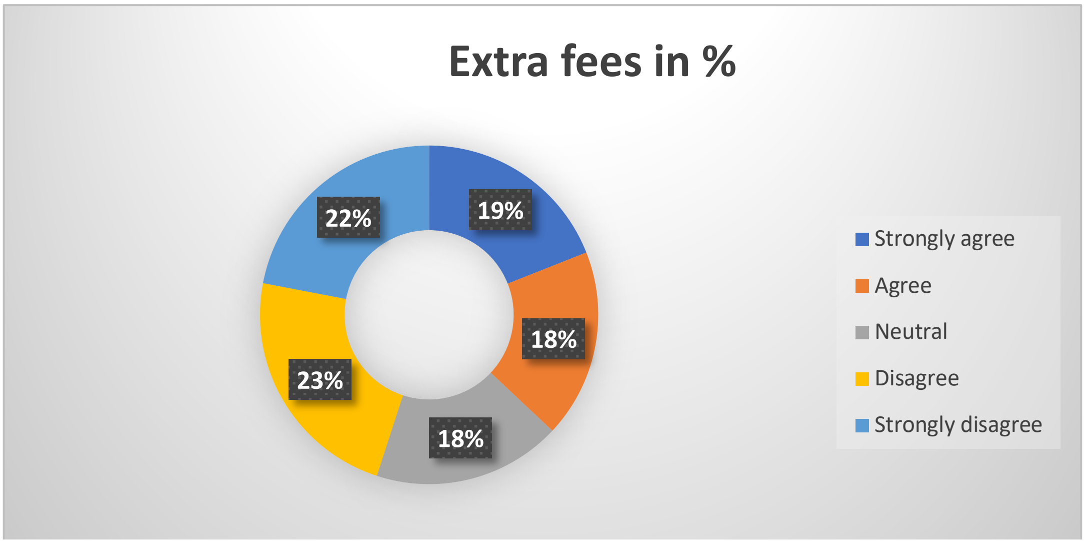
The support of local companies and entrepreneurs is another accompanying phenomenon of sustainable tourism. One of the directions that emerges regarding sustainable hospitality tourism is the use of raw materials and products of local farmers' suppliers. Gastronomic establishments that go in this direction are in most cases among the companies with a higher price level of products offered, because the price of their inputs is also higher. Another question, the results are presented in Picture 5: Attitudes of travellers to catering services, aimed at finding out the preferences of gastronomic companies that support local suppliers despite the need to accept higher prices from customers. only 24% of the respondents expressed their disagreement with the use of the services of these gastronomic facilities, the main reason being the higher price. Among those who expressed a negative attitude were mostly people with lower education.



Picture 5: Attitude of travellers to catering services
Source: Own processing.

2.1.4 Attitude of travellers to pay extra fees

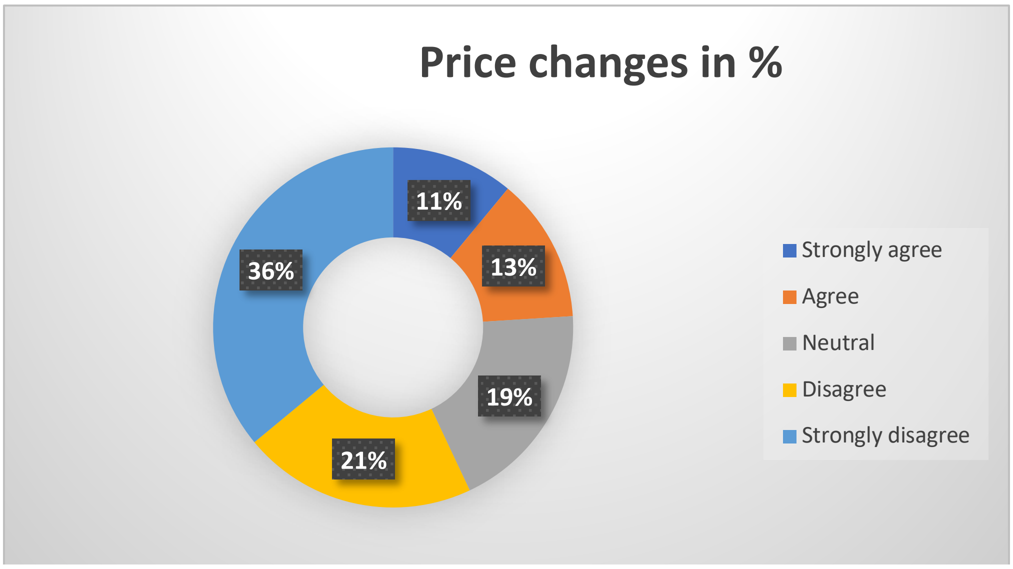
From the author's point of view, this was a key issue that turned out as was expected by author see Picture 6: Extra fees. Paying extra fees, for example for a one-day entry into the city, paying taxes on accommodation during the peak season or extra payments for priority visits to tourist attractions are the easiest to apply from the point of view of destination management. Venice was considering its introduction for one-day visitors, Mallorca applies residence taxes, which the tourist pays directly to the accommodation capacity, and the amount of this tax depends on the level of the accommodation facility. The 37% of the total number of respondents express a positive opinion and willingness to pay these extra fees and 45% of respondents express a clear disagreement and the possible payment of extra fees is a significant obstacle for them to visit a destination that will require payment of these fees. Rather, the consent is expressed by persons who travel more than 3 times a year, fall into the age category under 34 years and passengers alone in a maximum of a couple. Families with children, travellers over the age of 35 and a maximum of twice a year have an indifferent attitude to payment or reject it.



Picture 6: Attitude of travellers to extra fees
Source: Own processing.

2.1.5 Attitude of travellers to price changes

Based on the results of the question about price increases due to the application of the principles of sustainable tourism, it can be stated that if the total price for holidays (transport, accommodation, holiday package, leisure activities) did not increase by more than 15%, then only 24% of travellers did not discourage visiting the chosen destination. For 57% of respondents, even this price increase would be a significant problem. Respondents who travel more frequently (3 or more trips a year), passengers under the age of 34 and in the age range of 55 to 64, and respondents with higher educational attainment, again had a conciliatory attitude towards price increases. This is unacceptable, especially for families with children.



Picture 7: Price changes
Source: Own processing

3 Discussion

Based on the research, it can be stated that the issue and trend of sustainable development reaches its limits in real practice. These limits are the visitors / tourists themselves, who according to the research results are willing to consider the principles of sustainable development when using selected tourism services (accommodation services, catering services) - the ecological impact of their accommodation, support for local entrepreneurs in case of catering). In general, the willingness to promote sustainable tourism is inversely proportional to any increased costs that may be required to bear in applying sustainable tourism. The introduction of sustainable tourism is a long-term process which, in addition to the resistance of the tourists themselves, may also encounter misunderstanding and rejection by tourism entities in tourist destinations. Concerns about the management of tourist destinations can play an important role here, which on the one hand understand the pressure to introduce sustainable tourism on the other hand and are mainly afraid of negative financial impacts, which will be based on lower attendance. The solution can be, above all, to raise awareness among tourists about the importance of sustainable tourism and greater efforts by the management of tourist destinations to implement the principles of sustainable tourism. The post-COVID-19 period can be clearly described as a crossroads, where there are several variants where the management of a tourist destination can go. The first option is to continue to be indifferent to sustainable tourism, the second option is to advise some tourist destinations to try to catch up with the losses caused by more than a year's loss of foreign inflows and the principles of sustainable tourism in the initial phase of tourism restart. will return with a time lag. The third, relatively revolutionary and ambitious attitude is to use the restart of tourism to change the strategy of the tourism destination towards sustainable tourism. Each of these approaches has its undeniable advantages and disadvantages, more inclined to the third variant are destinations where in the pre-pandemic COVID-19 struggled with tourism phobia such as Venice, Barcelona, which have detailed concepts and plans for the application of sustainable tourism. An example of the second approach can be, for example, Mallorca, which continues to do very active marketing to attract tourists from Great Britain or Germany, who in the period before the COVID-19 pandemic were synonymous with mass tourism. The first group includes Greece and Croatia, which have clearly stated that they again want to be among the most visited destinations in Europe, regardless of the negative effects of overtourism on their countries.

Conclusion

The COVID-19 pandemic has caused only severe damage to the global tourism industry. COVID-19 pandemic has helped many tourist destinations realize that overtourism is a significant problem for them, leading to a decline in the quality of life of local people. On the other hand, the empty streets of popular tourist cities, relatively empty beaches, reduced income to city coffers have helped everyone realize that it will not be possible without tourists and that it is necessary to find a way to implement tourism based on the principles of sustainable tourism. which, even with limited resources - water, soil, etc., will probably become the only alternative in the future to implement the tourism industry.

At the end of this article, I would like to thank the representatives of Tourist information centres for providing and consulting issues related to sustainable tourism.

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RECON CODIFIED LEGISLATION ON THE CONSULTATION OF ORDINARY PEOPLE AND THE AVERAGE CONSUMER IN DIFFERENT CONTEXTS

Marek Švec – Andrea Olšovská

Abstract
The legal construct of the view of the average person in legal relationships is based on the premise of differentiation of individual natural persons. Different subjective attributes and personality characteristics may affect the ability of a party of the legal relationship to perform later legal acts. This premise is more pronounced in the field of marketing communication and the conduct of business entities in the economic market at the moment, when we assume that their activities are aimed at arousing the interest of a natural person for their products and services in the position of a consumer. Achieving a firm belief in a particular characteristic of a particular product usually leads to the final step of purchasing that product. Even with this fact in mind, the concept of the average consumer was created in the past, a partial foreshadowing of which is the newly drafted provision of the recodified Civil Code in the form of a "presumption of common abilities". Therefore, in the presented scientific article, the authors deal with the connection of the new provision with the existing concept of the average consumer, while they complete the legal reasoning with the legal practice to the institute of the average consumer. The legal interpretation is complemented by an interdisciplinary excursion to another branch of law to confirm the legal arguments presented.

Key words:
Average consumer. Clarity. Marketing communication. Presumption of normal abilities.

Introduction

Although the concept of the average consumer is not, in principle, a new legal institute which would cause a certain disproportion in its application in consumer legal relations, it can be stated that the development of its internal content definition also went through a certain development. In this context, the authors have also published a scientific paper on the development of the definition of the legal content of this term in the domestic and European legal environment.[1] Since then, however, there have been some positive developments in the legal practice, where various consumer judgments have taken into account to some extent the claims and requirements that should be at most or at least imposed on a natural person who will be in legal relations of a consumer nature or which will be targeted by the marketing communication of a specific business entity[2]. On the other hand, there is a new proposal for a general regulation of the assessment of the "ability" of an ordinary person to perceive, understand and, on the basis of this perception and understanding, to perform acts relevant for the law, in the form of a new provision § 5 par. 1 of the working draft of the Basic Provisions of the Civil Code[3] (hereinafter referred to as "*provision of working proposal*"). Although the new provision of the working proposal will be the subject of a later legal interpretation, we would like to draw attention to the fact that its model can be found in the normative text of

[1] ŠVEC, M., OLŠOVSKÁ, A., MURA, L.: Protection of an "average consumer" in the digital society – European. In MATÚŠ, J., PETRANOVÁ, D. (eds.): *Marketing Identity : Digital Life - part II.* Trnava : FMK UCM in Trnava, 2015, p. 275.
[2] ŽUĽOVÁ, J., KUNDRÁT, I.: Service of documents in the context of employment during employee quarantine. In *Central European Journal of Labour Law and Personnel Management: International Scientific Journal*, 2020, Vol. 3, No. 1, p. 80.
[3] Working proposals of paragraph texts submitted for public and professional discussion. Available on the website of the Ministry of Justice of the Slovak Republic - <https://www.justice.gov.sk/ Stranky/Ministerstvo/Rekodifikacia-OZ/Navrhy.aspx>.

generally binding legal regulations, e.g. in labour law, where it is subsumed under the term so-called "Comprehensibility" of employee information, which presupposes an analogous form of information, i.e. communication at a level that will correspond to the ability of the average employee to understand the employer. In this respect, in our view, the newly drafted provision of the working proposal will to some extent strengthen the concept of the average consumer, which the courts regularly refer to European court decisions, but in the general legislation such a concept was absent, causing the problem of its application to other legal relationship areas of marketing communication, which, however, were not in the nature of consumer civil relations.[4]

1 The average consumer in the new legal context

In both cases, the formulation of the definition of their legal content leaves a relatively wide scope for interpretation, which will in many respects be determined by the facts of specific situations. Neither the concept of the average consumer nor the newly conceived presumption of common abilities provides businesses or stakeholders in marketing communication with sufficient conclusions to be able to adapt their activities in a way that would not be called into question by applying the presumption of reasonableness and caution in performing legal acts. The problem lies in the very effort to derive any criteria or characteristics that should determine the average and standard person (natural person), which would become a theoretical borderline against which we would assess the nature of marketing activities and their impact on consumers or members of society. Based on influence, we would be able to conclude that for example such advertising is inappropriate for the average consumer in the sense that he could not obtain a sufficient amount of information from it, and to understand it in such a way that he could fully consider his subsequent actions as a subjective realization of individual will and not the result of originally "purposefully" set marketing communication. Since the average consumer is the most appropriate representative of a group of consumers to see if he can be deceived or lied to by a business, in specific cases it is subsequently considered crucial what specific characteristics of the group of consumers are transmitted to him in relation to the consumer or to the product at issue in the present situation[5]. Although the currently used normative model for assessing the average consumer is based on the assumption of how a consumer (ordinary person) should behave in a certain situation (so far only in the area of unfair commercial practices)[6], only in court proceedings it is determined at the court's discretion, whether or not there is a presumption of misleading consumers in this case[7]. It is therefore assumed that the

[4] HLADIKOVA, V., HURAJOVA, A.: Internet Addiction in the Time of the Covid-19 Pandemic in Young Adults. In KVETANOVA, Z., BEZAKOVA, Z., MADLENAK, A. (eds.): Marketing Identity: Covid-2.0. Trnava : FMK UCM in Trnava, 2020, p. 135.

[5] HLADIKOVA, V., HULAJOVA, L.: The Phenomenon of Internet Addictive Behaviour among Slovak Youth. In *European Journal of Science and Theology*, 2016, Vol. 12, No. 6, p. 150.

[6] Directive no. 2005/29 / EC on unfair business-to-consumer commercial practices in the internal market in Art. 18 defines the "average" consumer as a person who *"has sufficient information and is reasonably aware and casious, taking into account social, cultural and linguistic factors*". An analogous regulation is contained in the conditions of the Slovak Republic in Act no. 250/2007 Coll. on consumer protection. in Act no. 40/1964 Coll. Civil Code as amended and Act no. 513/1991 Coll. Commercial Code as amended.

[7] Clause 8 para. 3 of Act no. 250/2007 Coll.: „*a commercial practice is also considered to be misleading if, given its nature, circumstances and the limitations of the means of communication, it omits the essential information that the average consumer needs depending on the context to make a commercial transaction decision, thereby causing or likely to cause that: the average consumer will make a decision on a commercial transaction that he would not otherwise make.l.“* Clause § 8 para. 4 of Act no. 250/2007 Coll.: „*a misleading omission shall also be deemed to exist if the seller conceals or provides in an obscure, incomprehensible, ambiguous or inappropriate manner the essential information referred to in paragraph 3 or does not disclose the business purpose of the*

average consumer has a degree of vigilance and a critical attitude, and that the behaviour of other consumers is also assessed[8]. Such an approach to the definition of the "average" consumer has subsequently been reflected in the relevant European legislation so far only in matters of unfair commercial practices.[9]

However, judicial decisions take that concept to a slightly different level, also with regard to the subjective conduct or omission of the average consumer concerned. Although the concept of 'Gut Springenheide'[10]is constantly used, in which '*the Court of Justice has defined the average consumer as reasonably attentive and cautious, without ordering an expert opinion or a consumer opinion poll*'[11], application practice is shifting to counting negative cases where the consumer cannot be considered average and where his own conduct will be a determinant of the exclusion of existing legal protection. If we take into account the legal premise that under unfair commercial practices we may subsume actions, omissions, manner of behaviour or expression, business communication, including advertising and marketing of the seller, directly related to the promotion, offer, sale and delivery of the product to the consumer, substantial distortion of the average consumer's economic behaviour in relation to the product or service, to which he is getting or is addressed, is the intentional failure to provide information about the product or service or to communicate it in a way that the average consumer simply cannot understand or accentuate, is a breach of his legal protection.[12]

However, the adoption of a broad interpretation of such a legal construct will always lead to increased legal uncertainty for businesses, as the consumer will always be able to invoke the application of legal protection in his wrong subjective decisions, even if the business may not have intended to engage in unfair commercial practices. We must make a clear distinction between not trying to inform and not being interested in getting to know the information at all before realizing our economic behaviour. In this context, the courts state that "*at the so-called unfair business practice test, both EU law and the Consumer Protection Act are not based on the economic behaviour of an occasional consumer, but on the conduct of the average consumer, the concept and meaning of which the Directive has borrowed from the previous legal practice of the Court of Justice of the EU on freedom of movement and which considers only consumer that is reasonably well informed, observant and cautious. Such so-called average consumer is only a person critical of his behaviour on the market and a person who*

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commercial practice unless it is clear from the context, and as a result of such misleading omission, the average consumer makes a decision on a commercial transaction which he would not otherwise take."

[8] MADLEŇÁK, A.: SoLoMo concept in practice - benefits and restrictions for selected target groups. In KUSA, A., ZAUSKOVA, A., BUCKOVA, Z. (eds.)*: Marketing Identity: Offline Is the New Online.* Trnava : FMK UCM in Trnava, 2019, p. 195.

[9] ONDREJOVÁ, D.: Hledisko tzv. průměrného spotřebitele v nekalé soutěži. In *Obchodněprávní revue,* 2009, Vol. 11, No. 8, p. 225.

[10] In the case of Gut Springheide (C-210/96), a German egg producer company described its products as '*six grains - ten fresh eggs*', with a leaflet attached to each egg pack informing them of the positive effect of the compound feed used by the seller on the resulting product. However, only 60% of such fodder was fed to the hens, the rest being other ingredients, which, according to German courts, constituted misleading advertising. The presented slogan could give the impression that the feed is exclusively from a special mixture. The model is therefore not a static concept and national courts, and authorities will have to use their own judgment and taking into account the case law of the Court of Justice of the European Union to determine the typical reaction of the average consumer. In the case of Thomas Rotter (C-449/07), the manufacturer requested registration of a trademark consisting in the original joining of sausages into the shape of pretzels. The Court ruled that „*although the shape applied for constitutes an original and unusual presentation of sausages, which does not alter the fact that the average consumer will not associate himself with the shape of pretzels and will perceive only the interconnection of sausages*. "

[11] Decision of the District Court in Prešov of September 16th, 2021, file no. 15Csp/5/2021.

[12] Similarly, see the decision of the District Court Bardejov of September 6th, 2021, file no. 5Csp/24/2018.

informs himself about the quality and price of goods and who behaves confidently economically. For these reasons, it is so clear that neither European nor national regulations protect a consumer who has been and remains uninformed due to his inattention, or recklessness or even indifference and absent mindedness "[13]. "*If the consumer accepted the draft contract and signed the text of the contract without first trying to understand the content of the submitted draft contract, then such a consumer cannot be considered a reasonably well informed, observant and cautious consumer whose legitimate interests are protected by EU law as well as SR law.*"[14]

In this sense, therefore, the average consumer will be determined by reasonableness, correct information or his mindfulness, even with regard to social or linguistic factors, but in comparison with other legal terms it will still be vague and general wording without lack of legal certainty for legal entities participating in these legal relationships (e.g. by analogy with the interpretation of good morals, which are used by parts of the protection of the weaker party also in consumer disputes)[15].

2 Assumption of common abilities - concept without criteria

Given the primary applicability of the average consumer concept primarily for the purposes of unfair commercial practices, the adoption of a "presumption of common ability" is expected to be applicable to a broader framework of viewing marketing communication activities and components. The newly conceived provision of § 6 par. 1 of the working draft of the Civil Code states that "*Everyone is treated equally as an ordinary, reasonable person that would think, perceive and feel in the given circumstances, unless his or her state of mind and reason, reasonably expected knowledge or ability or other valid reasons need to be taken into account*". At the same time, however, the provision of § 6 par. 2 of the working draft of the Civil Code states that "*if this law* (new Civil Code) *conditions the occurrence or omission of legal consequences by the fact that someone should have known about a circumstance, then the legal consequences will occur or disappear, even if that person did not know about the circumstances, if it can be assumed that he/she would learn about it with due diligence, which can be required with regard to aspects according to the provisions of § 6 para. 1 of the first chapter of the new Civil Code. This also applies accordingly even if this law (the new Civil Code) makes the occurrence or omission of legal consequences conditional on the fact that someone could not have known about the circumstances. "* The significance of this provision should be that if the law requires the addressee of the standard, e.g. to know about a circumstance, it does not mean that it must be proven that he/she actually knew about that circumstance[16]. Such proof would be very difficult in such subjective questions. Therefore, it

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[13] Decision of the Levice District Court of July 29th, 2021, file no. 5Csp/72/2020.
[14] Decision of the Regional Court in Bratislava of July 24th, 2021, file no. 10Co/55/2020.
[15] „*A set of ethical, generally observed and recognized principles can be considered good morals, the observance of which is often ensured by legal norms so that every action is in accordance with the general moral principles of a democratic society. The Civil Code, or any other regulation, does not define the concept of good morals. However, theory and legal practice unanimously regard good morals are generally accepted rules of morality, which represent the fundamental value order of society, and the legislator considers them so important that it incorporates them into civil law by reference to a legal norm. It follows that these moral rules are objective in nature and therefore any consensual, and therefore subjective, motivated statement by the parties is not decisive as to whether or not the contract concluded by them is in accordance with good morals*'- compare decision Of the Regional Court in Banská Bystrica of August 28th, 2008, file no. 16Co/152/2008).
[16] KUPEC, V., PISAR, P.: Auditing and Controlling as a Tool for SME Marketing Risk Management. In *Marketing and Management of Innovations*, 2021, No. 1, p. 231.

is presumed that if an ordinary reasonable person were aware of such a circumstance in the circumstances in which the addressee was, then it is assumed that the addressee himself also knew about it. The addressee is therefore also credited with the so-called *presumed knowledge*, when from the circumstances of a particular case it can be concluded that an ordinary reasonable person must have known about the circumstance. Thus, knowledge (or other similar subjective circumstance) includes a state in which the addressee actually knew something, as well as a state in which he must have known about it. [17]

However, the above premise does not apply if certain circumstances so require, in particular the state of mind and body (e.g. a person whose mental maturity does not reach the level of an ordinary person) or the expected skill or ability (if it is a person who can be expected to know something based on his work, experience, education, even though an ordinary person would not know about it). Thus, both a reduction and an increase in the rate of things like knowledge, feelings, perceptions, depend on subjective qualities or expectations. If the law (the new Civil Code) applies such a term ("should"), then the legal consequences will occur when, even if the person did not know about a circumstance, but it can be assumed that he should have learned about it if he had exercised the due intensions with regard to the aspects under the cited provision. What are due intentions will depend on which case the standard affects. In this case as well, however, the new Civil Code makes it possible to take into account the individual state of mind and body or expected abilities or skills. It is therefore necessary first to examine whether any kind of due diligence is expected in legal proceedings of a given type, and if so (if the intensions are 'appropriate'), then it is necessary to examine whether intention can be demanded under given circumstances or whether it should not be higher. According to the provisions of § 6 par. 2 of the working draft of the Civil Code, the procedure is similar (but in the opposite direction), if the new Civil Code uses the term "could not know", which means that the person concerned could not know about the circumstance even with due care.[18]

In the case of the presumption of normal abilities, as in the case of the average consumer, the question will repeatedly arise as to how a business will be able to conduct its marketing communications in such a way as not to infringe the legal provisions cited. It will therefore be quite complicated, with regard to individual industries or services, for the enhanced protection of such a person to be applied appropriately, especially when disregarding cases involving the object of purchase or sale, but in general marketing communication inside and outside. It is not just a case of a relationship between a business entity and its potential customer, but part of marketing communication is e.g. also communication of the business entity with its own employees or the general public, in which legal relations may arise based on the contractual principle, while their use will be governed by the possible secondary application of the provisions of § 6 para. 1 and par. 2 provisions of the working draft. A typical example will be the area of labour relations, where the business entity will implement internal communication with employees, the subject of which will be the communication of various information concerning the company's management, content of labour relations, benefit system, etc. On the basis of variously communicated information, legal and factual actions will be performed by employees, while their nature and the will of employees in general to perform such actions will

[17] Explanatory Memorandum to the working draft of the paragraph texts submitted for public and professional discussion. Available on the website of the Ministry of Justice of the Slovak Republic - https://www.justice.gov.sk/Stranky/Ministerstvo/Rekodifikacia-OZ/Navrhy.aspx.

[18] UHRINOVSKÝ, J.: Institute of Personality Protection and the prepared recodification of substantive civil law in the light of current application practice and case law of the courts of the Slovak Republic. In ŠMELKOVÁ, J. (ed.): *Milestones of law in Central Europe 2015.* Bratislava : Comenius University in Bratislava, Faculty of Law, 2015, p. 659 et seq.

be based on the assumption of their acquisition and perception (or understanding) with regard to the cited provision of the work proposal. The subsidiarity of its use will be associated with an insufficient definition of the quality and quantity of such communication, which is only partially regulated by the relevant labour law regulations in the provisions of Act no. 311/2001 Coll. of the Labour Code as amended (hereinafter referred to as "*Labour Code*"). The only provision that regulates the quality of information provided to employees, while taking into account the requirement of communication of the employer in relation to the cited provision of § 6 para. 1 of the working proposal, the provision of § 229 par. 2 of the Labour Code, states the obligation of the employer to provide information in a comprehensible manner and at an appropriate time. The comprehensibility of information in this sense and also with regard to the fulfilment of the purpose of the established information obligation must meet the basic content principles of providing information, i.e. that the employee understands the content of the communicated information to a reasonable extent and can follow it and adjust his behaviour when managing rights and obligations arising from the existing employment relationship. Comprehensibility in terms of the content of the information is therefore understood to be the provision of information at a level corresponding to the employee's intellectual maturity (information provided in a "lay" or rather "reasonable" manner in relation to the job position performed).[19]

The comprehensibility of the provided information does not have to affect only its content, but also the way in which the information is provided, i.e. the content of the concept of comprehensibility and suitability of the information will also depend on the appropriate wording, so that the employee is able to understand the information.[20] All these attributes, consequently in a complex concept, are capable of influencing the comprehensibility and appropriateness of the communicated information by the employer and at the same time are the reason when the employee will be able to invoke the non-fulfilment of the presumption of normal abilities. Dominantly, this problem of incomprehensibility of the communicated information on the part of the employer is manifested in the application practice in job positions filled by low-skilled or unqualified persons who often fail to understand the meaning of the communicated information. These are people who often do not even have a secondary education and their ability to understand the wider context is severely limited. They are even people who are often vulnerable to misinterpretation and acquire certain information in their own logic and context compared to regular employees[21]. The primary shortcoming manifested in these cases is the method of communicated information, which is presented in a complex way, including the introduction of various legal provisions, which makes it impossible to understand the content of the information provided to employees. The communicated information thus has the nature of a description of this particular labour law institute, with which the employee has not yet had to meet in the previous professional life, and therefore the level of understanding of this information might be challenging. Therefore, although it is recommended to state a number of practical cases and positively resolved situations in which the employer could explain the employee's identification or identification with the case of another employee, his colleague, such an explanation may not be sufficient and we believe that the employee could successfully claim the application of the substantive condition of the presumption of normal ability to take into account his ability and (other substantiated) reasons, in assessing any of his actions, which he carried out on the basis of "his own" understanding or

[19] ŠVEC, M., TOMAN, J. et al.: *Labor Code. Collective Bargaining Act. Comment. II. volume*. Bratislava : Wolters Kluwer, 2019, p. 1890.
[20] KRAJČOVIČ, P.: *Media Planning*. Trnava : University of Ss. Cyril and Methodius in Trnava, 2017, p. 40.
[21] KUPEC, V. et al.: Conceptual Comparison of Internal Audit and Internal Control in the Marketing Environment. In *Sustainability*, 2021, Vol. 13, No. 12, Art. No. 6691.

misunderstanding of the information communicated. It is therefore required to find a balance between a layman's description of situations (employment institutes), in which the employer is able to assist the employee or in which the employee must fulfil his obligation, so that the employee as a recipient can get an incorrect or incomplete impression.

Conclusion

The concept of the average consumer, the presumption of common abilities or the comprehensibility of the communicated information are all legal institutes, the application of which causes or will cause disputes between the participants in legal relations in application practice. On the one hand, there is the interest of business entities to implement marketing communication in order to address the potential customer (consumer) as much as possible and often on the edge of permissible legal restrictions, on the other hand, the consumer or employee as weaker parties to this legal relationship, who enjoy increased legal protection[22]. It is quite difficult to look for and to find a balanced relationship between these ambivalent positions, while taking into account the vague formulations that partially regulate the link between the legal and factual acts performed and the information (stimuli, facts) based of which they were implemented. Only the application practice itself in the form of sketched court decisions is able to provide the expected qualitative or quantitative criteria according to which the parties to legal relationships could determine their behaviour in a way that would not only correspond to their own legislation, customs, but also respect the subjective interests of parties[23].

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CRISIS COMMUNICATION DURING A PANDEMIC. POSSIBILITIES FOR IMPROVING COMMUNICATION WITH MINORITY COMMUNITIES

Marek Tomaštík – Isabela Adelaid Raúl

Abstract
Public health authorities are preparing the public for a regular winter flu epidemic. After the past several waves of the COVID-19 pandemic and the issue of its communication and public distrust of communication and information passed by the government and other entities, this communication will take place in the same social, historical and cultural environment where there is already significant distrust of government and health. differences. The study addresses the challenges of the crisis and the communication of emergency risks with special populations during a pandemic. The study emphasizes the targeting of reports to specific groups at the time, presents significant difficulties, proposes a model for community involvement, disaster risk education and crisis and emergency risk communication to prepare minority communities and government agencies for effective pandemic work and capacity building. respond to them and strengthen the trust that is critical at such moments. Examples of such involvement and potential confidence-building strategies include tools known to many health educators.

Key words:
Community Preparedness. Crisis Communication. Public Health. Risk Communication. Trust.

Introduction

In the first quarter of 2020, a global pandemic of the coronavirus disease SARS-CoV-2 broke out. It was an unknown type of virus that aroused unprecedented interest from the media and the general public. States around the world, including the Czech Republic, have tried to prevent the spread of the virus through restrictive crisis measures, thus protecting their populations from possible infection. Over time, however, the pandemic has begun to pose not only health but also economic and social risks to individual states. The originally health crisis thus became a complex crisis situation, which began to merge into the normal course of life of the population and the economy more than expected. Events that are highly unlikely to occur but whose consequences have a major impact on society are difficult to predict - we do not have sufficient historical experience with them. However, they do occur occasionally and their effects can be extreme. Given that there are few events from which we can draw experience, it is almost impossible for him to understand the consequences. This is because we do not have enough facts or the opportunity to model decision-making processes and risk mitigation procedures to be able to respond appropriately. However, there are similarities and common principles for how companies in crisis situations and at the same time implement crisis management. The current global crisis caused by the COVID-19 virus is an exceptional situation that none of us have experienced before. Therefore, approaches tried in the past may not be enough to manage it, and governments face the need to act quickly and proactively to cope with this uncertain and unstable period.[1] Chaos theory emphasizes that catastrophes that take a toll on human lives are inherently characterized by change, a high degree of uncertainty, and interactive complexity. In a crisis, the ability of those responsible to communicate in a way that connects those who listen can mean for some people the difference between life and death when they decide whether to follow instructions. In fact, the very way people receive, process, and act on information can change when they are at risk of illness or

[1] HECHT, T. D., ALLEN, N. J., KLAMMER, J. D., KELLY, E. C.: Group beliefs, ability, and performance: The potency of group potency. In *Group Dynamics: Theory, Research, and Practice*, 2002, Vol. 6, p. 144-145.

death, as people simplify complex information, try to force new information into previous constructions, and cling to current beliefs.[2] During a crisis, an open and empathetic style of communication that inspires public confidence is most effective when officials try to encourage the population to take positive action or refrain from harmful action. Although confidence in the crisis is essential, public suspicion of scientific experts and government is growing for a variety of reasons, including access to more sources of conflicting information, restrictions on the use of scientific reasoning in decision-making, and political struggles. Trust and credibility – which are manifested in empathy and care, competence and expertise, honesty and openness and dedication and commitment – are essential elements of convincing communication. The current COVID_19 threat is highly virulent and causes many deaths.[3] Governments must respond to this experience to ensure that the public is informed and also to increase public interest in vaccination. This article addresses the manifestations of distrust in government and the challenges of risk communication and crisis communication to vulnerable communities. Targeting news to specific groups is a major challenge in times of crisis.

1 Covid_19 and the Connection with other Epidemics

During its existence, humanity has struggled with many epidemics that have threatened human existence on the planet at certain times. Medical elites have always faced the challenge of how to protect an illiterate society through education to fight epidemics. In modern times, medical circles have been more successful and have been able to use the press to improve the hygienic habits of society and thus reduce the contagion of, for example, the Spanish flu in some US states. Recently, the media has been involved in informing society how to protect it from AIDS, SARS and MERS.[4] However, national governments have not learned from this experience, and especially at the beginning of the COVID_19 pandemic, information about the disease has been very chaotic. Although governments have prepared crisis communication scenarios by law, problems have arisen in communication between the government and the public, and in particular some communities in society. There were problems communicating with certain communities of society in the area for which governments were responsible. We can define these communities as a group that cannot be effectively addressed during the early stages of a public safety emergency through communication media.[5] It is necessary to define such groups of the population on which it is necessary to focus crisis communication. We can define such communities using the following questions:

1. For which community is a specialized message or communication product required.
2. What are the differences between communities or age groups that require health and safety information during an emergency in an emergency?
3. How crisis communication messages are received by these communities and sections of the population, and how these communities respond to the pandemic.

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[2] KWOK, L., LEE, J., HAN, S. H.: Crisis Communication on Social Media: What Types of COVID-19 Messages Get the Attention? In *Cornell Hospitality Quarterly*. First Published June 30, 2021. [online]. [2021-10-28]. Available at: <https://doi.org/10.1177/19389655211028143>.

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If we do not know the answer to these questions, society seriously risks poor communication with groups of the population and we risk that selected communities will not have important news and overall communication will be unnecessary and confusing.

2 Covid_19 and Risk Communication and Crisis Communication

If we want to address selected groups of the population, we must approach each such group specifically. These selected population groups, for example, retirees observe that there are certain differences in health and are determined systemically with different levels of the social hierarchy. Retirees are disadvantaged by their social status. Therefore, pandemic preparation must be understood in this context. Retirees are the group to be the first to respond to existing health disparities with increased vulnerability in a pandemic.[6] Retirees have experienced differences in exposure, susceptibility and treatment, which create a synergistic effect leading to unequal levels of morbidity and mortality. We know that creating crisis communication for any group of people during a pandemic is very difficult. Crisis managers and the government should recognize the risks that are associated with differences in the various manifestations of the disease and are communicated. At first, the layers of society were not entirely willing to trust the government to announce pandemic measures. Many messages during the crisis communication were the target of jokes. The government has also approved a form of crisis communication within the valid Pandemic Plan of the Czech Republic, unfortunately this plan proved to be inappropriately elaborated. Therefore, distrust of many reports has also caused general distrust of most government measures. For crisis communication between the government and other public authorities to be effective, measures need to be based on fairness and transparency. Justice in the broadest sense should ensure a fair distribution of the benefits and burdens of preventive measures and responses and equal respect and dignity for every citizen. Transparency, in turn, requires a pandemic preparedness to communicate transparent and objective information.[7] An open and empathetic style of communication that inspires public confidence is most effective during a crisis, especially when governments and public authorities are trying to provoke positive action or refrain from harmful action. The public's suspicion of the unfair intentions of scientists and the government is growing, and the public does not trust the information provided. This is also the reason why many people, as well as pensioners, look for truthful data on so-called disinformation servers, which provide "true" news. Such an approach of the population leads to a greater number of sources of conflicting information, and at the same time limiting the use of scientific reasoning in decision-making leads to a political struggle. It is trust and trustworthiness that are the basic features of convincing crisis communication, which is manifested in empathy, competence, openness and expertise.[8] The current COVID_19 threat is highly virulent. Given that the Pandemic Plan was not well prepared for the crisis communication of the pandemic, and in particular the current COVID_19, the government and state authorities should seek to improve preparedness planning for preparedness and for building flexible and sustainable communication strategies and networks. During the ongoing pandemic, the improvement of crisis communication is

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[6] WODAK, R.: Crisis communication and crisis management during COVID-19. In *Global Discourse: An interdisciplinary journal of current affairs*, 2021, Vol. 11, No. 3, p. 329-353. [online]. [2021-10-28]. Available at: <https://doi.org/10.1332/204378921X16100431230102>.

[7] HE, H., HARRIS, L.: The impact of covid-19 pandemic on corporate social responsibility and marketing philosophy. In *Journal of Business Research*, 2020, Vol. 116, p. 176-182.

[8] HECHT, T. D., ALLEN, N. J., KLAMMER, J. D., KELLY, E. C.: Group beliefs, ability, and performance: The potency of group potency. In *Group Dynamics: Theory, Research, and Practice*, 2002, Vol. 6, p. 152.

difficult to improve as public attention shifts to coordinated health communication in support of public health interventions aimed at reducing morbidity and mortality due to the COVID_19 pandemic. Crisis communication should be analyzed, improved and updated during a period when there is no epidemic or pandemic. One of the most important steps taken by the government and the state administration is the communication of non-pharmaceutical interventions, which will require changes in the behavior of individuals in the population to prevent the spread of the pandemic, reduce the number of hospitalizations and deaths.

3 Pandemic COVID_19 in the Context of Different Levels of Population Health

The COVID_19 pandemic, which is now taking place in the information age - where immediate horizontal communication is ongoing - will severely hamper the ability of those responsible to provide accurate, timely, consistent and credible information. We must be able to communicate emergency messages to a very diverse population. The principles of crisis communication are therefore an essential part of our response to the pandemic that is beginning now. Crisis communication involves the urgency of disaster communication with the need to communicate the risks and benefits to stakeholders and the public. The goal of crisis communication is the effort of all interested experts to provide information that will enable the population to make the best possible decisions. It is also better to accept this crisis situation that has arisen in society.[9] One of the reasons why they address different social strata of the population is the differences in the level of health of individual strata of the population. Economic resources, education, occupations can worsen the health of the population.[10] In the preparation for a pandemic, it is necessary to associate existing health differences with the strata of society with increased vulnerability in a pandemic, and within the Pandemic Plan it is necessary to describe these differences in exposure, susceptibility to disease, adherence to treatment. These activities create a synergistic effect leading to unequal levels of morbidity at different levels of society.[11] Establishing specifically targeted communication with the population is difficult, and communicators must recognize the risks associated with differences in exposure and susceptibility to treatment. It is necessary to create reports that reflect this fact. We know from research that a large part of the population is less trusting and also does not trust government communications on pandemic measures.[12] After the outbreak of the COVID_19 pandemic, government officials and subsequently professional marketing companies worked to create new trustworthy relationships with the population, and the results are very sporadic. However, in many studies, a phenomenon has emerged that has shown growing distrust of the government as well as regional governments.[13] The so-called risky communication messages, which spread various misinformation, became a big problem. Another problem is that people in a certain part of the population think that an experiment is

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[9] COOMBS, T.: *Ongoing Crisis Communication: Planning, Managing, and Responding*. London : SAGE Publications Inc., 2015.

[10] BRASHERS, D. E.: Communication and uncertainty management. In *Journal of Communications*, 2001, Vol. 51, p. 477-497.

[11] COOMBS, T., HOLLADAY, S., J.: *The Handbook of Crisis Communication.* Chichester : Wiley-Blackwell, 2012.

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[13] MALECKI, K. M, KEATING, J. A., SAFDAR, N.: Crisis Communication and Public Perception of COVID-19 Risk in the Era of Social Media. In *Clinical Infectious Diseases*, 2021, Vol. 72, No. 4, p. 697-702. [online]. [2021-10-28]. Available at: <https://doi.org/10.1093/cid/ciaa758>.

being done on them. The problem here is that people think they are being denied their freedom. This implies the need to communicate on the principles of fairness and transparency.

- **Justice** - preparing for a potential pandemic (even a potential disaster) should ensure a fair distribution of the benefits and burdens of preventive measures and responses, and equal respect for the dignity and autonomy of each individual.
- **Transparency** - pandemic preparedness requires transparent communication of accurate information.

In this context, it must be said that differences in population are based on different income, social status, education, employment. Furthermore, worries about their health, which not all layers do at a good level. It turns out that different occupations bring different forms of intensity of exposure to the COVID_19 virus. E.g. in 2020, the entire shifts of the Ostrava-Karviná mines in Ostrava were affected, or workers in education or healthcare come up with the exposure more intensively than in other jobs. The immunity of individuals must also be included in communication. To strengthen it, the media helped to popularize regular hardening. The method of treatment also changed during the pandemic, especially after the onset of vaccination, communication also changed. The population was very affected by the death toll, as the media reported many deaths every day. All this then caused great problems in crisis communication between the government and state authorities and regional governments. At the Faculty of Logistics and Crisis Management of Tomas Bata University, a media analysis of the outputs of the Government of the Czech Republic and the media outputs of the Regional Office in Zlín was performed. The research showed that government agencies were not fully prepared for a possible pandemic in the Czech Republic. It turned out that the surrounding countries were not ready for this possibility either. The reports provided by the government showed many media errors. They were long, written in complex language, commented immediately by the opposition, which negated the government's regulations. This was done by various experts who, in fact, challenged government regulations with their scientific "knowledge". Another problem was misinformation. However, the authorities reacted to this foreseeable situation very clumsily, which began to spread chaos in society. So many people were either completely frightened or part of the population completely despised the untrustworthy government communication. A slightly different case is the communication of the Regional Office in Zlín, which in the years 2017 - 2019 dealt with the situation of highly contagious African swine fever, which suddenly spread here and caused great complications in economic life and in the lives of the Zlín region. Here, the regional authority learned to communicate more easily with the public. The staff of the Regional Office's press department used their experience in communicating African swine fever in the first periods of the COVID_19 pandemic. The communication was brief, clear and explained the government's communication. Subsequently, with the change of management, this communication was changed. The feedback of communication between government and regional authorities was carried out as part of the tracing of COVID_19 positive patients, which was carried out within the call center within the Hygiene Station in Zlín. A Call Center was set up at the Faculty of Logistics and Crisis Management, where students tracked positive patients on Covid_19. Here they encountered all sorts of reactions. A record was kept of each call, which was then analyzed. The results of the patient calls were very interesting. A total of 5,320 calls were made from September 2020 to the end of November 2022. Most 52 % knew about government regulations and took them relatively calmly and were relatively satisfied with the communication. Another group of 24 % were people who cursed government regulations, their communication and compliance. Another group of 13 % insulted telephone operators, cursed the government and all authorities and forces, and did not want to comply with the regulation. The last group of 11 % did not recognize any regulations at all, denied the disease at all and went to demonstrate and did everything against the regulations. Initially, this group was smaller, but by the end of the period it was growing and reaching up to 30 %[14]. During the period under review, these groups changed according to the increase in individual waves of the pandemic and also according to the political situation in the Czech Republic, as there were two elections.

4 Design of a Model to Improve the Response to a Pandemic

We need to present and extend a model that builds communication for disasters and pandemics. The main rationale for the capacity building approach is that there will be severe limitations on the extent to which media professionals are able to develop a more targeted communication strategy during a pandemic. In times of crisis, the problem is the lack of media professionals and at the same time greater requirements for communication with the population. It is important to educate government officials before the event, especially the ability to respond to emerging security issues and situations. The key is that pandemic plans must include continuous improvement in communication with the population. They must start communicating properly before an emergency occurs in order to overcome mistrust and social context barriers. Waiting for the pandemic to rise increases a vulnerable person at disproportionate risk. Social confidence in state institutions should be important in highly stressful and persistent emergencies. Research involving focus group interviews can be used to develop and test type plans before using them. If we focus on a certain group of the population, for example a pensioner, it is necessary to assign messages and channels to the observable social characteristics of this age group of people. Addressing a communication strategy requires that communication reflect the cultural, social, psychological factors that affect health in this population group. Very successful research was conducted in Los Angeles, which eventually led to the development of materials in fourteen language versions that also reflected the different cultural and social strata of the population. In this case, volunteers represent a successful approach in the context of prevention and treatment of chronic diseases. In the midst of a social pandemic, these volunteers can build appropriate and trustworthy communication between a select group of pensioners, for example, and the government. Preparation for successful communication must include partnerships with community organizations that can effectively reach a selected population and offer trusted spokespersons with whom government can work. Crisis and emergency communication principles are an essential part of the pandemic response that is beginning. This communication includes the urgency of communication in any disaster, as well as the need to communicate the risks and benefits to stakeholders and the population. Coordinating reporting and releasing information between government, counties and other authorities is essential to avoid confusion that can undermine public confidence, create fear and anxiety, and prevent response measures.

Table 1: Strategies for Improving Complex Communication and Crisis Communication

Before the event	Extraordinary event	After an emergency
Ongoing risk education	More one way, Emergency Risk Communication	Increased capacity and resilience of communities at times of disasters and pandemics

[14] The operation of the Call Center and thus the measurement ended with a decision of the Regional Hygiene Station in Zlín at the end of November 2021.

Partnership formation	More need for immediate action	Evaluate the effectiveness of communication
Civic engagement	Community partners engagement in response	Revise communication plans to include the necessary changes
Opportunity for deliberation on difficult policies and procedures	Do research to identify how the public is affected by the event.	Evaluate channel propagation and range, frequency, process
Identify and involve trusted partners in the preparation of crisis communication	Have regular meetings with speakers	Find out if new training is needed for the speaker or if new speakers need to be appointed
Identify suitable speakers and develop trusting relationships before the event	Develop new materials and news as needed	Explore evaluation results with partners and suggest new strategies
Develop the capacity of staff to produce messages that are culturally and linguistically appropriate and targeted at an appropriate level of literacy	Organize community forums as much as possible	Examine the resilience of the population during an emergency
Develop and test materials for crisis communication	Emphasize positive coping and resilience models	
Perform communication activities to prepare for crisis communication		

Source: Recommendations prepared by the working team for the Crisis Staff composed of employees of Tomas Bata University, the Fire and Rescue Service, and employees of the Regional Authority. Autumn 2021.

The information provided to the public should be technically correct and concise. Communication during a pandemic should minimize speculation, clearly state strengths and limitations of current data, and avoid over-assurance to the public. The pandemic itself will provoke an immediate, intense and sustained demand for information from the public and healthcare providers, politicians and the news media. Healthcare professionals must be prepared to work with the media and communicate with the public. It is the timely and transparent dissemination of accurate, scientifically based information on the pandemic and the progress of the response that can build public confidence. Unfortunately, the COVID_19 pandemic will be a long-lasting crisis, during which communication styles and communication strategies will be constantly changing, according to the new waves of the COVID_19 virus. The goal of crisis communication is to communicate messages that will reduce morbidity, save lives and maintain social structures. The right message at the right time through the right channel can contribute to these goals, and therefore crisis management authorities must be at the heart of planning activities leading to the destruction of a pandemic. It is also important to evaluate the feedback on the information provided and the reactions of the public. It is also important for the crisis management media to help ensure that the public has adequate information and plans to enable the public to adopt the new behaviors necessary for their safety.

Conclusion

The changes in the nature and extent of crises and emergencies facing the state and the public call for more comprehensive approaches to communication. The ideal communication model should be a comprehensive combination of many traditional concepts of health and risk, risk communication and crisis communication. The individual steps of communication and crisis communication should be activated according to the development of the pandemic or even any crisis situation. Crises and pandemics are by definition uncertain and often create unpredictable and chaotic situations. Therefore, comprehensive risk communication should be used as a tool to manage these complex situations. This approach recognizes the need for effective crisis and emergency communication to begin long before the outbreak and to continue after the immediate threat has receded. Comprehensive and crisis communication confirms that risks are ubiquitous and emergencies and pandemics threaten public health and prosperity more frequently

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EDUCATION AS ONE OF KEY FACTORS AFFECTING ENVIRONMENTAL CONSUMER BEHAVIOUR IN SUSTAINABLE FASHION

Alena Kusá – Marianna Urmínová

Abstract
Sustainable fashion is gradually becoming the modern environmental consumer trend with regard to a high consumption and exploitation rate existing in the fashion industry. Changes to consumer preferences in sustainable fashion have mainly been caused by combination of various situational or individual factors. Taking into consideration the results of previous research and studies, the theoretical part of our paper will focus on the factors we managed to define and which are likely to affect environmental consumer behaviour in the field of sustainable fashion goods. One of key factors is education as a way to proper perception and comprehension of acquired information by means of marketing communication and paying the way for proper understanding of the higher price of sustainable fashion goods. Thanks to our own research and analysis of secondary reserach, the paper presents important outputs in the field of education and buying intentions or the relation between the education and changes to environmental buying preferences.

Key words:
Education. Green consumer behaviour. Marketing communication. Sustainable fashion.

Introduction

In respect of the growing need for sustainable development in the last decade, the research has mainly focused on understanding the factors affecting environmentally friendly consumer behaviour with the special emphasis placed on environmental consumer behaviour.[1] In respect of current climate changes happening in our territory, consumers are more afraid of negative environmental effects of their purchase, which has helped to form their environmentally friendly consumer behaviour. Still there are many of us who do not reflect to the above fears or the cases when, despite our positive attitude to green marketing, our shopping cannot be described as sustainable at all. Despite great progress in clarifying the relations between fears of sustainability and the environmentally friendly consumption, many questions still arise. Why our interest in the environment does not always show in the effective buying behaviour or why these goals do not transform into environmentally friendly action/activities? Customers' approach to more ecological purchase in the fashion industry, which is defined as one of the most polluting industries in the world, is influenced by combination of various key factors affecting environmental consumer behaviour: price, trust, education/learning and last but not least, marketing communication. In an acceptable manner and by means of the properly set-up marketing communication, consumers need to accept and reflect on relevant information about the environmental impact of their purchase or the particular fashion goods. Due to proper interpretation of the information, the consumer should understand the higher price policy applicable to environmental fashion products or express and reinforce his trust in sustainable fashion. The whole process stands on cooperation of factors of marketing communication and education. The educational space as such is wide enough to lead and develop the change we need to see in the world. It is all based on the assumption that insufficient education is the main cause of non-understanding of the high price of sustainable goods, understanding of marketing communication and the key factor encouraging creditworthiness of information in the sustainable fashion. Besides that, we also observed a narrow correlation between education and

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learning because the higher degree the person obtains, the higher willingness to learn does he demonstrate in this field, which will considerably change his view of the world, quality of life and social responsibility towards our planet.

1 Factors affecting consumers' environmental behaviour

There are various factors paying a role in the consumer's buying decision and affecting his environmental behaviour. Within this research, our current surveys will focus on certain key aspects that considerably influence environmentally friendly behaviour of customers or change their buying preferences. In general, we base our assumptions on the opinions by Joshi and Rahmana who classify the factors affecting individual buying behaviour into two broad categories:
a) individual,
b) situational.

In relation to the above subject matter, the factors such as the price, trust, education/learning and marketing communication will be further split into particular categories.

1.1 Situational factors

These factors may refer to so-called situational powers that, as defined by Joshi and Rahman, substantially affect consumers' green decision-making. These mainly include the price, availability, quality, brand image or marketing communication and environmental labelling. These aspects either encourage or discourage consumers from purchasing environmentally friendly products.[2] We will describe the price and marketing communication in more detail below.

1.1.1 Price

It is publicly known that a lack of economic resources increases the impact of the price and is the major obstacle to the purchase of green products. This is also confirmed by Aslam et al. who states that the price largely correlates with customer satisfaction.[3] It is obvious that the high price negatively affects the buying intention and behaviour of the consumer when it come to the environmentally friendly purchase.

1.1.2 Marketing communication

As mentioned above, proper interpretation and communication of sustainability may considerable affect consumers' environmental behaviour. Company marketing activities, as suggested by Choi and Sung, mainly focus on consumer satisfaction, their social and ethical needs by providing cultural support, environmental protection or emergency and disaster relief, for instance.[4] Sustainable marketing activities, on the other hand, have a positive effect on boosting company brand image, company growth and its vitality. By Vaitone and Skackauskiene, the most common advantages of environmental marketing strategy include: reinforcing public relations, increasing a profit, methods for accomplishing company goals,

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promoting a competitive advantage, cost cutting or improving a brand name.[5] According to Lewandowska et al. creating effective and easy-to-understand eco-marketing communication may be a great challenge for both producers and sellers.[6]

1.2 Individual factors

According to Joshi and Rahman, individual factors include variables connected with the individual decision-making process whereas situational factors involve variables that create and describe various situations in which an individual consumer decides about his own need.[7] These individual factors mainly cover trust, education, values, habits, emotions, etc.

This category includes those variables that are specifically related to the decision-making powers of an individual. In general, these refer to variables that result from individual life experience (attitudes, values, etc.) and affect the individual decision-making process. Factors such as trust and education will be further described in the chapter below.

1.2.1 Trust/Credibility

In the context of green products, Chen defines trust as a belief or an expectation related to information about environmental features of the product.[8] Foroudi et al. understand trust as the state of mind by means of which we can adopt sensitivity to favourable motives.[9] Some studies point to the fact that many consumers demonstrate a lack of trust in sustainable goods[10], which can considerably halt development and growth. Due to widespread greenwashing, consumers are becoming more sceptical towards companies and suspicious of possible frauds in the certification process or product check, etc.[11] Delmas and Burbano define "greenwashing" as an intersection of two types of social behaviour: weak environmental performance and positive communication from the part of the company about such performance. In other words, this amounts to deceptive practices and consumer fraud which will eventually create a gap between symbolic and material activities of the company policy promoting the sustainability principle.[12]

1.2.2 Education

Education and knowledge have become one of the most commonly studied variables demonstrating the positive impact on environmental intentions of consumers and their willingness to purchase environmentally friendly products. Kianpour et al. claim that knowledge acquired in this area is significantly linked to how consumers collect, organise and evaluate products. By these authors, knowledge and education are a significant predicator of

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environmentally friendly behaviour.[13] Even Hirschman claimed back in 1980 that consumers who are more aware of environmental problems are willing to pay more for environmentally friendly products.[14] In his study, Anuar et al. points to the fact that if consumers were more aware of environmental impacts of their consumption, they would become much more ecological.[15] Taufiquem et al. also supports the above opinions and connect consumers' knowledge and trust in ecological brands with their environmental knowledge in order to find out how these affect pro-environmental behaviour of consumers. Their findings show that environmental knowledge is positively linked to environmental attitudes and positive environmental attitudes and trust in eco-brands affect pro-environmental behaviour of consumers[16] Consumer's knowledge theoretically consists of two dimensions - general knowledge and product knowledge. General knowledge relates to collected experiences with consumption whereas product knowledge refers to the amount of information about the product range and rules saved in the individual memory.[17] When taking into consideration the theoretical basis, our paper rather focuses on the specific knowledge of consumers connected with the product and specific product features - rather than on general environmental knowledge.

In light of the aforementioned, we may assume that education/learning in the field of environmental consumer behaviour is a key environmental stimulus for consumer behaviour and, as it represents a certain linking attribute between the above mentioned factors, it has also become the key subject matter of our research.

2 Methodics

The main objective of our paper is, by means of the descriptive analysis of our own questionnaire research and the analysis of two selected papers of authors who studied education as a key factor affecting the change of consumer environmental behaviour in the fashion industry, to define basic outputs for any further research in the said area. The analytical part of the paper consists of primary and secondary resources and data of various authors in relation to the given subject matter. Secondary information was mainly obtained from articles in the journals and literature in databases and relevant online publications. The said theoretical knowledge was selected on the basis of the content and its time relevance to the subject matter. When elaborating the study, we used various logical methods such as content analysis, comparison, factual analysis, description, deduction or critical thinking. In primary resourses were respondents randomly selected from the Generations Y and Z functioning in the online environment. Each attribute of the main group had a non-zero probability of being included in the selected group. Since we do not know the exact total of the sample size, the size of the selected group was calculated by the following pattern:

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[16] TAUFIGUE, K. M. R., VOCINO, A., POLONSKY, M. J.: The influence of eco-label knowledge and trust on pro-environmental consumer behaviour in an emerging market. In *Journal of Strategic Marketing*, 2017, Vol. 25, No. 7, p. 520.

[17] PHILIPPE, A., NGOBO, P. V.: Assessment of consumer knowledge and its consequences: a multi-component approach. In *Advances in Consumer Research*, 1999, Vol. 26, p. 570.

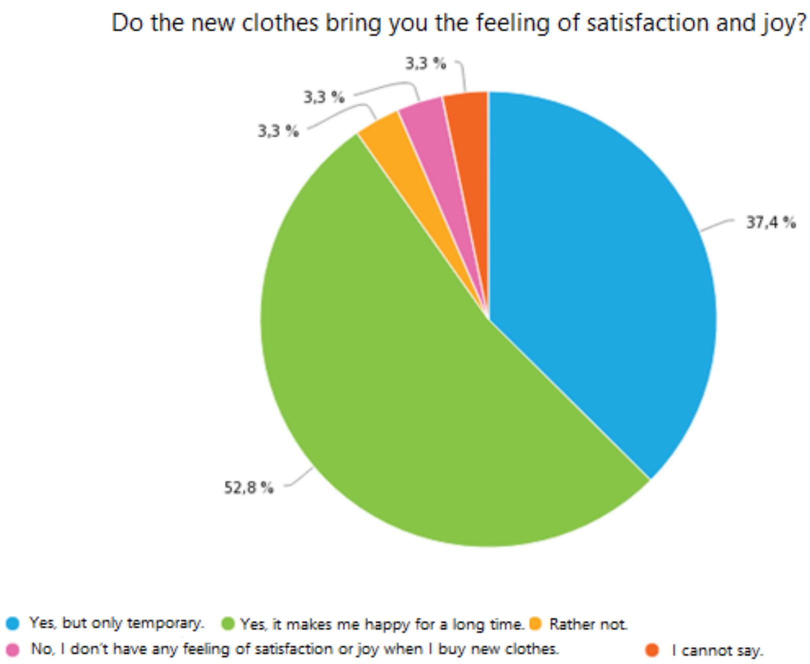
$$\frac{Z_{1-\frac{a^2}{2}} * \pi * (1-\pi)}{E^2}$$

where: π = the occurrence ratio of the observed trait within the basic set; E = maximum acceptable error interval; z = quantile of the distribution function. As we do not know the occurrence ratio of the observed trait within the basic set, we conservatively determined the value as 0.5. The maximum acceptable error interval was determined at the level of 5% and the quantile of the distribution function had a value of 1.96, which equals 95 % reliability. The minimum size of the selected set according to this pattern is 385 respondents. Our research was conducted on a sample of 430 respondents.

3 Results and discussion

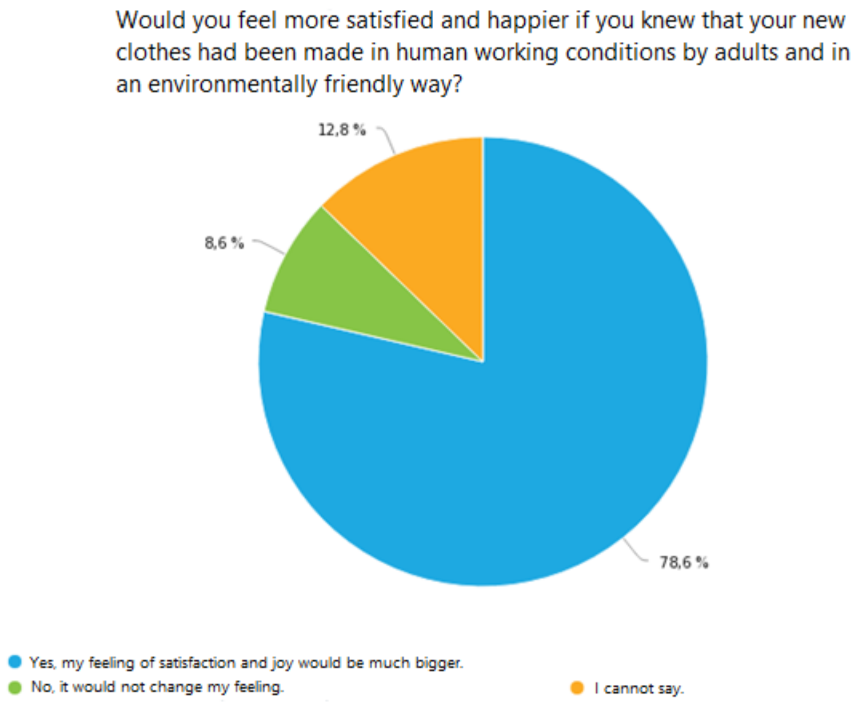
3.1 The analysis of the research results

Within our own research we carried out by means of the questionnaire survey on the sample of 430 respondents aged 18 to 38 (Generation Z and Y) we focused on the impact of education and providing relevant information in the field of negative environmental effect of fast fashion on post-purchase behaviour of consumers. As for environmental marketing communication, we further focused on the form in which the relevant information should be properly communicated to consumers.



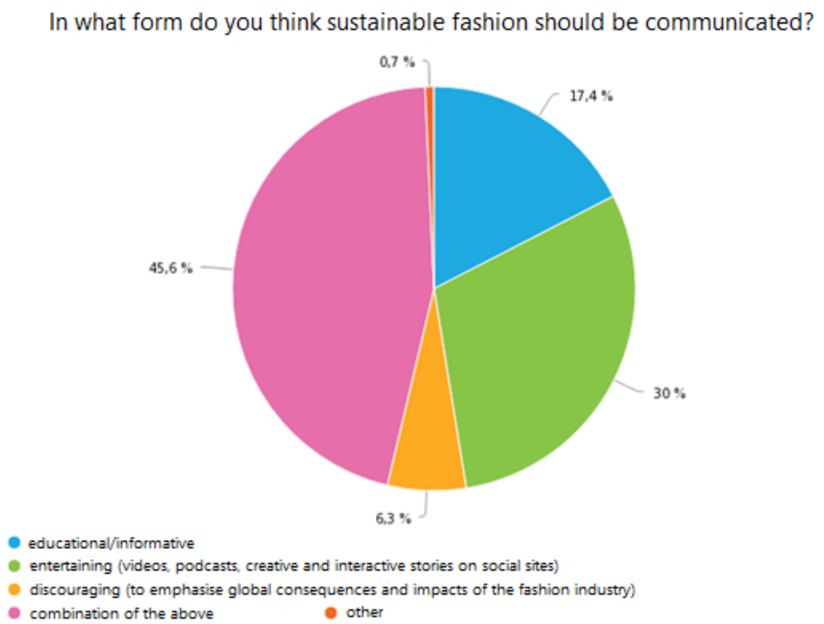
Graph 1: Expression of the feeling within consumers' post-purchase behaviour in fast fashion
Source: Own processing.

The Graph 1 shows post-purchase behaviour of consumers through the feeling of satisfaction and joy from the purchase of fashion goods. The given answers did not provide us with an explicit conclusion as a half of respondents (52.8%) stated that buying fashion goods/products brought them long-term joy whereas almost 50% of respondents only perceived the temporary feeling of satisfaction and joy or even did not feel any satisfaction at all. In the following question, we were trying to find out the cause for consumer dissatisfaction in education and the information provided in the field of negative environmental impact of the fashion industry.



Graph 2: Expression of feelings within post-purchase consumer behaviour in fast fashion with education in the process of the buying decision-making process
Source: Own processing.

The following question points to the subject matter of increasing the feeling of satisfaction and joy from the purchase of fashion goods in relation to education and information about the production and textile materials and their role in the process of consumer's decision-making. The given results definitely show that up to 78.6% of respondents would certainly have a greater feeling of satisfaction and joy in case they buy sustainable products. Only 8.6% of respondents stated their feeling in the post-purchase behaviour would not change. This is to say that acquiring knowledge of the given subject matter will have a positive impact on the post-purchase feeling of consumers. The knowledge the consumer obtains reinforces his feeling of satisfaction and encourages the purchase of sustainable goods in course of the next decision-making process.



Graph 3: Form of environmental marketing communication on the basis of consumers' preferences
Source: Own processing.

The main goal of environmental marketing communication is to present to consumers the importance of environmental protection in goods production.[18] With regard to the target group of consumers, the form in which sustainability is communicated and the information is provided is still adapting and changing. The results show that respondents aged 18 to 38 (Generation Z and Y) prefer the information on sustainable fashion being communicated in an educational form (17.4%). An entertaining form is preferred by 30% of respondents and discouraging one by 6.3% of respondents. 45.6% of respondents stated they would like the information about sustainable fashion to be communicated by combination of the above forms. This is to say that environmental marketing communication should primarily educate about various facts and negative environmental impacts of fast fashion by means of videos, podcasts, creative and interactive stories on social sites, etc.

3.2 Analysis of secondary studies

On the basis of the detailed analysis of scientific databases, this part of the paper focused on two scientific studies the results of which have brought significant conclusions in the field of education and the impact on consumer environmental behaviour in fast fashion.

In his paper named „*Environmentally sustainable textile and apparel consumption: the role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance*", Kang et al. focuses and analyses complex understanding of attitudes, perception and purpose of behaviour of the young in relation to consumption of environmentally friendly textile and garment products. Results of the study show that consumers' knowledge of products, perceived consumer effectiveness and perceived personal relevance significantly affect attitudes of young consumers, subjective norms and perceived control of behaviour and thus, to a certain extent, affect buying intentions with regard to environmentally friendly textile and garment products. The sources of this research are beneficial for politicians, pedagogues or environmentalists as

[18] MORAVČÍKOVÁ, D., KRIŽANOVÁ, A., MAJEROVÁ, J. RYPÁKOVÁ, M.: Green marketing as the source of the competitive advantage of the business. In *Sustainability,* 2017, Vol. 9, p. 2218.

they enable them to create strategies to ensure better communication with consumers and eventually support the favourable consumer behaviour. The authors of the article set the following 2 out of 5 hypotheses which are crucial for our further research into the given field:

H1: Consumer knowledge affects the attitude, subjective norms and perceived control of behaviour towards environmentally sustainable textile and garment consumption.

H2: Consumer knowledge, perceived consumer effectiveness and perceived personal relevance indirectly affect the buying goals towards environmentally sustainable textile and garment consumption.

The main research was carried out by means of the research questionnaire on the sample of 714 respondents aged 18 to 29 defining the behavioural intention as the consumer's willingness in the purchase of sustainable garments. The behavioural intention was measured by three items with which probability the respondent would consider performing each of his behaviour on the basis of 7 Point Likert Scale (1 = highly improbable; 7 = highly probable). The attitude was defined as the function of assumptions about the results of purchasing and wearing sustainable clothes and evaluating the results. In contrast to our assumption, the results of the research indicate that the larger is the knowledge and experience of young consumers about sustainable fashion products, the less likely are they to perceive social pressure on consumption of sustainable fashion products. The negative relation between consumers' knowledge and subjective norms is not surprising because, as the authors declare, this is easy to explain by saying that more experienced and smarter consumer procure sustainable fashion products on the basis of their own decisions with an obvious impact on the environment and not on the basis of social pressure. Therefore the findings suggest that if consumers do believe they are able to influence the environment by means of their individual consumer behaviour, they tend to create a positive attitude to consumption of sustainable garments.

The following part of our paper focuses on the secondary analysis of the paper named „*Determinants Influencing Consumers Purchasing Intention for Sustainable Fashion: Evidence from Ho Chi Minh City*", which observes the relation and factors affecting consumers' intention to purchase sustainable fashion products. The article was intentionally selected from database sources thanks to the main subject matter of our research. It represents the key basis for observing the educational factor as a key factor for consumer's environmental behaviour and the purchase of sustainable fashion. The authors of the paper studied the relation between consumer knowledge and intention to purchase sustainable garments. Further to some other studies, the following hypotheses were proposed:

H1: Consumer's knowledge of environmental problems positively affects the intention to buy more sustainable clothes.

H2: Consumer's knowledge of sustainable fashion positively affects the buying intention towards sustainable fashion.

Data collection of the analysed paper consists of two phases; the first phase is the preliminary target group of 15 random respondents so as the authors could verify whether they understood the notions and clarify the questions that seemed to be complicated for the respondents. In the second phase, the research was distributed both online and off-line to 270 respondents who were just randomly selected. Descriptive analyses were made to identify the demographic profile of the respondents. Followed scales variables verified by the Cronbach's alfa-analysis.

EFA and multiplied regressive analysis were performed for the purpose of identifying the facts affecting the intention of the customer - shopping in a sustainable manner.

For conclusion, the authors came to certain significant conclusions and proposed adequate recommendations:

- consumers need more information that would enable them to improve their ethical decision;
- the main channels consumers use to search for information about sustainable products are public procurement, public learning, impact of peers and company marketing information about the product;
- companies should boost clients' environmental awareness by educating them and communicating through the media not only environmental pollution including the production process, textile and fabric colouring, but also advantages of sustainable products such as sustainable fashion;
- environmental activities can also be promoted by using activities increasing the environmental and sustainability awareness at universities or high schools;
- businesses should also enhance consumers' awareness of sustainable fashion by contacting them through various platforms to inform them about sustainable products. Such information has to contain distribution addresses that should be located on both online and offline space to provide the customers with all the comfort they wish for.[19]

Conclusion

Research workers have found out that environmental awareness was directly linked to development of attitudes and behavioural patterns which reflect consumers' interest in the environmental issues.[20] Consumers who are more familiar with environmental subjects tend to care more about the environment in contrast to those who have less knowledge; these fears lead consumers to consider product environmental attributes when deciding on the purchase.[21] It was also revealed that individuals with broader environmental knowledge were more likely to perceive their individual efforts as their personal contribution to solutions of environmental problems in contrast to those who are less environmentally aware. The submitted paper introduces some significant facts in the field of impact of education as a key factor affecting consumers' environmental behaviour. The results of our own research demonstrate that almost a half of young people aged 18 to 38 (Generation Y and Z) state that purchase of ordinary fast fashion goods do not bring them a long-term feeling of satisfaction in contrast to sustainable fashion goods as in this case they are able to track the whole production process with the minimum negative social as well as environmental impact. The information which is provided to prospective consumers by means of marketing communication should be properly communicated in an educational, entertaining or even discouraging way. The information should emphasise facts in an educational way whereas negative environmental impacts of fast fashion products should be interpreted by means of podcasts, videos, creative and interactive stories on social sites, etc. Our main target group consisted of the respondents from Generation

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[20] KANG, J. et al.: Environmentally sustainable textile and apparel consumption: the role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance. In *International Journal of Consumer Studies,* 2013, Vol. 37, No. 4, p. 447.

[21] KIM, H. S., DAMHORST, M. L.: Environmental concern and apparel consumption. In *Clothing and Textiles Research Journal*, 1998, Vol. 16, p. 129.

Y and Z who should be expressly addressed the threats and challenges posed by the fast fashion industry through properly selected communicational means. The results of our research correlate with the research named „*Determinants Influencing Consumers Purchasing Intention for Sustainable Fashion: Evidence from Ho Chi Minh City*" which brings about findings and conclusions emphasising the need for further education and broader knowledge in terms of consumers' environmental awareness. Results of the research show that businesses should enhance consumers' environmental awareness by educating them and distributing the message through media, but not limited to the causes of environmental pollution including the production process, textile and fibre colouring but also about advantages sustainable products bring. The study also points out to a higher rate of awareness at schools or universities as well as in businesses. Information should be easily available by means of online or offline communication means to ensure an easy access for wide audience. The above opinions correlate with the results of the submitted research. However, there are certain discrepancies with the results of the research named „*Environmentally sustainable textile and apparel consumption: the role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance*" and published by Kang et al. who emphasises and analyses the complex understanding of attitudes, perception and behavioural intentions of the young in the context of the demand for environmentally sustainable textile and garment products. The results of our research, in contrast to our study, confirm that the broader the knowledge and experience of young consumers about sustainable fashion products, the less significant is social pressure on consumption of sustainable fashion goods. Findings of this research suggest that if consumers believe they are able to really influence the environment by their individual consumption behaviour, they are able to form a positive attitude towards consumption of sustainable fashion goods. As within the secondary analysis we observed certain collisions regarding the statements about education as a key factor that significantly affects the change of consumers' environmental preferences in the fashion industry, we recommend paying attention to the studied area and introducing new relevant results which will be beneficial for entrepreneurs in the sustainable fashion sector, marketers and pedagogues in educational institutions.

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CORPORATE SOCIAL RESPONSIBILITY WITH A FOCUS ON ECONOMIC DEVELOPMENT IN THE REGION

Pavla Varvažovská – Martina Jarkovská

Abstract
The article focuses on corporate social responsibility (CRS) and its importance for the region's development. The aim is to identify socially responsible activities at a selected company in the region and suggest possibilities of social responsibility in business for the region's economic development. The whole concept of social responsibility is a systemic approach of management to business management. Today, a company can no longer be an isolated system. It depends on the economic, social, and political environment. Unless it respects the interests and needs of all stakeholders, it can no longer prosper. To ensure the integrity of the analysis and a quality description of the subsequent recommendations, an analysis of the web environment and the survey carried out with representatives of the selected company and institution is used. The survey also focuses on raising public awareness of the topic of CSR. The results of the survey should enable practical applicability and show CSR application possibilities. They can also provide helpful information for companies and the general public on CSR issues in the region's further development.

Keywords:
Corporate Social Responsibility (CSR). Enterprise. Environment. Ethics in business. Pillars of corporate social responsibility. Region. Stakeholders. Sustainable Development.

Introduction

Corporate Social Responsibility (CSR) can be understood as a voluntary promise of companies to behave responsibly to the environment and society within their business and operation within the company, not only in the region in which the company operates but also to the whole world. Customers are interested in a company's final product or service in today's informed society and address other issues, activities, plans, and company policy. Society monitors the company to ensure that it operates and functions in accordance with what it reports. It is desirable to adhere to the basic principles of CSR, and in general, every other benefit "above standard" and innovation in the field of CSR is positively accepted by the company. Being interested in CSR and accepting CSR principles as an advantage, not as a complication, are among the main prerequisites for the company's long-term prosperity (the ideal of consideration for all involved). The topicality and timelessness of the topic of social responsibility and the related reporting on socially responsible activities of organizations are confirmed by a number of sources of professional literature and experts dealing with this issue. Overall, the demands not only of consumers on the responsible behavior of organizations but of the whole globalized society are increasing. The entire concept of CSR is, in essence, a systemic approach of management to business management.

1 Theoretical Background

When defining CSR, one can follow the definition of the European Commission in 2001, which defines CSR as a concept by which companies voluntarily integrate social and environmental aspects into common corporate operations and interactions with stakeholders.[1] It can be concluded that CSR includes primarily active communication with stakeholders,

[1] ZADRAŽILOVÁ, D.: *Společenská odpovědnost podniků. Transparentnost a etika podnikání.* Prague : C. H. Beck, 2010, p. 1215.

responsibility to society and the environment, voluntariness, and especially a strategic approach, which means long-term, planned, and controlled activities. CSR is based on three fundamental pillars:[2]

- economic (profit),
- social (people),
- environmental (planet).

The concept of CSR was introduced only recently in the Czech Republic. The idea has been promoted by the Business Leaders Forum (BLF) platform since 1992. Ten years later, it is already the official implementation of the CSR concept in our country. In 2008, BLF hosted the CSR Europe conference in Prague. Since the beginning of the 20th century, large companies operating in our territory have gradually implemented the CSR concept into their management practices. Companies and governments are increasingly demanding responsible organizations.[3] In recent years, CSR has developed significantly, and it can be said that it is experiencing a real boom.[4] CSR is a trend that calls for a change in the orientation of companies from short-term to long-term goals, from maximum to optimal long-term profit. Socially responsible companies behave in such a way as to contribute to sustainable development, be transparent, and generally help improve society's overall state. In the company's interest, the long-term building of quality relationships with customers and suppliers is the main goal for the company. In addition to achieving the desired profit, a satisfied customer is essential. Equal opportunities in the selection of suppliers are also emphasized and applied.[2] In the social area of CSR, there should also be an interest in the surrounding communities and municipalities. A socially responsible company in this area should cooperate and actively communicate with local communities, provide information on news, the state, and development of the environment, the impact of business activities on the environment, or communicate with local communities in dealing with unpleasant issues such as an accident or problem which affects all parties.[2] Environmental policy is a documented commitment of the company's top management to comply with applicable environmental legislation, continuously improve its environmental impact, and define the principles of further development and recovery plans. Kunz points out that an adequate ecological corporate policy can significantly influence the consumer behavior of employees not only within the company but also in their households and thus in the general public.[2] The report on socially responsible behavior is explained by Kašparová and Kunz[5] as "*the process of communicating the social and environmental impacts caused by a company's economic activities to certain interest groups and society as a whole*." We perceive the report itself as an output of the process of socially responsible behavior and an input for a number of other activities in connection with CSR. Reporting can bring a systemic approach to the management of socially responsible activities. It can also identify future risks or opportunities, thus significantly contributing to increasing the company's competitiveness and long-term sustainability. The information provided by the report serves the company and is an essential factor that can partially shape the decision-making process of various types of stakeholders.[5] The most frequently mentioned reason that leads large companies to CSR

[2] KUNZ, V.: *Společenská odpovědnost firem.* Prague : Grada Publishing, 2012, p. 15.

[3] WIERNIK, B. M., ONES, D. S.: Ethical employee behaviors in the consensus taxonomy of counterproductive work behaviors. In *International Journal of Selection and Assessment*, 2018, Vol. 26, No. 1, p. 37.

[4] PLÁŠKOVÁ, A., RYŠÁNEK, P.: *Společenská odpovědnost (CSR): hodnocení CSR organizací veřejného sektoru v programu Národní ceny ČR za společenskou odpovědnost: (veřejný sektor).* Prague : National Quality Support Information Center. National quality support policy, 2013, p. 35.

[5] KAŠPAROVÁ, K., KUNZ, V. *Moderní přístupy ke společenské odpovědnosti firem a CSR reportování.* Prague : Grada Publishing, 2013, p. 59.

reporting is strengthening reputation and brand and ethical reasons. There are also a number of reasons why companies do not report on their CSR activities. These reasons include, for example, ignorance of this issue as CSR reporting is a relatively new topic within CSR. Another reason may be the fear of disclosing certain sensitive information and, last but not least, the company expects an increase in costs. The system of monitoring CSR activities can be financially demanding for small and medium-sized enterprises. CSR reports provide an overview of the company's approach to the environment, responsibility for sustainability, or directly fulfilling the company's social commitments within the CSR concept. CSR reports contain information where the corporation is first introduced and the company's presentation to employees, the environment, and the surrounding community. The reports contain information on the environmental impacts of the business, outline possible potential risks associated with the operation of the company, and describe specific CSR activities and projects, whether planned or implemented.[6] The Global Reporting Initiative (GRI) is an international initiative that has helped companies create rules and guidelines for creating a CSR report. "The purpose of this directive is to show organizations a certain reporting framework to compile the most objective report possible on their performance, comparable to traditional financial reporting." This is an annual company report, which is publicly available and provides a detailed overview of the company and its social, environmental, economic impact on society.[7] According to a study by Lee et al.,[8] social networks are one of the possible and very effective information channels that promote CSR initiatives. With the ever-increasing mass use of social networks, such a presentation is becoming a sought-after campaign supporting CSR. A company that wants to be socially responsible sets ethical goals that it strives to achieve in business. Ethics in business means the connection of moral values and principles in connection with the development of business activities[9]. As stated by Pavlík and Bělčík,[6] ethical behavior and trust in the field of business in the Czech Republic suffer. They do not doubt that improvement leads through economically motivated "etiquette" of managers. He further states that the unethical business climate is one of the significant disadvantages of the Czech Republic compared to Western Europe. In general, the public sector is rated as less ethical compared to the private sector. The level of ethics in the Czech Republic is slightly improving, and prospects are well on track. The corrupt atmosphere is influenced by the overall culture of society, imperfect and non-transparent legislation. "Cleaner Production" journal is a highly cited magazine focused on environmental management. Most articles related to this topic emphasized that the priority of companies is to acquire new customers and retain them thanks to competitive advantage through environmental management systems.[10] Sustainable development issues are becoming increasingly important among organizations and their stakeholders around the world. In this context, eco-efficiency has become a consistent tool in the transition to sustainable development. Efforts at eco-efficiency indicators have been used for comparative studies and decision-making tasks that provide better financial, environmental, and social results.[11] For

[6] PAVLÍK, M., BĚLČÍK, M. et al.: *Společenská odpovědnost organizace: CSR v praxi a jak s ním dál.* Prague : Grada Publishing, 2010, p. 47.

[7] KULDOVÁ, L.: *Společenská odpovědnost firem: etické podnikání a společenská odpovědnost v praxi* social, OPS, 2010, p. 93.

[8] LEE, Y. J., YOON, H. J., O'DONNELL, N. H.: The effects of information cues on perceived legitimacy of companies that promote corporate social responsibility initiatives on social networking sites. In *Journal of Business Research*, 2018, Vol. 83, No. 2, p. 212.

[9] *Seznam praktik.* [online]. [2021-09-15]. Available at: <https://bestpractices.cz/seznam-praktik/>.

[10] FERENHOF, H. A. et al.: Environmental management systems in small and medium-sized enterprises: an analysis and systematic review. In *Journal of Cleaner Production*, 2014, Vol. 74, No. 1, p. 46.

[11] CAIADO, R. G. G. et al.: Towards sustainable development through the perspective of eco-efficiency - A systematic literature review. In *Journal of Cleaner Production,* 2017, Vol. 165, No. 11, p. 894.

the Czech public, CSR is most often associated with a charity, which Thanks to CSR projects, small and medium-sized enterprises have a good reputation in their surroundings. They are not bothered, for example, by the problem of a lack of customers and employees. Four-fifths of family companies support socially beneficial activities in their area, as a survey by Ipsos found for the Association of Small and Medium-Sized Enterprises and Self-Employed Persons of the Czech Republic, attended by 400 companies in May 2017. Companies often support sports clubs, charities, or various associations and extracurricular activities of young people. Less often, they are dedicated to maintaining the cleanliness and nature in the area or repairing monuments. Every year, family companies spend an average of about 25 thousand crowns on socially responsible activities. However, it depends on the turnover. The amount of contributions also depends on the number of sales. Companies usually do not publish their activities in this direction very much. Only about 13 percent of companies publish this information on their website. According to experts, charity is often a stepping stone to social responsibility. It is currently shifting towards domestic business among domestic companies and revealing the moral and ethical values that companies have in their business strategy.[12] According to experts, the social responsibility of Czech companies is increasingly shifting to the economic field. At present, companies are established directly to profile themselves as socially responsible, targeting customers with the same values.

2 Aim and Methodology

The main goal is to define the key elements of CSR in business; the partial goal is to describe the introduction to CSR, define the three pillars of CSR, focusing on the advantages and disadvantages of CSR and CSR approach to current practice and trends. The subject of interest of the practical part is the proposal of the possibilities of using social responsibility in business for the development of the selected region (Pardubice region). A partial goal is the analysis of aspects of business activities in a selected company in connection with a socially responsible approach. Another partial goal of the qualitative survey is to identify key elements of social responsibility in the company and institution and introduce these CSR activities. The last source of data is the questionnaire survey itself, which examines the overview and awareness of respondents on the topic of CSR in the public consciousness of the Pardubice region. At the beginning of the survey, three research questions were set for the questionnaire survey: Question No. 1: The majority of the population in the Pardubice region knows the concept of CSR. Question No. 2: The public in the Pardubice region would welcome companies to be more environmentally friendly in their business. Question No. 3: The public in the Pardubice region prefers socially responsible companies when choosing goods or services. A partial goal is to determine whether the public in the Pardubice region is interested in CSR issues. The field survey is divided into two parts, namely the quantitative part and the qualitative part. A questionnaire on residents, the public of the Pardubice region in connection with CSR information will be used for the quantitative empirical survey. Controlled and semi-standardized interviews, interviews with representatives of the selected company and institution in the Pardubice region will be used for the qualitative survey. The survey will find practical views on social responsibility in a company and institution in the Pardubice region.

[12] JANÍKOVÁ, S.: Společenskou odpovědnost by firmy měly v první řadě uplatňovat vůči zaměstnancům. Benefity zajistí jejich spokojenost a loajalitu. Released on 5th May 2018. [online]. [2021-10-21]. Available at: <https://archiv.ihned.cz/c1-66129240-spolecenskou-odpovednost-by-firmy-mely-v-prvni-rade-uplatnovat-vuci-zamestnancum-benefity-zajisti-jejich-spokojenost-a-loajalitu>.

3 Results and Discussion

At the beginning of the quantitative survey, three research questions were set, based on which the theoretical hypothesis H was established: "The prioritization of CSR in the selection of goods or services depends on the education obtained among the inhabitants of the Pardubice region." (People with higher professional and university education prefer socially responsible companies when choosing goods or services.) A null hypothesis H0 was created for this hypothesis: The preference of a socially responsible company in the selection of goods or services does not depend on the education obtained. Respondents from the Pardubice region were randomly selected for the survey. The preliminary research was carried out on a selected sample of respondents at the Pardubice Municipal Office. Whether the questions were understandable and easy to solve or what the respondent did not understand was ascertained. Output: The aim is to draw attention to the fact that the public in the Pardubice region has a level of awareness of CSR issues. Based on the findings, it can be interpreted that there is a relationship between the preference of a socially responsible company in selecting goods or services and the highest level of education at the chosen level of significance. It is clear from the contingency table (Table 1) that respondents who have completed higher vocational education and higher education prefer socially responsible companies when choosing goods or services, compared to respondents who have completed primary to secondary education with a school-leaving examination. Conclusion: Hypothesis H was confirmed, null hypothesis H0 was rejected. People with higher professional and university education prefer socially responsible companies when choosing goods or services more often than people with primary education, secondary education without a school-leaving examination, and secondary education with a school-leaving exam. The testing of this dependence is based on the answers to as amended: "Do you prefer socially responsible companies when choosing goods or services?" And questions aimed at finding the highest level of education: "Please indicate your age." Due to the fulfillment of the conditions for using the independence test in the contingency table and the semantically close responses to the above questions, the individual categories of responses were merged. For question number 7, the category "YES" was created, which included the answers "Yes, I notice it" and "Mostly yes," and the category "NO" was created, comprising responses "Mostly no" and "No, I do not watch it. " To determine the highest level of education attained, the individual categories were merged into two groups. In the first group, the categories of respondents with the highest educational attainment from primary to secondary education with a school-leaving examination were merged. In the second group, respondents with the highest educational attainment categories from higher vocational to university-educated persons were merged. A four-field contingency table of relative frequencies was created based on the merging of individual categories. Consequently, a contingency table of expected frequencies was formed using a statistic formula (Table 2).

Table 1: Contingency table of relative frequencies

	Primary - secondary with school-leaving examination	Higher education and university education	Total
YES	45	19	64
NO	83	14	97
Total	128	33	161

Source: Own processing

Table 2: A contingency table of expected frequencies

	Primary - secondary with school-leaving examination	Higher education and university education	Total
YES	50.88	13.12	64
NO	77.12	19.88	97
Total	128	33	161

Source: Own processing

The significance level was set at 5%. For a four-field contingency table, the degree of freedom is equal to 1. (r-1). (S-1) = 1. From this, it was found that "Critical value of χ (1-α); df = 3,841." The test criterion was now calculated using the formula below and compared with the critical value found. After substituting into the formula, the test criterion was G = 5.502. Since the test criterion is greater than the critical value, at the level of significance of 5%, the null hypothesis (H0) on the independence of individual features was rejected, and hypothesis H was confirmed, which tells us that there is a dependence. The whole questionnaire was evaluated similarly. From a quantitative survey, it can be stated that the population of the Pardubice region is aware of corporate social responsibility. However, the title "Corporate Social Responsibility (CSR) "did not say much to the respondents in introducing the questionnaire survey. When the CSR concert was specified in the following questions, there was a more precise orientation in the topic. A high number of respondents (119) state that they know at least one area of CSR, 42 respondents state that they do not know any area of CSR. In general, it can be noted that the title CSR is not very widespread; in the initial question of the questionnaire, 88 answers did not agree with the content of the CSR concept, but in a more specific survey, the orientation in CSR issues is evident.Regarding the benefits of CSR, 150 respondents mentioned the specific benefits of CSR activities for the company. Only 11 respondents stated that the introduction of CSR does not bring significant benefits to the company, which shows some awareness of this issue. For most respondents, the company needs to be environmentally friendly in its business. 13 respondents said, "no, I do not care about it." Here it is clear that the inhabitants of the Pardubice region are aware of the importance of environmental protection in the business. Companies should inform the public about their CSR activities. The survey shows that more than 80% of respondents consider reporting companies to be necessary.

Furthermore, 97 respondents stated that they do not focus on socially responsible companies when choosing goods or services. This question is further elaborated when dependence is monitored (education of respondents - preference for socially responsible companies when selecting goods or services). In selecting CSR areas, 65 respondents favor balancing all three areas, ecology and the environment, and the social area wins out of specific answers, which confirms the opinion of the population that the Pardubice region should be more focused on environmental protection in connection with CSR. In the region, respondents also welcome the support of non-profit organizations and greater transparency in business. Most respondents (140) do not follow specific companies in the region, which focus their activities on the CSR concept. It can be emphasized here that it is essential for companies to inform the public more about their CSR activities. A total of 161 respondents (111 women and 50 men) took part in the survey, of which 100 people with a high school-leaving examination, 130 people have lived in the Pardubice region since birth, and the category in the age range of 28-47 is the most represented. Hypothesis H was confirmed, null hypothesis H0 was rejected. People with higher professional and university education prefer socially responsible companies when choosing goods or services more often than people with primary education, secondary education without a school-leaving examination, and secondary education with a school-leaving examination.

The results of the qualitative survey corresponded to the quantitative survey. The time invested in meetings with VEIDEC representatives was very beneficial concerning the development of the economic area of business because the company is constantly inventing innovations and more efficient ways of doing business concerning social responsibility. The investigation carried out with representatives of the city of Pardubice was not so helpful. Public administration is a contributory organization whose main task is public service and transparent management of public funds. Therefore, the financial possibilities of both entities are different in their amount and the options of their use in financing CSR activities. According to interviews with representatives of the Veidec company, a strong representation of CSR activities in the social field is evident. Employees can draw countless benefits, work in a pleasant environment, have above-standard employee benefits while realizing that this cannot be taken for granted. This approach has a positive effect on their mental and physical health. The company is renowned and popular in the public consciousness for its care of employees. The company has solid moral and ethical values. It presents itself with respect for nature and the environment, respect for people (employees, customers, everyone involved, the whole company). The city of Pardubice also has a strong representation of CSR activities in the social field. Employees can draw benefits that are not negligible but are lower compared to the company. The difference is, for example, in the work environment, which is far from comfortable compared to Veidec.

The ethical and moral approach of the employees of the Pardubice Municipal Office is a question for further investigation. By conceptual benefits, both subjects try to motivate their employees to work better, to a positive attitude, but they also use them to attract new employees. Both entities are aware that the relationship between employees and their management is essential for good relations in the workplace. CSR and corporate philanthropy are very popular at Veidec. The company has created its corporate donations and sponsorship team that discusses what projects the company will support. The company focuses primarily on charitable, cultural, and sports areas. The company is also involved in corporate volunteering (so far only marginally).

Conclusions

The main contribution to the region's development within Veidec's social responsibility framework is respect for the environment, nature protection, creation of new jobs, corporate philanthropy, and good communication with all stakeholders. The proposed specific activity for the region's development is a project to support equestrian sport in the Pardubice region. This activity is directly related to the company's executive, whose main hobby is equestrian and show jumping, so he decided to support the construction of an equestrian complex, which is missing in the Pardubice region. Currently, the intention is in the design phase. Another proposed activity is the support of the non-profit organization Maltese Aid, focusing on seniors in the Pardubice region. Another benefit in the region is activities focused on sponsoring sports clubs, HC Dynamo Pardubice, and supporting the local football club. Veidec is also presenting a project in which it plans to introduce electric cars into its fleet and thus tries to reduce air emissions. The company also follows other modern trends in the field of eco-transport. It acquires "eco-bikes," available to local employees at the company, and uses the possibility of lending. The company is very timeless in its innovative approach. CSR and the emphasis on business sustainability reflect the recognition that it is crucial to focus on achieving the planned results and how to achieve them because it often decides on the results in the longer term. Although CSR is still a predominantly voluntary initiative, there is increasing interest in it from year to year. The goal of CSR is the sustainability of all three economic, social and environmental areas. A company should not be socially responsible in only one area. It should always focus on all three areas of CSR in a balanced way. The terminology of "Corporate Social Responsibility" is not very widespread among the public. Still, on closer inspection, it is clear that the public in the Pardubice region knows specific areas of CSR and is aware of the importance of introducing CSR in business. In practice, CSR means that a socially responsible company voluntarily operates according to high ethical principles, cultivates good relations with its business partners, takes care of its employees, and supports the region in which it operates. It also tries to minimize negative impacts on the environment. In building a good name, the company monitors its activities and publishes reports on its activities. With its annual report, CSR report, the company informs the general public about its social responsibility activities. This is an excellent opportunity to let people know about the company's activities in all three areas of CSR. CSR provides a framework that systematically helps integrate environmental, economic, social, and ethical criteria into the decision-making processes of organizational managers. Socially responsible business is an indisputable advantage in business behavior.

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"BEING GREENER OR GREENWASHING": THE NEW REALITY OF CORPORATE SOCIAL RESPONSIBILITY PRACTICES ACROSS CZECH AUTOMOTIVE FIRMS

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Abstract:
Corporate social responsibility (CSR) is a widely discussed topics in the management segment of car manufacturers. The tendency to be greener than green, to be responsible to the society, to support economic growth in regions influences everyday decisions as much as strategic directions. Are the Czech businesses in the automotive industry socially responsible? How do they react to new challenges? This paper aims to show CSR activities provided by car manufacturers/their suppliers in the Czech Republic. The authors have divided it into three major pillars of CSR – economic, environmental, and social. Papers' results show that the automotive firms in the Czech Republic have been increasingly investing into new CSR activities but at the same time some of the claimed CSR activities have not been so viable in the reality. The study outlines the greenwashing practices among some of the selected automotive firms and the need for further research in the area of Corporate Social Responsibility.

Key words:
Automobile industry. Corporate Social Responsibility. Greenwashing. Sustainability.

Introduction

Corporate social responsibility (CSR) is currently an inseparable part of the automotive industry, as the current business trend favours employees' wellbeing and the impact of their business on the environment beyond the mere profit motive[1]. However, the current corporate social responsibility is threatened by COVID-19, which has spread around the world in a short time. Since the end of 2019, the world has been in a pandemic that impacted the world economy. COVID -19 has thus become a modern concept that in a short time became part of everyday communication and everyday life[2]. Manufacturing companies are aware of the severity of COVID -19 and are being forced to take action at all levels of business, including in the field of CSR. As mentioned in the introduction, the concept of CSR cannot be defined uniformly as there is no single consistent definition, but current definitions of CSR have overlapping characteristics[3]:

- Cooperation and dialogues with stakeholders – active cooperation with stakeholders leads to situations from which all stakeholders benefit.
- Volunteering – CSR activities are implemented out of their convictions beyond legislative obligations.
- Systematicity and long-term time horizon – social responsibility is a commitment with a long-term time horizon that monitors both short-term and long-term objectives and their sustainability[4].

[1] KUROWSKI, M., WITOWSKI, K., LESICKI, D.: CSR in automotive sector-leaders or deceivers? The case of Audi AG. In *Central European Review of Economics & Finance*, 2018, Vol. 25, No. 3, p. 5-19.
[2] HE, H., HARRIS, L.: The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy. In *Journal of business research*, 2020, Vol. 116, 176-182.
[3] HACKETT, C.: *The Evolution of the CSR Concept: From Sharing to Caring*. Palgrave London : Macmillan, 2017, p. 6-24.
[4] BEAL BRENT, D.: *Corporate social responsibility: definition, core issues, and recent developments*. Los Angeles : Sage Publications, 2014, p. 90.

- Responsibility towards society and the commitment of companies to contribute to the development of quality of life – CSR Active companies should show interest in their surroundings and try to minimise ethical, social and environmental risks and to seek sustainable solutions[5].

The automotive industry can be defined as the engineering industry that is involves the development, production, marketing and sales of motor vehicles. The industry includes all carmakers as well as their subcontractors. This sector is one of the most important (considered a pillar of the Czech economy) for the Czech Republic because it constitutes about 23% of total industrial production, 21% of total exports of the Czech Republic and 9% of GDP. The importance of the automotive industry is therefore considerable for the Czech Republic in terms of the labour market and economic performance. For this reason, in order to promote mutual communication and common goals, companies involved in the automotive production chain established voluntary association AutoSAP (Association of the Automotive Industry) on 27 June 1989. Auto SAP also brings together research institutions, schools and other similar entities or natural persons who are interested in actively contributing to the development of the Czech automotive industry. The association has 138 members. An important representative of the automotive industry in the Czech Republic is undoubtedly the carmaker Škoda Auto, a.s., which produced over 750,000 cars in 2020, making it the largest producer of cars with 65.02% of the total production. Another important manufacturer is Hyundai Motor Manufacturing Czech, s.r.o., which produced almost 240,000 cars in 2020, thus accounting for 20.71% of the Czech Republic's total production. The third of the important carmakers is Toyota Motor Manufacturing Czech Republic, s.r.o., whose production accounts for 14.27% of this country's total production with about 160,000 cars.

1 Methodology

The results presented in this paper come from partial research of an internal project at SKODA AUTO University. The project is focused on an identification of key aspects of sustainable behaviour in supply chains across the Czech automobile industry. To create a list of CSR activities by automotive firms, a qualitative meta-analysis was undertaken. Two research questions were set: Which CSR activities do Czech automotive firms often engage in? Do they fulfil all three pillars of sustainability – economic, environmental, social? Researchers, working on an internal project at SKODA AUTO University, provided a deep literature, and secondary data review. First, the collection of CSR reports was done. The most important players on the Czech automotive market were observed. The researchers studied their CSR reports, different expert studies and articles in the context of CSR activities by automotive firms. Second, the literature, and journal review provided a deep analysis, and the list of CSR activities was made.

2 Reporting CSR activities

Reporting CSR activities is a voluntary activity of an active company's CSR, which uses reports to give the most objective account possible on social responsibility [6]. Reporting can boost the

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[5] KOTLER, P., LEE, N.: *Corporate social responsibility: doing the most good for your company and your cause*. Hoboken : John Wiley, 2005, p. 147.

[6] SHARMA, R., KUMAR, V.: Capital Management, Business Opportunities, and Framework: A Case for Automotive Sector. In *Corporate Biodiversity Management for Sustainable Growth*. Cham : Springer, 2020, p. 213-228.

interest of investors and potential job seekers. Reports can be printed, but electronic ones are chosen for better access to the report as the form allows the general public and stakeholders unrestricted access. When creating CSR reports, the basic principles should be observed, namely:

- transparency – public access and transparency of information;
- materiality;
- reliability;
- completeness of information;
- comparability;
- neutrality;
- regularity of publication;
- intelligibility.

According to a study by KPMG, the main reasons to report are strengthening brand reputation and ethical commitments. In recent years, however, there has been much more representation of ethical commitments, mainly due to the ever-increasing pressure from the party stakeholders[7]. And the reasons why some companies do not report are:

- Ignorance of the issue – due to the lack of a specific interpretation of CSR, the quantity and opacity of the standards governing CSR lead to misunderstandings in the reporting process.
- Expectations of increased costs – for reporting it is necessary to have a certain monitoring system, which charges some initial costs, but the monitoring system itself can bring the savings that the company has made to the purchase.
- Fear of disclosure – according to research, some companies do not report on their CSR activities for fear of publishing information, which may then lead to increased pressure by NGOs on the business, image damage and negative legislation impacts.

3 Results

CSR intersects with sustainability because the latter is instrumental in achieving the pillars of the former. The three mentioned pillars are based on triple-bottom-line approach, which was first defined in 1994 by John Elkington and later published in his 1997 book *Cannibals with Forks: Triple Bottom Line of the 21st Century Business* [8]. The triple-bottom-line approach divides CSR and sustainable activities into three areas – social, economic and environmental. The researchers identified the most frequently mentioned CSR activities in automobile industry and divided them into 3 pillars. First, the activities of the social pillar will be interpreted. Two directions of social activities were defined – activities supporting employees (Table 1), activities supporting society (Table 2).

Table 1: Activities supporting employees

equal opportunities
special programmes (education, retraining)
inclusion
work-life-balance

[7] BOIRAL, O., HERAS-SAIZARBITORIA, I., BROTHERTON, M. C.: Assessing and improving the quality of sustainability reports: The auditors' perspective. In *Journal of Business Ethics*, 2019, Vol. 3, No. 155, p. 703-721.
[8] ELKINGTON, J.: *25 Years Ago I Coined the Phrase "Triple Bottom Line. Here's Why It's Time to Rethink It*. Released in 2018. [online]. [2020-10-08]. Available at: <https://hbr.org/2018/06/25-years-ago-i-coined-the-phrase-triple-bottom-line-heres-why-im-giving-up-on-it/>.

gender equality
respect for human rights
health prevention
no slave, and child labour
no discrimination
monitoring of employees' satisfaction
benefits
care of health and safety

Source: Own processing.

Table 2: Activities supporting society

philanthropy
community support
traffic safety
COVID-19 – help
customers' health and safety
respect for human rights
cooperation with educational institutions
education in a region

Source: Own processing.

One of the activities in social pillar is a certification in ISO – IT security 27001. This activity pertains to both – society and employees. Economic pillar of CSR/sustainability is fulfilled by these activities in Table 3:

Table 3: Activities supporting the economy

cooperation (development, recycling of battery)
cost reduction = consumption reducing
economic development of a region
regional suppliers' support
anticorruption
innovation in automotive
employment in a region
engagement of disadvantaged groups
elimination of unequal opportunities
support of sustainable cities
protection of resources
care of health and safety
legitimate tax paying
country-by-country tax report
fair relationships with suppliers
shared economy

Source: Own processing.

Business continuity is an ISO certification, often cited in the context of and economic pillar in CSR strategy.

The last, but not least is the environmental pillar, to which many firms connect their sustainability first to the environmental aspect. Activities of an environmental pillar were divided in three parts: waste (Table 4), product (Table 5) and production (Table 6).

Table 4: Activities supporting the environment - waste

waste reduction
parts recycling, reusing
back distribution
product recycling
battery recycling
sustainable waste management
circular economy

Source: Own processing.

Table 5: Activities supporting the environment – product

sustainable product development
monitoring of product impact on the environment
LCA (life cycle assessment)
eco-friendly parts
ecological solution of traditional products
communication of sustainable products to public

Source: Own processing.

Table 6: Activities supporting the environment – production and suppliers' relationships

water usage reduction
energy efficiency
usage of renewable energy sources
CO2 emissions reduction
usage of grey water
transformation, improvement of production in ecological terms
VOC emissions reduction
sewage water treatment
usage of sustainable materials
noise reduction
direction to the climate neutrality
sustainable suppliers' relationships
TIER 1 certified suppliers
cooperation in the development of batteries
from road to railway and sea
packaging management
environmental education of suppliers

Source: Own processing.

The automotive industry addresses the problem with biodiversity in the field of certification, too. Other norms are connected to environmental management, certification ISO 14001, energy ISO 50001, and other important guidelines, and ecological measures.

All aspects, mentioned above, are the most frequently cited CSR activities in the automobile industry. They are the implementation of CSR strategy, and firms monitor their fulfilment over years, and set new goals and objective for the future management. The researchers/authors of this paper plan to identify these activities in practice of Czech automotive firms, or rather in their reports – publicly communicated activities.

Conclusion

The most important players in the Czech automotive industry have sustainable development management in place. At the same time, the implementation of the sustainable development management system is based on a continuous improvement process, which is organised into three pillars – social, economic and environmental – and is represented by responsible departments of car companies.[9]

Sustainable development management is defined as a five-stage process:
1. Early identification and evaluation phase of sustainable development topics based on regular trend analysis.
2. Consultation and initiation phase, where the agreed content of sustainable development topics is presented at internal committees. The modifications or approved amendments identified are enshrined in the sustainable development strategy and in the specific sustainable development programmes.
3. Phase of implementation of programmes into the main activity within the various pillars of sustainable development.
4. Review and review phase, where access to management efficiency is reviewed by the sustainable development council.
5. Communication and reporting phases. The reporting process involves internal communication of sustainable development topics with the management of the company. The non-financial reporting process is submitted in the form of the sustainable development report, minimally once every two years.

Sustainable development reports for the most important players on the Czech automotive market and their suppliers were analysed by the authors of this paper for 2020. Based on the results of the meta-analysis carried out in June–August 2021, it can be concluded that none of the six sins of greenwashing can be identified for the automotive companies under review operating on the Czech market. In particular, the sin of irrelevancy, the absence of evidence or evidence of vagueness is refuted by the number of specific sub-criteria for sustainable development set out in Chapter 3.

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[9] VOLFOVÁ, H., JADERNÁ, E., PECHOVÁ, J.: *CSR in corona time*. In *Marketing Science & Inspirations*, 2020, Vol. 15, No. 3, p. 2-21.

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RATIONAL AND EMOTIONAL ATTITUDE OF THE CZECH CONSUMERS TOWARDS SUSTAINABLE RETAILERS

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Abstract
Sustainability has become a new prevailing norm in today's society. From one perspective, current customers are forced to address ecological problems by supporting different sustainable principles and processes. From another point of view, contemporary retailers are trying to achieve sustainable goals, which have been accomplished by governments and end consumers. The main aim of this research paper will be to explore rational and emotional attitudes of the Czech consumers towards sustainable organisations. In addition, it will be necessary to understand how consumer attitudes are reflected in retailers' processes. Both the theoretical and practical sections will cover certain aspects related to the end consumers and their position toward sustainable activities of current retailers. Based on the research data, the dependency of those variables will be analysed and identified. The research paper highlights explorative questions that should support current businesses by implementing new communication campaigns, channels and techniques. Moreover, it will be necessary to explore rational arguments, related to sustainable consumer behaviour in order to identify the stance of current society towards ecology and sustainable retailers.

Keywords:
Attitude. Behaviour. Consumers. Customer. Ecology. Emotions. Sustainability.

Introduction

Under the influence of the global financial crisis in 2008, a so-called "new norm" has emerged. It led to a revision of what is realistic in terms of global rates of economic growth, showing that consumers have proven to be the strongest and most important part in the chains of the world economy and businesses. Mainly, due to these reasons today's entrepreneurs and marketers are actively studying customers' ways of thinking and rational and emotional attitudes towards offered products and services. With the development of sustainability, current consumers start analysing their personal effect on the environment. Current social activities bring not only utility, but even a negative effect on natural resources and fair trade collaboration between different business segments. In order to support current sustainable activities, certain types of customers (worldwide) are endeavouring to increase the relevance of those sustainable concepts. Therefore, current retailers have to be convinced of consumer attitudes in order to meet the customer demand and maximise the value of their business.

1 Consumer behaviour and factors influencing consumer habits

The results of the 10th Global Consumer Behaviour Survey conducted by PwC revealed that new technologies allow customers to demand an individual approach towards their personality and market emplacement. Individual approaches and processes of certain marketing activities are changing under the development of social responsibility, scientific and technological progress. Nowadays business is primarily focused on building long-term relationships with consumers, which should be reflected in customer loyalty, target customer orientation and individual approach.[1] Under the influence of the technology and information revolution, we can identify a constant changing of consumer's habits and behaviour. Those amendments influence

[1] *Global Consumer Insights Survey.* [online]. [2021–09-27]. Available at: <https://www.pwc.com/cl/es/publicaciones/assets/2019/report.pdf>.

their perception of purchasing activities. The consumer in the recent past and the current customer have divergent attitudes to the final decision making and dissimilar approaches in their daily activities. Businesses that are trying to communicate effectively and optimally with customers should take into account various factors that influence consumer behaviour. Companies should focus on value that brings satisfaction and benefits to customers in order to meet their demand. In-depth analysis of communication within individual business systems (organisations, suppliers and customers) is essential to identify in time consumer behaviour changes. Banerjee et al. state that individual companies should adapt to the requirements of sustainability and derive its benefits. The only requirement is a consumer demand for such products within individual customer segments.[2] The process of changing consumer behaviour is based on increasing awareness. Individuals do not enrich their original potential but build a fundamentally new one with support of an entity that provides access to information and collective self-organisation in conditions of uncertainty. The main output from this interaction is a collectively generated insider who receives a fundamentally new awareness about the reality of social significance. Under the influence of these conditions, marketing communication between the purchaser and business systems can be established on a marketing relationship and on value concepts. Innovations are the most efficient influencers that support today's retailers in the development of their product. The main principle of sustainability is the environmental friendliness of goods and services. Nevertheless, nowadays entrepreneurs and corporations are faced with challenges that induce development in a field of sustainability. The concept of sustainable retailing often requires a high level of investments, government support, consumer demand and their willingness to pay for that type of product. Consumer behaviour and analysis of customer attitudes toward ecological concepts should be a basic pillar in determining the direction of the organisation, modernisation of its product design and representation of new policies towards sustainability in the market. The sustainable behaviour of today's society can be approached from different perspectives. It is necessary to take into account aspects of customer behaviour in every sphere of the business–marketing perspective, economic value, production processes and materials from which individual products will be produced.[3] Ripple et al. specify that companies should be aware that understanding the consumer's way of thinking can be a key driver of negative environmental impact elimination.[4] Hopkins et al. complement the idea of an effective utilisation of sustainability and avoidance of negative trends by presenting today's business with a wide range of benefits that can be brought by implementing sustainable concepts, such as identifying new product types, developing of technologies, accelerating innovation processes and, last but not least increasing employees' understanding and motivation for environmental development.[5] Nowadays companies are not only trying to produce and sell sustainably. They are also considering new business models that should develop a concept of sustainability to support current customer behaviour and meet demand.[6] The field of marketing has researched and identified the "green consumer" segment in order to understand basic needs of those individuals and prepare special offers for those types of buyers. Jaderná et al. identify several segments of a sustainable customer based on the customer's attitude towards sustainability. From the research, it is

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[5] HOPKINS, M. S. et. al.: The Business of Sustainability: What It Means to Managers Now. In *MIT Sloan Management Review*, 2009, Vol. 51, No. 1, p. 22.

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possible to determine the dependence between individual generations and their aspiration for a sustainable product. The most fundamental output of a study is the recommendation to tactically deal with customer segments that have a certain composition of habits, attitudes and interests.[7] The right communication strategy can positively influence customer behaviour and attitudes towards a sustainability.[8] Consumer trends are basic principles of understanding buyer behaviour towards environmental protection and development of sustainability. Those trends should be conducive to businesses taking a number of useful measures and increasing consumer motivation to purchase sustainable goods. Research conducted by Deloitte[9] shows that the lifestyle of the current population is constantly changing. The change can be identified in the positive trend in consumer perceptions of environmental challenges and problems that are emerging in the markets. More than 68% of respondents try to limit the use of plastics during their daily activities. The positive attitude of 43% of respondents towards sustainable concepts is closely linked with adoption and promotion of sustainable product certification. According to Golden et al., the main goal of sustainable certification is to help consumers make the right, sustainable and ethical decision during the purchasing process. Sustainable certification includes a great variety of concepts and trends, focused on individual areas of business, production and sales. Individual criteria and conditions for certification conformity, support consumers and provide the opportunity to purchase products and services in accordance with ethical standards.[10] Another indicator from the Deloitte survey points to 34% of respondents who are interested in compliance with ethical standards and promoting solidarity in countries with a predominance of agriculture. The sustainable concept of Fair Trade is primarily based on ethical principles in the production and sale of agricultural products.[11] The research identifies that one third of respondents have accepted this trend and those persons are actively trying to follow that.[12] In any case, the potential for development in this area remains visible. Individual authors have their own classifications of factors that affect customer behaviour during the purchasing process. Kumar identifies five factors that have a direct impact on customer behaviour in retail. The first influencing factors are brand loyalty and the visual impact of the product. The next factor is the final decision and buying aspiration. According to the author, an individual group of factors assist consumers in their final consideration of purchasing products. The final factor is the attributes of the goods and services that complement each other and motivate customers to future purchases.[12] In the research of Hosaidi and Rojhe, the authors reflect on different factors that help today's marketers to identify individual customer types of thinking and correctly determine consumer goals and demands. Therefore, these factors can be characterised as marketing-oriented where the main output is a division of consumer groups. The first factor specified by authors is "cultural groups" of customers. This factor can maintain cultural differences, consumer needs and social classes. Culture is known as the most important influencer of basic needs and customer demand. Consumer behaviour is closely linked to the local population and laws, which have a direct impact on the final purchasing decision. Another factor is civic associations. In particular, this category includes groups of individuals who have

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[7] JADERNÁ, E. et al.: The interest of different generations of Czech consumers in certified products and environmental organizations. In *Marketing Science and Inspiration*, 2019, Vol. 14, No. 4, p. 16.

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a direct impact on their surroundings. As an example, the authors state family, co-workers, neighbours and other associations of people who build consumer behaviour and create a new lifestyle. The final factors can be categorised as personal and psychological indicators. In most cases, these factors are created and developed by the individuals themselves during daily activities. Circumstances, such as occupation, economic situation in the country, age and self-confidence create values for consumers. Hence, it has a significant impact on consumer demand and its behaviour in a particular product selection. Psychological factors are primarily based on consumers' own motivation, knowledge and expectations.[13] The diversity of purchasing behaviour and its dependence on various aspects was described and observed by Jaderná and Ostin, who analysed the dependence of gender, level of education and age of respondents on their attitude towards sustainability certificates. The authors demonstrate the fact that purchasing goods with a certain certificate depends on the age of the consumer. These data and surveys can be actively used by today's marketers and entrepreneurs in order to justify the emotional and rational attitudes of their customers.[14] Rational and sustainable customer behaviour should be based on reducing adverse environmental impacts and streamlining fair trade. The processes described above can positively affect not only the environment but also have a direct impact on a market's social and economic progress.[15]

2 Marketing research methodology

This article focuses on the attitudes of Czech consumers towards sustainable companies, which also reflects the research goal. The practical part of the article aims to evaluate how consumers perceive sustainability as an activity of retailers. This is followed by research questions:

- What associations do consumers most often associate with a sustainable society?
- What emotions do consumers have towards a sustainable company?
- Is it possible to categorise consumers according to their associations with sustainable companies?

To achieve the research goal and to answer research questions, quantitative marketing research was chosen. The research was carried out by an online questionnaire survey in 2020, in cooperation with the Behavio Labs agency, which handled data collection directly. They approached selected respondents from the household panel on the Trendaro online platform. Thanks to professional processing and the large number of respondents, it is possible to consider the sample as representative and data as valid and reliable. Its results can therefore be generalised with respect to the population in the Czech Republic. The data were evaluated first on the basis of frequency analysis and then, to obtain valid results, also on the basis of analysis of contingency tables. To detect basic relationships and relationships between quantities, the first step was using Pearson's chi-square test. Only relationships with a p value of less than 0.05 were recorded. If the relationship between two variables is lower than 0.05, it can be said that they have a certain relationship. For a meaningful interpretation of the research, it is necessary to know whether the relationship is conclusive towards individual socio-demographic measures, such as age, gender or job classification. Adjusted residuals were used in PivotTables. The adjusted residual is based on the difference between the empirical and the

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expected frequency, and when its value is higher than 2.00 (or -2.00 for the negative direction of relations), we can be sure (with 95% certainty) that the difference between the frequencies did not arise by chance. In the case of values greater than or equal to 3.29 (or -3.29), the probability of a random deviation occurring is less than 0.1%. Only statistically significant relationships were retained. Outliers were excluded.

3 Synthesis of main outputs from marketing research

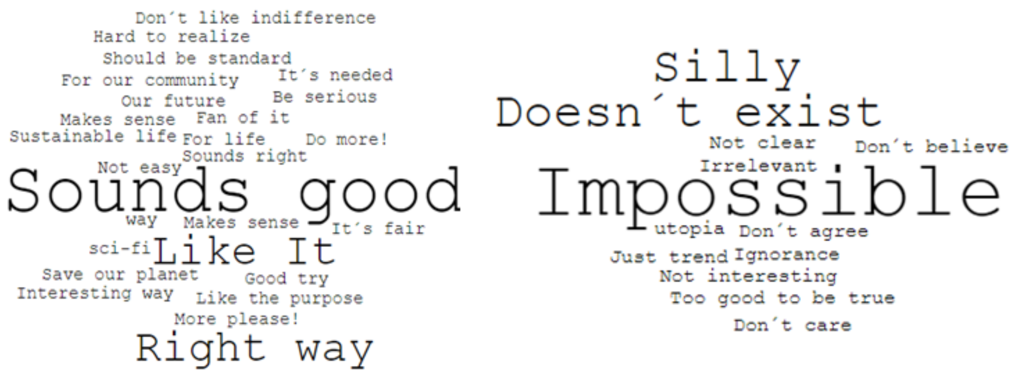
The outputs will be evaluated in the order in which the research questions were determined. So first, the article will focus on the associations that consumers associate with sustainable companies.

Table 1: Association with sustainable company

Sustainable company:	**n**	**%**
Conscientiously produces and disposes	515	26 %
Provides customers with information about its goals and sustainable development	382	19 %
Uses natural resources	358	18 %
Treats employees with respect and respects their rights	309	16 %
Its suppliers are environmentally friendly	255	13 %
Implements projects with public benefit	173	9 %
Overall	1992	100 %

Source: Own processing.

The frequency analysis shows that most respondents associate a sustainable company with at least two associations. The most common is conscientious production and disposal, followed with a relatively large gap by informing customers about goals and sustainable development. Qualities associated with sustainable companies the least were community projects and environmentally friendly suppliers. What consumers know and identify with usually works best. In this case, it is therefore appropriate to promote careful production and good information. These two associations should be supplemented by declaring the preservation of human rights and respect for employees. Associations, such as emotions, are an inseparable part of consumer behaviour. The research also examined emotion at a basic level, which, however, sufficiently approximates how respondents define themselves in relation to sustainable retail companies. This part of the article therefore deals with the second research question – what emotions do consumers perceive towards a sustainable company? The frequency analysis shows that the most common emotion which respondents, expressed towards sustainable companies, was cheerfulness (56%), followed by love (22%). A neutral approach was also recorded – neutral (20%) and boredom (2%). Only 2% of respondents reported a markedly negative emotion – anger. It is therefore evident that from the point of view of emotions, sustainability is positively received among consumers. Respondents also had the opportunity to comment on emotions orally. In the following infographics you will find the most interesting statements associated with both positive and negative emotions.



Picture 1: Respondents' statements about sustainability related to emotions (love, cheerfulness and anger, boredom)
Source: Own processing.

From a practical point of view, it is very important to connect associations with the right emotions. The statements above are a guide to practically express yourself regarding sustainability and what words to choose to be in line with consumers' perceptions. Equally important is finding out what stereotypes to focus on and trying to change their perception in society. It is also interesting to find out what combinations between associations and emotions have a proven relationship. Based on the p-value and adjusted residuals, the statistically important bonds between the quantities were extracted.

Table 2: Linkage between associations and emotions

Independent quantities	Dependent quantities	Adj. Res.
Uses natural resources	Love	5.2
	Neutral	-4.4
Its suppliers are environmentally friendly	Love	5.1
Conscientiously produces and disposes	Cheerfulness	4.1
	Boredom	-2.2
Implements projects with public benefits	Love	4.2
Treats employees with respect and respects their rights	Cheerfulness	4.9
	Anger	-3.2
Provides customers with information about its sustainability	Boredom	3.7

Source: Own processing.

Most associations evoke positive emotions, confirming the importance of the association "Conscientiously produces and disposes", which is not only associated with the cheerfulness, but also negates the emotion of boredom. Similarly, "Respect for human rights" does not evoke anger among respondents. The second most frequently chosen association "Provides customers with information about its sustainability" on the contrary, very often evokes boredom. The practical benefits are also evident here. Information on the sustainability of companies should be provided to consumers in a creative and modern way, with a clear goal – to involve reason and emotions. This can lead to the much-needed synergy between the rational and emotional concept of sustainability. The last part of the article deals with the third research question, i.e. the possibilities of creating a profile of consumers depending on the most commonly perceived associations towards sustainable companies. Due to the complexity of the approach, it is necessary to define consumer groups whose rational and emotional attitude towards sustainable companies is positive, but at the same time to know the groups of consumers who are clearly averse to sustainable companies. Associations will be evaluated gradually. For each of them, consumers will be profiled who identify with it or reject it.

Table 3: Linkage between associations and socio-demographic quantities

Association	Socio-demographic quantity		Adj. Res.
Uses natural resources	Age	25–44	2.3
		57–70	-2.1
	Education	Vocational school	-2.6
		University	3

Association	Socio-demographic quantity		Adj. Res.
Its suppliers are environmentally friendly	Gender	male	-2.3
	Age	19–24	2.7
		25–44	2.6
		57–70	-2.4
		71–92	-2.2
	Region	Hradec Králové	2.2
		Southern Moravia	-1.7
	Education	Vocational school	-2
		University	2.1
	Job	N/A (Pensioner)	-2.6

Association	Socio-demographic quantity		Adj. Res.
Gently produces and disposes	Age	19–24	2.9
		57–70	-2.5
	Region	Pilsen	-2.1
		Prague	2.2
	Population	over 50,000	2.7
	Education	Vocational school	-4
		University	4
	Income	31–50,000 CZK	2.5
	Job	Working student	2.8

Association	Socio-demographic quantity		Adj. Res.
Implements projects with public benefit	Age	less than 19	2.8
		57–70	-2.3
	Region	Prague	-2.1
		Zlin	2.3
	Population	up to 10,000	2.6
	Education	Vocational school	-2
	Income	51,000 CZK and more	2.8
	Job	Student	2.1

Association	Socio-demographic quantity		Adj. Res.
Treats employees with respect and respects their rights	Region	Vysočina	2
		Ústí nad Labem	-2.4
	Education	Vocational school	-2.3
	Income	51,000 CZK and more	2.5
	Job	Student	2.2

		Unemployed	-2.4

Association	Socio-demographic quantity		Adj. Res.
Provides customers with information about its sustainability	Gender	male	-2.3
	Age	19–24	2.1
		57–70	-2
	Region	Prague	2.4
		Pilsen	-1.5
	Education	Primary school	-2.4
		University	2.9
	Income	51,000 CZK and more	2.8
	Job	Pensioner	-2.6
		Full-time worker	2.7

Source: Own processing.

Younger people, aged between 25 and 44, as well as consumers with a university degree, react significantly positively to the **"Use of natural resources"**. On the other hand, people between the ages of 57–70 and respondents who have graduated from vocational school express a negative attitude. A relatively large number of socio-demographic variables is associated with **"Environmentally friendly suppliers".** This association is especially important for younger people between 19 and 44 years of age. A strong connection with this association was found in the Hradec Králové region and in the group of people with university education. On the other hand, men and respondents between the ages of 57 and 92 show a negative approach towards doing business with eco-suppliers. A negative attitude was found in the South Moravian region and among pensioners. The most frequently chosen association **"Conscientiously produces and disposes"** also shows a large number of relationships to sociodemographic variables. This association was most often chosen by younger respondents, people living in Prague and other cities with more than 50,000 citizens. Respondents with a university degree, working students and people with incomes between 31–50,000 CZK have a significantly positive attitude towards it. On the other hand, respondents in the Pilsen Region and people with vocational school does not agree with this association at all. **"Community Projects with public benefit"** is a topic that should be given more space in the public discussion. The social pillar of sustainability is often neglected, and the more companies engaging in community activities, the higher the standard of living can be expected, especially locally. Significant support for community projects can be seen here among respondents aged 19–24. They are usually active people, with ideas and enthusiasm to make their home a better place. Therefore, companies should target their community events primarily at this group. People in the Zlin region and in other municipalities with a population of more than 10,000 are very positive about community sustainability. People between the ages of 57 and 70 living in Prague and respondents who are graduates from vocational school, perceive community efforts negatively. This is despite the fact that community projects significantly improve the standard of living. **"Respect for employees"** is an important characteristic of a sustainable society for respondents from the Vysočina region with an income of more than CZK 51,000 per month and for students. However, the demographic groups that are most confronted with unfair practices and disrespect did not mention this association. This is an interesting output, as what should a sustainable company be towards employees other than respectful. A negative tendency to characterise the company as sustainable according to its approach to employees can be found in the Ústí nad Labem region, among respondents with vocational school and the unemployed. This paradigm needs to be changed especially in relation towards these groups. The last and second most common association is **"Communicating sustainable topics to customers"**. This is how the sustainable company was most often characterised by younger respondents and women, people living in Prague or with a university education. Furthermore, full-time workers and respondents with high incomes over 51,000 CZK per month also often mention this association. On the contrary, this association is completely unimportant for men, respondents between the ages of 57–70 living in the Pilsen region. This characteristic is also not often perceived by people with basic education and pensioners. This implies an important finding: information needs to be disseminated in larger cities among young people and integrated into their teaching, ideally at all levels of education but primarily at universities.

Conclusion

Three research questions were asked in the article. First, it was necessary to answer what rational arguments consumers most often accept when thinking about sustainable companies. The research showed that the most important statement on the issue of sustainability should be the fact that companies conscientiously produce but also dispose of materials. This is followed by a sufficient range of information provided to customers. It is appropriate to focus on these two topics and use them appropriately in sustainable activities. The second research question was focused on expressing emotions towards sustainable companies. Most respondents chose the emotion - cheerfulness, followed by love. Negative emotions such as boredom or anger were not often mentioned, so it is a very positive result. In the infographics in the text above, it is also possible to find the most common and interesting oral evaluations of positive and negative emotions. People often stated in connection with love and cheerfulness statements related to our planet or future. Conversely, in the area of negative emotions, connections such as utopia, stupidity or impossibility were often mentioned. Emotions provide clear guidance on what topics to focus on in practice, what emotions to use, and what atmosphere to evoke to support a positive attitude. The article has shown several times that associations and emotions are interconnected. The third research question was focused on finding out whether consumers can be profiled according to their tendency to be positive or negative towards sustainable companies. The results of the socio-demographic relationships show two relatively strong phenomena. The younger generation reacts open-mindedly toward sustainable companies, while the older generation has a more hostile attitude towards them. Therefore, they do not really accept any association as a valid expression of their opinion. We can observe the same phenomenon in education. People with a university degree strongly support sustainable companies, whereas respondents whose highest qualification is vocational or elementary school very often reject them. The tendency of respondents with an income higher than CZK 51,000 is to support associations related to employee rights, the provision of information and, above all, the community impact of sustainable activities. It is very interesting that people with a higher income often care about the general well-being of society. From the point of view of marketing communication, all these findings can be used to target a sustainable promotional campaign. In the first place, campaigns focused on strengthening the relationship toward sustainability in groups that express positive rational and emotional attitudes, but also to change the attitudes of socio-demographic groups which refuse the validity of the concept of sustainability, should be planned.

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POSSIBILITIES OF EVALUATING CRITICAL THINKING THROUGH STANDARDIZED TESTS

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Abstract
There is a considerable diversity in the measurement and testing of critical thinking in terms of the tests used for this purpose and the approaches by which the level of critical thinking can be assessed. In addition, the purpose of its use is essential when developing and using critical thinking tests. Critical thinking is the ability to think clearly and rationally, understand the logical connections between ideas, apply basic logical operations, and avoid cognitive biases. Critical thinking has been the subject of much debate and reflection since early Greek philosophers, such as Plato and Socrates. It is now gaining momentum, especially concerning the spread of disinformation and hybrid threats. The paper deals with the possibilities of various forms of critical thinking testing. The main goal of this research study is a framework structural analysis of standardized assessment tools focused on critical thinking.

Key words:
Critical thinking. Critical thinking skills. Measurement and testing of critical thinking.

Introduction

Over the last decades, the amount of new knowledge, information, and the number of people engaging in all areas of human activity have been growing geometrically. One of the possible ways of processing and evaluating this information and its meaningful application in practice is critical thinking. Therefore, critical thinking is a practical tool for orienting oneself in the world, allowing them to work effectively with information and use it in personal, professional, and social life. The primary goals of critical thinking are independent solid problem-solving abilities and the natural ability to think critically. Critical thinking is a collection of mental operations that is directly or indirectly tied to a variety of elements, most notably to how we view the world around us and how we set our minds. Critical thinking is defined as the ability to think clearly and rationally, recognizing the logical relationship between concepts. The ability to think critically and independently might be characterized as critical thinking. In essence, critical thinking comprises the capacity to think independently and reflectively, as well as the ability to reason. Being an active learner rather than a passive recipient of knowledge is required. Critical thinkers thoroughly examine ideas and assumptions rather than taking them at face value. They will always try to determine whether the viewpoints, arguments, and conclusions represent the entire picture and are willing to be proved incorrect. But how can you evaluate this mix of cognitive and communicative abilities? How do they seem in the light of empirical research? What goes into the creation of standardized tests? Can we utilize them for anything? How can we pass judgment on them? Our purpose is to provide answers to all of these and other inquiries concerning these crucial talents required to live in the twenty-first century.

1 Conceptual Definitions of Critical Thinking

Critical thinking is a term frequently used in the literature, but there is no consensus about the content and contextual definition of its specifics to date. Many definitions of critical thinking reflect this concept from different angles, from different perspectives and in the conceptual definition consider philosophical, psychological, educational and other aspects. Ennis[1] summarized seventeen frequently cited definitions that point to various dimensions of thought constructs, cognitive skills, procedures, and procedural elements associated with this widely used term. The conceptual definition of the concept of critical thinking differs in different definitions mainly by the primary focus of its conceptualization. The concept of critical thinking is generally understood to mean a relatively broad framework of different orientations, goals, criteria, thought components and intellectual standards. Older definitions[2] of critical thinking emphasize the constructive nature of thought processes and the solution of authentic problems. Other definitions emphasize procedural aspects and the resulting outcomes of critical thinking.[3] [4] An essential component of the meaning of critical thinking is intentionality, which can be manifested by various thought processes leading to concretized outputs of critical thinking. These may be, for example, outputs obtained through forming and judgment,[5] [6] actions or beliefs.[7] [8] The broad use of the term critical thinking is sometimes equated with its criterial aspects. In this context, Scriven and Paul[9] present the analysis, synthesis, evaluation, conceptualization, and application of various types of information that one can acquire through one's own experience, observation, reflection, and communication. The concept of critical thinking can also be formulated from the point of view of the degree of rationality. In this context, Stanovich and Stanovich[10] emphasize epistemic rationality (adapting human beliefs to the world) and instrumental rationality (optimizing the fulfilment of goals). In addition, some authors[11] [12] focus on applying formal rules of logic. Critical thinking can also be judged by the nature of the thought components that are involved. According to Paul and Elder,[13] this is a way of thinking in which the thinker improves the quality of his thinking by cleverly taking responsibility for the structures inherent in thinking and forcing intellectual standards on them. These are the following components that may involve thinking about any problem, object, or information:

- Efficiency (reasoning has a specific purpose defined by external stimulus or internalization).

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[1] ENNIS, R. H. : Critical Thinking Across the Curriculum: A Vision. In *Topoi*, 2016, Vol. 37, No.1, p. 165-184.

[2] DEWEY, J.: How We Think: *A Restatement of the Relation of Reflective Thinking to the Educative Process*. Lexington, MA : D. C. Heath, 1933.

[3] FISHER, A., SCRIVEN, M. : *Critical Thinking: Its Definition and Assessment.* Norwich : University of East Anglia, Centre for Research in Critical Thinking, 1997.

[4] JOHNSON, R. H.: The Problem of Defining Critical Thinking". In NORRIS, S. P. (ed.): *The Generalizability of Critical Thinking*, New York : Teachers College Press, 1992, p. 38-53.

[5] LIPMAN, M. : Critical thinking – What can it be? In *Educational Leadership,* 1988*,* Vol. 46, No. 1, p. 38-43.

[6] FACIONE, P. A.: *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. Millbrae, CA : The California Academic Press, 1990a.

[7] ENNIS, R.H.: Critical thinking assessment. In *Theory Into Practice*, 1993, Vol. 32, No. 3, p. 174-186.

[8] BAILIN, S., CASE, R., COOMBS, J. R., DANIELS, L. B.: Conceptualizing critical thinking. In *Journal of Curriculum Studies,* 1999, Vol. 31, No. 3, p. 285-302.

[9] SCRIVEN, M., PAUL, R. W. : *Defining Critical Thinking*. Tomales. CA : National Council for Excellence in Critical Thinking Instruction, 1987. [online]. [2021-09-09]. Available at: <http://www.criticalthinking.org/pages/defining-critical-thinking/766>.

[10] STANOVICH, K. E., STANOVICH, P. J.: A Framework for Critical Thinking, Rational Thinking, and Intelligence." In PREISS, D. D., STERNBERG, R. J. (eds): *Innovations in Educational Psychology: Perspectives on Learning, Teaching and Human Development*. New York : Springer Publishing, 2010, p. 195-237.

[11] LEWIS, A., SMITH, D.: Defining higher order thinking. In *Theory Into Practice,* 1993, Vol. 32, No. 3, p. 131-137.

[12] STERNBERG, R. J.: *Critical thinking: Its nature, measurement, and improvement. Washington, DC:* National Institute of Education, 1986.

[13] PAUL, R., ELDER, L.: *International Critical Thinking Essay Test.* Tomales, CA : Foundation for Critical Thinking, 2007.

- Intention (the intention of thinking is to try to solve a question, problem, dilemma, etc.).
- Assumptions (reasoning is based on specific assumptions).
- Point of view (thinking is always framed and influenced by a certain point of view).
- Input data (thinking considers different types of inputs - e.g. information, questions, opinions, etc.).
- Conceptualization (various concepts, models, own or foreign considerations and opinions are reflected in the thinking).
- Interpretation (part of thinking is also the interpretation of various phenomena of objective reality).
- Output data (the process of thinking is finalized by various types of outputs - e.g. by acquiring a particular belief, conclusion, opinion, etc.

The components of critical thinking also include the various mental processes, strategies, and representations that people use to solve problems, make decisions, and learn new concepts.[14] These are primarily various cognitive strategies that are intentionally implemented to achieve the desired result,[15] such as substantiation of a claim, resolution of a dilemma, and substantiation of an argument.[16] Critical thinking can also be defined in relation to core skills and related subskills. Such an approach to defining critical thinking is based on different sets of skills or thought processes associated with a critically thinking individual.[17] These skills include the ability to think analytically, draw conclusions from evidence, evaluate the credibility of evidence, analyse and interpret textual or numerical data, making of reasoned judgments, and the ability to provide constructive feedback. These skills are described in detail, with examples, in the 1990 APA Delphi Report,[18] which presented an expert consensual conceptualisation of critical thinking.

2 Standards of Thinking

Some definitions of critical thinking take into account various intellectual standards that determine the quality of thinking. According to Paul and Elder,[19] the following standards are the key dispositions of a critical person: Clarity; Accuracy; Precision; Relevance; Depth; Breadth; Logic; Significance and Fairness. Consistent application of thinking standards to elements of thinking results in the development of the following intellectual qualities:

- Intellectual Humility,
- Intellectual Courage,
- Intellectual Empathy,
- Intellectual Autonomy,
- Intellectual Integrity,

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[14] STERNBERG, R. J.: *Critical thinking: Its nature, measurement, and improvement. Washington, DC:* National Institute of Education, 1986.

[15] HALPERN, D. F.: Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. In *American Psychologist,* 1998, Vol. 53, No. 4, p. 449-455.

[16] WILLINGHAM, D. T: Critical thinking: Why is it so hard to teach? In *Arts Education Policy Review,* 2008, Vol. 109, No. 4, p. 21-29.

[17] LEWIS, A., SMITH, D.: Defining higher order thinking. In *Theory Into Practice,* 1993, Vol. 32, No. 3, p. 131-137.

[18] FACIONE, P. A. et al.: *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction. Research Findings and Recommendations.* Washington, DC : *ERIC,* Institute of Education Sciences, 1989.

[19] PAUL, R., ELDER, L.: *International Critical Thinking Essay Test.* Tomales, CA : Foundation for Critical Thinking, 2007.

- Intellectual Perseverance,
- Confidence in Reason,
- Fair-mindedness.

Facione, Gittens and Facione[20] describe someone who has positive critical thinking habits of mind as a person who is:

- Truth-seeking - the individual has intellectual integrity and a fearless desire to actively seek the most advanced available knowledge in any given situation. A truth-seeker asks probing questions and follows logic and evidence wherever they lead, even if the conclusions contradict their deeply held views.
- Open-minded - the person is tolerant of opposing viewpoints and aware of the possibility of their own biases. An open-minded person respects the right of others to hold opposing views.
- Analytical - the individual is habitually sensitive to prospective difficulties and vigilant in predicting implications and attempting to predict short-term and long-term outcomes of events, decisions, and actions. This mental tendency could also be described as "foresightfulness."
- Systematic - the person continually strives to identify and resolve problems in an organized and complete manner. A systematic individual approaches problem solving, learning, and investigation in an ordered, focused, persistent, and diligent manner.
- Confident in reasoning - the person believes in their reasoning abilities to make sound decisions. Another issue is whether or not a person's or a group's faith in their critical thinking is warranted.
- Inquisitive - the individual strives to be well-informed, wants to understand how things function and wants to learn new things about a wide range of topics, even if the immediate benefit of knowing those things is not immediately apparent. An inquisitive person is filled with intellectual curiosity.
- Judicious - this means that the person tackles problems to understand that some are poorly structured and that others may have more than one plausible answer. A judicious person has the cognitive maturity to see that many topics and concerns are not black and white and that judgements must be made in the face of doubt at times.

3 Assessment of Critical Thinking

One of the basic preconditions for the spread of critical thinking in the population is the availability of appropriate evaluation tools to measure the level of critical thinking. Critical thinking assessment assumes that appropriate strategies and techniques are available, which are an essential element of any effort to assess the individual level of critical thinking of different target groups. Different types of standardized tests are available in the academic environment, but in the evaluation practice tests aimed at verifying the level of achieved knowledge still prevail. Haynes et al.[21] argue that testing to verify students' ability to memorize factual knowledge is much simpler than designing assessments that assess critical thinking skills. Silva[22] argues that new assessment methods are needed to measure higher-

[20] FACIONE, P. A. GITTENS, C. A. FACIONE, N. C.: *Cultivating A Critical Thinking Mindset,* Redondo Beach, CA : Measured Reasons LLC, 2016, p. 4.
[21] HAYNES, A., LISIC, E., GOLTZ, M., STEIN, B., HARRIS, K.: Moving Beyond Assessment to Improving Students' Critical Thinking Skills: A Model for Implementing Change. In *Journal of the Scholarship of Teaching and Learning*, 2016, Vol. 16, No. 4, p. 44-61.
[22] SILVA, E. : *Measuring Skills for the 21st Century (Report).* Washington, DC : Education Sector, 2008.

order skills, focusing more on contextual thinking and problem-solving skills based usually on real world situations. Within such a critical thinking assessment model, test subjects are asked to perform analysis, interpretation, reasoning, judgments, and formulate their own solutions. According to Ku[23], the available empirical evidence suggests that open-ended measures capture the formulation of critical thinking better than multiple-choice measures because they are more sensitive to the dispositional components of critical thinking. Cognitive and dispositional parts of critical thinking can be more effectively verified through mixed-item tests, which include multiple-choice items as well as open-ended questions. Norris[24] contends that standardized instruments that employ multiple-choice formats to measure plausibility or deductive reasoning are likely to reflect alien conceptions such as empirical, theological, or political convictions, as well as test creators' opinions. The aim and format of these tools differ widely. According to Fischer, Spiker, and Riedel,[25] critical thinking is a "stimulus-related phenomena," which means that specific aspects of the external role might influence whether critical thinking is elicited in a certain assessment setting. The authors identify a number of contextual elements that influence critical thinking usage.

4 Methods

The main goal of this research study is a framework structural analysis of standardized assessment tools focused on critical thinking. We used a systematic analysis framework to search, screen, and evaluate the tests, and the search terms to identify critical thinking tests were derived from Google searches as well as the Academia and ResearchGate academic databases. This study began with a full-text search of the following keywords: critical thinking tests and critical thinking assessment. Relevant synonyms for the articulated terms have been identified and also included in the search. For each keyword and its synonyms, we downloaded those search results whose description indicated that they might be relevant and focused on the subject of our research. We then selected search results that met the criteria of including comprehensive information about the relevant critical thinking test. We placed these secondary data in a database of our own design and subsequently subjected them to a quantitative and, in part, qualitative and content analysis. The data download and analysis took place between October 1 and October 30, 2021. We included a total of 17 standardized critical thinking tests in our final research sample. The selection criterion was that there was a detailed description of the focus and methodology of the testing tool for the respective test. Tests that did not meet this criterion were excluded from the research sample.

5 Results

Cambridge Thinking Skills Assessment

This assessment is for applicants for a university degree in Cambridge for courses in computer science, economics, engineering, land management, natural sciences and politics,

[23] KU, K. Y. : Assessing students' critical thinking performance: Urging for measurements using multi-response format. In *Thinking Skills and Creativity,* 2009, Vol. 4, No. 1, p. 70-76.

[24] NORRIS, S. P.: Can we test validly for critical thinking? In *Educational Researcher,* 1989, Vol. 18, No. 9, p. 21-26.

[25] FISCHER, S. C., SPIKER, V. A., RIEDEL, S. L.: *Critical thinking training for army officers, Volume 2: A model of critical thinking. (Technical Report).* Arlington, VA : U.S. Army Research Institute for the Behavioral and Social Sciences, 2009.

psychology and sociology. The Cambridge test consists of 50 multiple-choice questions that test problem-solving skills. The test also includes items for testing critical thinking, numerical and spatial reasoning, understanding arguments and reasoning using everyday language. Test participants have 90 minutes to complete the test.[26]

Cornell Critical Thinking Test (Level X)

The test contains seventy-six items with multiple choices. This test assesses the level of induction, deduction, trustworthiness of resources and identification of assumptions. The test is used to evaluate programs aimed at developing critical thinking skills, as well as in university, career and employment admissions. The methodology allows one to complete the test within a time limit of 50 minutes, but also includes the possibility of testing without a time limit.[27]

The California Critical Thinking Skills Test: College Level

The multiple-choice test includes 35-items assessing interpretation, argument analysis and appraisal, evaluation, inference, and explanation. Part of the assessment are sub-scores on deduction and induction. Some versions use general content: other versions focus on professional fields, e.g., health sciences, business, law and government. The test is primarily intended for college students but can also be used to test critical thinking of high school students[28].

The California Critical Thinking Dispositions Inventory

This test contains 34 items with multiple-choice answers and is aimed at assessing the dispositions of critical thinking of the subjects. The methodology recommends a test duration of 20 to 30 minutes, assessing the following seven disposition subscores:

- Disposition toward truth-seeking,
- disposition toward open-mindedness or intolerance,
- disposition toward anticipating possible consequences or being heedless of them,
- disposition toward proceeding in a systematic or unsystematic way,
- disposition toward being confident in the powers of reasoning or mistrustful of thinking,
- disposition toward being inquisitive or resistant to learning, toward mature and nuanced judgment or toward rigid simplistic thinking.29

The California Critical Thinking Skills Test: M Series for Children and Youth

A specific test aimed primarily at the target group of children and adolescents, which can be administered online or using the paper and pencil technique. The test design uses multiple choice questions. The test items identify analytical skills related to understanding different sentences as different practical application tasks to more comprehensively assess individual critical thinking skills. The recommended test administration time is 45 minutes.[30]

[26] *Employers and universities to benefit from Cambridge thinking skills assessment.* Cambridge : Cambridge University Press & Assessment. [online]. [2021-10-09]. Available at: <https://www.cambridgeenglish.org/news/view/employers-and-universities-to-benefit-from-cambridge-thinking-skills-assessment/>.

[27] FRENCH, B. F., HAND, B., THERRIEN, W. J., VALDIVIA VAZQUEZ, J. A.: Detection of sex differential item functioning in the Cornell Critical Thinking Test. In *European Journal of Psychological Assessment*, 2012, Vol. 28, No. 3, p. 201-207.

[28] FACIONE, P.A.: *The California Critical Thinking Skills Test.* Millbrae, CA: California Academic Press, 2013.

[29] FACIONE, P. A., FACIONE, N. C., GIANCARLO, C. A. F.: *California critical thinking disposition inventory: CCTDI.* Millbrae, CA : California Academic Press, 2001.

[30] FACIONE, P. A.: *The California Critical Thinking Skills Test.* Millbrae, CA : California Academic Press, 2013.

Illinois Critical Thinking Essay Test

A test aimed at testing critical thinking through essay writing. The target group are high school students, but the test can also be used above and below this level. A detailed six-point section is available in the test methodology to evaluate the focus, supporting reasons, organization of the rationale, and integration of argumentative essays dealing with the problem the student is interested in. The problem that the essays focus on deals with one specific topic.[31]

International Critical Thinking Essay Test

The International Critical Thinking Essay Test is designed to test the principles of critical thinking that can be applied in any discipline. The test has two objectives. The first purpose is to create an acceptable method for pre-and post-testing of students to assess their ability to think critically within a discipline or subject. The second purpose is to design a test instrument that encourages instructors to teach their field developing critical thinking skills. The International Critical Thinking Essay Test consists of two sections: 1) An examination of a writing prompt, and 2) an evaluation of the writing prompt. For the part dedicated to the analysis, the student can get a maximum of 80 points, for the evaluation part they can get 20 points. The student must correctly identify the reasoning components within a written work in the Analysis section of the exam (each response is worth 10 points). The student must build a critical analysis and assessment of the reasoning in the Assessment section of the test (in the original piece).[32]

College and Work Readiness Assessment Plus

The test aims to assess the level of critical thinking and communication skills. Selected-response items use the five-point Likert scale. Administration time is 60 minutes for the performance assessment task and 30 minutes for the selected-response items. The following six skill categories are covered via performance tasks and selected-response questions:

- Analysis and problem solving.
- Writing effectiveness.
- Writing mechanics.
- Scientific and quantitative reasoning.
- Critical reading and evaluation.
- Critique an argument.[33]

Arke Primack Scale

Based on the California Critical Thinking Skills Test, this test measures media literacy, reasoning and critical thinking skills. A conceptual model based on this scale may be valuable for measuring media literacy and assessing media literacy interventions in various areas. The test's conceptual model uses the Likert-type scale and consists of five domains: recall, purpose, viewpoint, technique, and evaluation.[34]

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[31] FINKEN, M., ENNIS, R. H.: *Illinois critical thinking essay test*. Champaign : University of Illinois, 1993.

[32] PAUL, R., ELDER, L.: *International Critical Thinking Essay Test.* Tomales, CA : Foundation for Critical Thinking, 2007.

[33] *College and Work Readiness Assessment Plus (CWRA+).* [online]. [2021-10-09]. Available at: <https://www.rand.org/education-and-labor/projects/assessments/tool/2007/college-and-work-readiness-assessment-plus-cwra.html>.

[34] ARKE, E. T., PRIMACK, B. A.: Quantifying media literacy: development, reliability, and validity of a new measure. In *Educational Media International*, 2009, Vol. 46, No. 1, p. 53-65.

Test of Everyday Reasoning
The test uses 35 dichotomously scored items and is focuses on the assessment of critical thinking and reasoning skills. The administration time is 45 minutes. The test uses five subscores and covers measuring of the following categories:

- Analysis (analytical reasoning skills).
- Inference (ability to draw conclusions from evidence).
- Evaluation (appraising the credibility of evidence).
- Deduction.
- Induction.

The subjects and situations of the tested items are known. The test subject analyzes and interprets the information offered in the text, graphs, or visuals; draws precise and substantiated conclusions; and evaluates the conclusions and explains why they represent strong or weak considerations.[35]

Think Ready Assessment System
The test based on classroom performance tasks measures the development of critical cognitive competences necessary for success in college. Each task takes one to two weeks to complete and assesses students' skills in problem formulation, research, interpretation, communication, and making precise and accurate claims. A conceptual model is constructed using four benchmark levels that correspond with cognitive skill development.
The test subscores are divided into the following key cognitive components:

- problem solving.
- research.
- reasoning.
- precision.
- interpretation.[36]

Business Critical Thinking Skills Test
A case-based reasoning skills assessment is designed for business students in college-level professional programs. The test measures the core reasoning skills needed for reflective decision making and problem-solving in business and workplace settings. Scores include overall reasoning skills, analytics skills, inference, evaluation, induction, deduction, and numeracy.[37]

The Holistic Critical Thinking Scoring Rubric
The test is constructed as a rating measure to assess the quality of critical thinking and is intended for any educational program or assessment process. Students can use the tool in the process of self-evaluation to assess the quality of their own or another's reasoning. Test items are based on rating verbal presentation or written text and the implementation process

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[35] FACIONE, P. A., FACIONE, N. C., WINTERHALTER, K.: *The test of everyday reasoning – (TER): Test Manual.* Millbrae, CA : California Academic Press, 2012.
[36] *ThinkReady: An innovative, formative assessment of student cognitive abilities! College & Career Readiness: A Comprehensive.* Educational Policy Improvement Center, 2014. [online]. [2021-10-09]. Available at: <https://collegeready.epiconline.org/info/thinkready.dot>.
[37] *Business Critical Thinking Skills Test (BCTST).* [online]. [2021-10-09]. Available at: <https://www.insightassessment.com/Products/Products-Summary/Critical-Thinking-Skills-Tests/Business-Critical-Thinking-Skills-Test-BCTST>.

requires training the raters to assure that they are making accurate ratings (judgments) about the evidence of critical thinking that they are observing and evaluating.[38]

Halpern Critical Thinking Assessment

The test based on everyday scenarios measures five categories and sub-categories of critical thinking skills:

- verbal reasoning (e.g., recognizing the use of persuasive or misleading language),
- argument analysis (e.g., recognizing reasons, assumptions, and conclusions in arguments),
- thinking as hypothesis testing (e.g., understanding sample size, generalizations),
- using likelihood and uncertainty (e.g., applying relevant principles of probability such as base rates),
- decision making and problem-solving (e.g., identifying the problem goal, generating and selecting solutions among alternatives).

The test employs two response formats: constructed response (how people respond to a scenario in their own words) and forced choice (how well they recognize a good response). The test provides an easy approach to measure learning results for programs aimed at improving critical thinking as well as a means of monitoring critical thinking levels.[39]

Online Critical Thinking Basic Concepts Test

A 100-item test with three parts reflects critical thinking as a trans-disciplinary system of interconnected concepts, principles, and understandings. The test is intended for use in high school (grades 10) and higher (college, university, and graduate-level). The test assesses how well students, instructors, or anybody else comprehend the core concepts underlying critical thinking. It focuses on the following five critical thinking dimensions:

- The analysis of thought.
- The assessment of thought.
- The dispositions of thought.
- The skills and abilities of thought.
- The obstacles or barriers to critical thought.40

Watson-Glaser Critical Thinking Appraisal

The test is intended to assess critical thinking abilities using statements or text passages. Individuals must make deductions and conclusions, identify assumptions required to validate a thesis, and assess the strength of an argument. Questions are divided across five areas of logical reasoning ability:

- drawing inferences,
- recognizing assumptions,
- deduction,
- interpreting,
- evaluating arguments.

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38 FACIONE, P. A., FACIONE, N. C.: *The Holistic Critical Thinking Scoring Rubric – HCTSR. A Tool for Developing and Evaluating Critical Thinking.* Millbrae, CA : California Academic Press, 2011.

39 BUTLER, H. A.: Halpern Critical Thinking Assessment predicts real-world outcomes of critical thinking. In *Applied Cognitive Psychology*, 2012, Vol. 26, No. 5, p. 721-729.

40 ELDER, L., PAUL, R., COSGROVE, R.: *Online Critical Thinking Basic Concepts Test.* Tomales, CA : Foundation for Critical Thinking, 2007.

The test tasks measure the ability of person to:
- Define a problem.
- Select key points of information to formulate a solution.
- Understand when an assumption has been made, and when it has not.
- Hypothesize, or select an applicable hypothesis based on limited evidence.
- Draw fact-based conclusions.
- Determine the probability of an inference.[41]

Digital Online Media Literacy Assessment
The test uses the procedure created by Quin and McMahon,[42] who tested the media literacy skills of a large sample of Australian students to assess different skill levels in analyzing media. In adapting the instrument to be completed by students, the authors modified questions using the format of the five critical questions to better structure students' demonstration of analysis skills.
There are four categories for comprehension:
- Reading comprehension.
- Listening comprehension.
- Viewing comprehension.
- Writing skills.

The measurement of students' analysis skills was designed on the following categories:
- Analysis: Identification of construction techniques.
- Analysis: Identification of point of view.
- Analysis: Identification of omissions.
- Analysis: Identification of purpose and target audience.
- Analysis: Comparison-contrast.[43]

Conclusion

Several critical thinking skills tests and measures have been developed to assess cognitive competences, critical thinking dispositions, reasoning skills, abilities, obstacles or barriers to critical thought, and understand the fundamental concepts embedded in critical thinking. All assessment tools in the research sample use more or less delineated components and scales for evaluating outcomes. Instruments provide a consistent framework for the evaluator, and the evaluated person can obtain feedback relating to the actual level of critical thinking. Principal components analysis revealed that instruments can be used to rate a tested person's reasoning and problem-solving abilities or to assess outcomes regarding various dimensions of thinking performance. Multiple forms of critical thinking assessment offer a variable set of criteria used to give an overall picture of performance in essential skills and abilities of thought areas.
Identifying, evaluating, and analysing an issue, interpreting information, synthesizing evidence, and reporting a conclusion are all examples of components of critical thinking. This part of the cognitive skills cluster also entails coping with ambiguity or conflicts between

[41] *Watson Glaser tests.* London : Practice Aptitude Tests. [online]. [2021-10-09]. Available at: <https://www.practiceaptitudetests.com/testing-publishers/watson-glaser/?gclid=Cj0KCQjw5JSLBhCxARIsAHgO2Sdb4jwLos8OoahP3kEJJbKqAW4Mlsb0IKXXutZhr-BTBnLiMGOK1NMaAs6CEALw_wcB>.
[42] QUIN, R., MCMAHON, B.: Evaluating standards in media education. In *Canadian Journal of Educational Communication*,1995, Vol. 22, No. 1, p. 15-25.
[43] HOBBS, R., FROST, R.: Measuring the acquisition of media-literacy skills. In *Reading Research Quarterly*, 2003, Vol. 38, No. 3, p. 330-355.

principles and contradicting facts. Braun et al.[44] argue that performance assessment provides the most realistic and credible approach to measuring critical thinking. Proper measurement is essential for tracking cognitive skills progress and giving relevant feedback to researchers, teachers, and learners. High-quality feedback may assist to concentrate the stakeholders' attention on critical skills areas that need improvement and provide relevant information about appropriate research models and decisions about the follow-up strategies and methods.
In addition, comparative research at the program and institutional levels can provide information to higher education leaders and policymakers. The conceptualization and description of critical thinking assessment instruments are intimately tied to models of information processing, mental processes and reasoning abilities that are extremely important in educational settings.

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College and Work Readiness Assessment Plus (CWRA+). [online]. [2021-10-09]. Available at: <https://www.rand.org/education-and-labor/projects/assessments/tool/2007/college-and-work-readiness-assessment-plus-cwra.html>.
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ELDER, L., PAUL, R., COSGROVE, R.: *Online Critical Thinking Basic Concepts Test.* Tomales, CA : Foundation for Critical Thinking, 2007.
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