

Nadanyiova, Margareta; Majerova, Jana; Gajanova, Lubica

Article

Digital marketing as a source of competitive advantage : case study of Slovak Republic

Marketing i menedžment inovacij

Provided in Cooperation with:

ZBW OAS

Reference: Nadanyiova, Margareta/Majerova, Jana et. al. (2021). Digital marketing as a source of competitive advantage : case study of Slovak Republic. In: Marketing i menedžment inovacij (4), S. 92 - 103.

https://mmi.fem.sumdu.edu.ua/sites/default/files/A547-2021-08_Nadanyiova_0.pdf.

doi:10.21272/mmi.2021.4-08.

This Version is available at:

<http://hdl.handle.net/11159/6888>

Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics

Düsternbrooker Weg 120

24105 Kiel (Germany)

E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)

<https://www.zbw.eu/>

Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte. Alle auf diesem Vorblatt angegebenen Informationen einschließlich der Rechteinformationen (z.B. Nennung einer Creative Commons Lizenz) wurden automatisch generiert und müssen durch Nutzer:innen vor einer Nachnutzung sorgfältig überprüft werden. Die Lizenzangaben stammen aus Publikationsmetadaten und können Fehler oder Ungenauigkeiten enthalten.

Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence. All information provided on this publication cover sheet, including copyright details (e.g. indication of a Creative Commons license), was automatically generated and must be carefully reviewed by users prior to reuse. The license information is derived from publication metadata and may contain errors or inaccuracies.




<https://savearchive.zbw.eu/termsfuse>

<https://doi.org/10.21272/mmi.2021.4-08>

JEL Classification: M31, M37

Margareta Nadanyiova,

Ph.D., Associate Professor, University of Zilina, Slovak Republic

 ORCID ID, 0000-0002-4379-6972

email: margareta.nadanyiova@fpedas.uniza.sk


Jana Majerova,

Ph.D., Associate Professor, AMBIS University, Czech Republic

email: jana.majerova@ambis.cz

Lubica Gajanova,

Ph.D., University of Zilina, Slovak Republic

 ORCID ID, 0000-0001-9242-5898

email: lubica.gajanova@fpedas.uniza.sk

Correspondence author: margareta.nadanyiova@fpedas.uniza.sk

DIGITAL MARKETING AS A SOURCE OF COMPETITIVE ADVANTAGE: CASE STUDY OF SLOVAK REPUBLIC

Abstract. Nowadays, marketing in the digital environment is very important for every company. The reason is that internet use has more than doubled in the last decade, and this shift has significantly affected the way customers buy products and communicate with companies. Digital marketing is like any other type of marketing - it is a way to connect with current customers and influence potential customers. It is very important, especially when there are already many products and services on the market with really high competition. The main difference between online and traditional marketing is that the company can better connect with customers and influence them online. Based on the above mentioned, the paper's main aim is to analyze the application of digital marketing in the selected Slovak brand and its perception by Slovak consumers, propose recommendations for a more effective application of digital marketing in this company. It includes providing the theoretical background and analysis of digital marketing from the viewpoint of Slovak and foreign authors. The important secondary data source was scientific research, annual company reports, statistical databases, and published professional publications. To find out the perception of digital marketing from the perspective of Slovak consumers, a questionnaire survey was conducted. The questionnaire survey aimed to find out the opinions, attitudes, and satisfaction of consumers with the selected Slovak brand. To determine the sample size, the base file representing a number of people older than 18 was obtained from the demographic statistics of the Statistical Office of the Slovak Republic. General scientific methods (i.e., excerption, description, comparative analysis, deduction, and induction) were used for data processing and mathematical and statistical methods to evaluate data from the survey using IBM SPSS Statistics software. To achieve the main goal of the paper, based on the theoretical background and survey results, research hypotheses were formulated and subsequently verified. Finally, based on the analysis and results of the questionnaire survey, benefits of digital marketing are highlighted, such as gaining a competitive advantage, increasing customer loyalty, and overall increasing brand awareness.

Keywords: digital marketing, competitive advantage, marketing communication, social media, consumers.

Introduction. Continuous innovation in digital technology and how they are used reflect the digital time in which we live currently (MacGregor et al., 2020). Saturated with ads of all kinds, consumers look for something unique in the digital world that will catch their attention. And just in this context, digital marketing is unique. It allows marketers to fully focus on their creativity and create something new and progressive with added value (Hitka et al., 2021; Vrtana et al., 2020; Oklander and Oklander, 2017).

Nowadays, digital marketing represents a modern marketing approach, which is an important means

Cite as: Nadanyiova, M., Majerova, J., & Gajanova, L. (2021). Digital Marketing as a Source of Competitive Advantage: Case Study of Slovak Republic. *Marketing and Management of Innovations*, 4, 92-103. <http://doi.org/10.21272/mmi.2021.4-08>



of gaining a competitive advantage (Shpak et al., 2019). Its area is versatile, suitable for any business, and achieving a wide range of goals. Trends in this area are subject to rapid changes and, in addition to the need for their knowledge, require continuous optimization of marketing campaigns depending on current customer requirements (Shpak et al., 2020). The main benefits of digital marketing for the business sphere are the possibility of individual care for each customer and inducing a feeling of uniqueness and added value for the company.

There are many scientific papers and surveys aimed at the issue of digital marketing as a source of competitive advantage. However, for the effective application of digital marketing in business practice, it is necessary to respect the regional socio-cultural specifics of the market.

Based on the above mentioned, the paper's main aim is to analyze the application of digital marketing in the selected Slovak brand and its perception by Slovak consumers, propose recommendations for a more effective application of digital marketing in this company. It includes providing the theoretical background and analysis of digital marketing from the viewpoint of Slovak and foreign authors. The important secondary data source was scientific research, annual company reports, statistical databases, and published professional publications. To find out the perception of digital marketing from the perspective of Slovak consumers, a questionnaire survey was conducted. Based on the analysis and results of the questionnaire survey, benefits of digital marketing are highlighted, such as gaining the competitive advantage, increasing customer loyalty, and increasing brand awareness.

Literature Review. Currently, the internet is a public global decentralized network used by millions of users around the world. As a whole, it does not belong to anyone and is not controlled by any authority. Its attractiveness as an effective advertising medium is given not only by the number of users but also by the development of services and tools of the internet market. From an additional medium, it gradually became a medium with a dominant position in marketing campaigns. Thus, it gained the status of a cheap, fast, and flexible medium with a high quality of services (Prikrylova and Jahodova, 2010).

There is no doubt that the internet has changed the world we live in. Accessing information, communicating with people, or sharing content has never been easier (Lizbetinova, 2014). The internet is leading to an increasingly interconnected communication environment. An increase in its use has resulted in a decline in traditional media such as television, radio, newspapers, and magazines. Marketing in an environment full of interconnections and their use in the Internet market is called digital marketing (Stokes, 2011). Digital marketing is an integral part of marketing communication for almost every business. Since its formation, it has undergone fundamental changes, which are mainly signed by scientific and technical progress and the development of new technologies. Many Slovak and foreign authors dealt with this topic.

Ryan and Jones (2009) dealt with the marketing strategies for successfully connecting businesses with the digital generation. Their research is focused on digital marketing, its beginnings and development, and the effectiveness of individual digital marketing tools.

Prikrylova and Jahodova (2010) characterized digital marketing as a modern communication tool with several platforms, ensuring fast communication with the possibility of targeting and individualizing content. Similarly, Scott (2010) considered digital marketing as a useful tool for more effective customer relationship management. He also examined the effectiveness of SEO optimization in search engines.

According to Janouch (2010), thanks to the internet, the perception of marketing has changed a lot. Currently, marketing represents a special approach to the customer, care for each customer, and individualize the product. However, marketing activities must be implemented comprehensively, because individually, they lose their meaning. He also explains the technical aspects of successful digital marketing communication for companies and defines the advantages of online marketing over offline marketing, which includes:

- monitoring and measurement – companies have much more data available;
- it could be operated continuously;

- it allows the individual approach to each customer;
- dynamic content – the offer could change at any time depending on the needs of customers.

The determinants mentioned above could be considered as advantages of digital marketing compared to traditional marketing. Unlike digital marketing, it does not allow companies to individualize content tailored to each customer. In terms of costs, individual campaigns are more expensive, but their content is not so dynamic. The activity of traditional marketing is limited, while digital marketing could be run continuously. In terms of the amount of data available, traditional marketing couldn't be compared with digital marketing. Information acquisition is longer, more demanding, and therefore more expensive (Janouch, 2010).

However, the purpose of digital marketing is not to completely replace traditional marketing. According to Kotler et al. (2017), both forms of marketing should exist simultaneously and complement each other. Traditional marketing plays an important role in building awareness and interest on the part of consumers. As the interaction increases, customers begin to demand closer relationships with companies, and as the need for digital marketing grows. The task of well-executed modern marketing is to estimate the time when it is appropriate to move the activities of marketers from the environment of traditional marketing to digital.

For digital marketing communication, companies could use various tools that differ from each other in the possibilities of their use, such as website, internet advertising, SEO, SEM, PPC, social networks, email marketing, online PR, blogs, and mobile marketing.

Currently, in the context of digital marketing, many new trends and strategies gradually evolve in the conditions of the high-tech industry. Foreign companies that know these trends use them successfully in their marketing communication. The trend is to use artificial intelligence to analyze consumer behavior, find out information from social networks, and understand consumers' search for the products they want. Product personalization has been playing a very important role for a long time. Noteworthy here it not only increases profits but also improves customer relationships. Companies currently focus on creating personalized videos (vlogs).

On the contrary, sending emails or telephone conversations is beginning to decline. With the addition of videos about products, their creation, or presenting the company's functioning, companies build popularity. Such videos are often published on channels such as YouTube and appear in search results (Dave, 2018).

The popularity of social networks among consumers is gradually growing, and so is the number of companies that use their services. In addition to the presentation of products and the company itself, it is possible to communicate with each customer through private messages. A relative novelty in social networks is the implementation of "stories", the use of which is gaining intensity (Dave, 2018).

The effectiveness of digital marketing tools is also reflected in the number of research and publications dealing with this issue from different points of view. Namely, Sceulovs and Gaile-Sarkane (2011) examined the ability of social networks to improve a company's competitiveness. They found that judicious use of opportunities arising from the use of social networks could make a significant contribution to improving the competitiveness of the company. This increased competitiveness could be reflected, for example, in increased sales, development and testing of new products or improved marketing activities. Sharma and Baoku (2012) explored social networks from an ethical perspective. Laws, regulations, and national policies governing privacy, personal data collection, and user identity protection are important in the use of social networks for business and should be respected and complied with. The impact of social networks on e-commerce is specified in more detail by Lekaj and Kiercini (2017). According to them, the company needs to deal with the constant optimization of social networks because current trends in e-commerce are subject to frequent changes. According to him, social networks are the best way for companies to build brand awareness.

Davidaviciene et al. (2017) dealt with social networks in connection with B2B and B2C communication. According to them, understanding and implementing new innovative tools for communicating with users on social networks contribute to increasing the number of interactions. Kritzinger and Weideman (2017) compared search engine optimization and paid search campaigns in terms of cost and effectiveness. They concluded that search engine optimization should form the basis of any business operating in the Internet environment. While advertising campaigns come at a cost, they could drive a large number of visitors.

Lorente-Paramo et al. (2020) provided practical insights into how to plan and deploy email marketing strategies in different cultural environments. According to him, before reaching the main goal of sales conversion, it is important to attract the recipient and redirect him to the seller's website. Harrigan et al. (2021) examined the assumptions of identifying influential persons for the needs of influencer marketing as a way of promotion, especially in the Internet environment. Nair and Gupta (2021) dealt with the conditions for applying artificial intelligence in a modern digital marketing environment. According to them, many companies do not realize the importance of the artificial intelligence application and do not know how to implement it properly. They claim that artificial intelligence represents a kind of breakthrough in the digital environment.

Methodology and research methods. The paper's main aim is to analyze the application of digital marketing in the selected Slovak brand and its perception by Slovak consumers, propose recommendations for a more effective application of digital marketing in this company. It includes providing the theoretical background and analysis of digital marketing from the viewpoint of Slovak and foreign authors. Based on the analysis and results of the questionnaire survey, benefits of digital marketing are highlighted, such as gaining the competitive advantage, increasing customer loyalty, and increasing brand awareness.

The important secondary data source was scientific research, annual company reports, statistical databases, and published professional publications. To find out the perception of digital marketing from the perspective of Slovak consumers, a questionnaire survey was conducted.

The questionnaire survey aimed to find out the opinions, attitudes, and satisfaction of consumers with the selected Slovak brand. To determine the sample size, the base file representing a number of the population older than 18 was obtained from the demographic statistics of the Statistical Office of the Slovak Republic. The confidence interval of 5% was determined, and the confidence level – 95%. Thus the error rate of 5% was admitted. The sample size of 384 respondents was calculated. The actual number of respondents who participated in the questionnaire survey was 408. The time required for the survey was 3 months (February – April 2021). The survey took the form of a questionnaire method through email communication. For the processing of the survey data, the quantitative assessment method was applied.

The marketing survey consists of four sections. The first section focuses on the general socio-demographic profile of respondents. The second section deals with the perception of the selected brand in the digital environment. The third section is devoted to determining respondents' experience with using the portal of the selected brand to search for or offer services. The last section finds out the consumer suggestions and recommendations for the selected brand.

General scientific methods (i.e., excerption, description, comparative analysis, deduction, and induction) were used for data processing, as well as mathematical and statistical methods in the evaluation of data from the survey using IBM SPSS Statistics software.

To achieve the main goal of the paper, based on the theoretical background and survey results, research hypotheses were formulated as follows:

- Hypothesis 1: There is the statistically significant dependence between the use of the brand portal and the brand's following on social networks by consumers.
- Hypothesis 2: There is the statistically significant dependence between the brand's following on social networks and the gender of respondents.

- Hypothesis 3: More than 50% of users of the selected brand portal are female.

The marginal rate of 50% was set as the expression of the simple majority (Macfie and Nufrio, 2006).

Statistical hypotheses testing is defined as a statement of the assumption of unknown parameters in the basic set, which is formulated as a statistical hypothesis, and its validity is verified by statistical procedures based on selected characteristics. The role of statistical hypotheses testing is to decide whether to accept or reject the hypothesis regarding the basic set according to the information from the available choice. In verification of the hypotheses, the methodology of statistical hypothesis testing consisting of the following steps was met (Rimarcik, 2007):

1. Formulation of the null hypothesis (H_0).
2. Formulation of the alternative hypothesis (H_1).
3. Determining the level of significance (α).
4. Calculation of test statistics and probability.
5. Decision.

For hypotheses 1 and 2, this study involved Pearson's Chi-square test of independence in determining whether there is a statistically significant relationship between the use of the brand portal and the brand's following on social networks by consumers, as well as between the brand's following on social networks and the gender of respondents. The contingency table was created to determine the dependence. In this table, the frequencies are arranged depending on both characters. Finally, the intensity of the association dependence between the variables was measured by Cramer's V (Rimarcik, 2007; McHugh, 2013).

For hypothesis 3, the method testing a single proportion by one-tailed testing was used because it is commonly used (Ruxton and Neuhauser, 2010; Lombardi and Hurlbert, 2009). Significance level α was determined at 0.05.

Results. The application of digital marketing in specific conditions of the Slovak Republic is analyzed in the case of the particular brand –Nehnutelnosti.sk as a part of the company United Classifields. United Classifields is a company engaged in advertising activities. It was established in 2015. The company's portfolio consists of several advertising portals divided into real-estate (including Nehnutelnosti.SK), automotive, and general advertising segments.

Nehnutelnosti.sk is an advertising portal collecting supply and demand for real estate in Slovakia and abroad. It offers apartments, houses, land, or recreational real estate for sale, purchase, or rent. Marketing communication takes place at B2B and B2C levels. The B2B segment is represented by individual real-estate agencies, which publish offers on the advertising portal on behalf of their clients. Advertisers and private advertisers represent the B2C segment.

The advertising portal Nehnutelnosti.sk uses several digital communication tools to communicate with potential and existing customers:

1. Website and blog consist of several subpages, which the website visitor could access by clicking on individual links. One of the so-called Magazin links the user to a blog where they could find articles with interesting facts from the world of real estate, tips on building modifications, or inspiration for furnishing real estate.
2. Mobile application is used to search for real estate easily and conveniently via mobile devices (for example, according to selected criteria directly on Google maps). Push notifications from the application inform users about the availability of new ads.
3. Social networks. The brand is registered on social networks Facebook, Instagram, and YouTube. The brand also uses influencer marketing to promote, in which it cooperates with several famous people from the Slovak show business.
4. Email marketing. Email communication of the brand could be grouped into two segments according to the direction of communication, namely the B2B and B2C segments. Communication at the B2B level consists in informing clients (real-estate agencies) about new services, functionalities, and

upcoming changes. In turn, it includes email campaigns aimed to support the purchase of additional services. Communication with the B2C segment consists of sending informational e-mails about, for example, new episodes of the series or new functions on the website and mobile application.

5. Online PR. The brand cooperates with various media, which publish articles on real estate on their websites.

6. SEO and PPC. In terms of UX quality, the site is fast and user-friendly. The brand is registered on three social networks, which effectively help it to convey content. Based on the evaluation of quality factors for search, the SEO optimization of the brand could be evaluated highly positively. The brand also uses paid advertising campaigns. These are text-type ads, i.e., PPC search engine campaigns and visual ads, for example, in the form of banner ads appearing on the YouTube social network.

All data that the company obtains from individual communication channels must be effectively processed using appropriate analytical tools. The article presents a few statistical evaluations of data measured by the brand for 2019 and 2020. In 2019, an average of 2,423,000 sessions was performed on the web portal *Nehnutelnosti.sk* in one month. In 2020, this number increased to 2,895,000. The term session means, for example, a visit to a website, blog, or viewing advertisements performed by the user. One user could perform multiple sessions. In 2019, the average monthly number of users of the *Nehnutelnosti.sk* web portal was 935,000. In 2020, this number increased to 1,077,000 users. We divided the data according to the category of gender and the type of equipment that was used during the visit. In 2019, the web portal was visited by more male users, namely 532,950. In 2020, the number of male users decreased to 484,650. The number of female users in 2019 was 402,050. In 2020, it increased to 592,350. In both periods, the order of the equipment used is the same. Users visited the web portal most often via mobile devices. In 2019, this number was 476,850, and in 2020 – up to 667,740 such users. Thus, the number of computer equipment users naturally decreased, from 420,750 users in 2019 to 376,950 in 2020. The number of tablet users also decreased. In 2019, 37,400 users visited the portal via a tablet. The following year, that number dropped to 32,310. The number of visitors to the Magazine increased year on year. In 2019, the number of readers was 110,000. In 2020, this number increased to 116,000 readers. When evaluating traffic on social networks, it is important where its users get to the company's user profile. They could be brought there by either organic or paid contributions. In both compared periods, the higher number of visits achieved organic results. In 2019, they brought traffic to 215,000 users and in 2020 to 373,000 users. Paid contributions brought in 71,000 users in 2019 and 75,000 users in 2020.

As previously mentioned, the marketing survey consists of four sections. The first section focuses on the general socio-demographic profile of respondents. From the total number of respondents in the sample set (408), 216 (52.9%) are female and 192 (47.1%) male. Based on consumer generation classification, 45 (11%) respondents are Baby Boomers; 94 (23%) – Generation X; 192 (47.1%) – Millennials, and 77 (18.9%) – Post-Millennials. The second section deals with the perception of the selected brand in the digital environment. The survey results show that the portal knows 378 respondents, representing a 92.6% share of the total number of respondents. The remaining 30 respondents do not recognize the advertising portal (7.4%). Of the number who know the portal, 316 (83.6%) respondents used the advertising portal to search for or offer real estate. Only 62 (16.4%) respondents have not yet used his services at all. A third of the respondents are fans of the brand on social networks. The remaining two-thirds of respondents do not follow the brand on social networks. When inviting respondents to choose those social networks on which they register the brand's activities, most such marketing activities are perceived by consumers on the social network Facebook (71.5% of respondents) and the least on the social network YouTube (9.1% of respondents). Activities on the social network Instagram are registered by 34.7% of respondents, and 26.3% of respondents do not register activities on any of the mentioned platforms.

The third section is devoted to determining respondents' experience with using the portal of the selected brand to search for or offer services. Among all respondents, up to 308 (97.5%) respondents

expressed satisfaction with the advertising portal. Respondents indicated that the length of individual search steps and the unavailability of some menus that appeared in search results as available were the most common reasons for their dissatisfaction with the advertising portal. The survey results show that 134 (42.4%) respondents used the mobile application to search for real estate on the portal. As many as 111 (35.1%) respondents stated that they did not use the application due to ignorance of its existence, and 71 (22.5%) respondents have no experience with it. The most used competing entity to search or advertise real estate offers is the Facebook Marketplace. Their services were used by up to 218 respondents representing 69% of the total number of responses. In turn, the Bazos.SK advertising portal, whose services were used by 131 (41.5%) respondents, could also be considered a strong competitor of the Nehnutelnosti.sk. 20 (6.3%) respondents used the services of the ZoznamRealit.SK advertising portal. The most frequently mentioned reasons for using the services of competing entities are:

- easy use of the Bazos.SK advertising portal, its long-term operation and familiarity with this portal;
- the offer of real-estate agencies is extended by offers that are not available on real-estate portals;
- better price of advertising offers on Bazos.sk;
- easy access to the Facebook Marketplace, the ability to communicate directly with the seller via the social network, the ability to set notifications, for example, the addition of new offers.

The last section found out the consumer suggestions and recommendations for the selected brand. The most common suggestions are:

- better visibility of the price filter for sorting real estate due to its confusing placement on the web portal;
- do not show ads that have already been booked in search results;
- better visibility of marketing activities;
- extension of the price filter with the possibility of sorting prices by squared meters;
- unification of price presentation (some advertisements have the stated rental price without energy, others have this item taken into account in the total price);
- creation of educational content (e.g., educational videos, tutorials and so on).

To verify the statistical hypothesis 1, this study involved the Pearson's Chi-square test of independence to determine whether there is a statistically significant relationship between the use of the brand portal and the following of the brand on social networks by consumers.

Hypothesis 1:

- H_0 : There is no statistically significant dependence between the use of the brand portal and the brand's following on social networks by consumers.
- H_1 : There is the statistically significant dependence between the use of the brand portal and the brand's following on social networks by consumers.

The contingency table was created to determine the dependence, where the frequencies are arranged depending on both characters.

Table 1. Contingency table

The use of the brand portal	The following of the brand on social networks		Total
	Yes	No	
Yes	105	211	316
No	12	50	62
Total	117	261	378

Sources: developed by the authors.

The condition has to apply that at least 80% of the theoretical numbers are greater than 5 and at the same time any frequency cannot be zero, which is met in our case. Significance level α was determined at 0.05. The results of the statistical hypothesis testing are shown in Table 2.

Table 2. Chi-Square test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.668 ^a	1	0.031
Likelihood Ratio	5.014	1	0.025
N of Valid Cases	378		

Sources: developed by the authors.

Finally, the intensity of the association dependence between the variables was measured using Cramer's V (Table 3).

Table 3. Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	0.111	0.031
	Cramer's V	0.111	0.031
N of Valid Cases		378	

Sources: developed by the authors.

Based on the comparison of the significance level with the p-value (Asymptotic Significance), we reject the hypothesis H_0 and accept the alternative hypothesis H_1 , i.e., there is a statistically significant relationship between the variables examined (the use of the brand portal and the following of the brand on social networks by consumers). According to Cramer's V (0.111), the intensity of the dependent of the variables indicates a very low dependency. Similarly, to verify the statistical hypothesis 2, Pearson's Chi-square test of independence was used to determine whether there is a statistically significant relationship between the following of the brand on social networks and the gender of respondents.

Hypothesis 2:

- H_0 : There is no statistically significant dependence between the brand's following on social networks and the gender of respondents.
- H_1 : There is the statistically significant dependence between the following of the brand on social networks and the gender of respondents.

To determine the dependence, the created contingency table consists of the frequencies arranged depending on both characters.

Table 4. Contingency table

The use of the brand portal	Gender of respondents		Total
	Male	Female	
Yes	65	52	117
No	113	148	261
Total	178	200	378

Sources: developed by the authors.

The condition has to apply that at least 80% of the theoretical numbers are greater than 5, and at the same time, any frequency couldn't be zero, which is met in this case. Significance level α was determined at 0.05. Table 5 shows the results of the statistical hypothesis testing.

Table 5. Chi-Square test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.874 ^a	1	0.027
Likelihood Ratio	4.874	1	0.027
N of Valid Cases	378		

Sources: developed by the authors.

Finally, we measured the intensity of the association dependence between the variables by the Cramer's V (Table 6).

Table 6. Symmetric Measures

	Value	Approximate Significance
Nominal by Nominal		
Phi	0.114	0.027
Cramer's V	0.114	0.027
N of Valid Cases	378	

Sources: developed by the authors.

Based on comparing the significance level with the p-value (Asymptotic Significance), hypothesis H_0 was rejected. In turn, alternative hypothesis H_1 was accepted. Thus, there is the statistically significant relationship between the variables examined (the following of the brand on social networks and the gender of respondents). According to Cramer's V (0.114), the dependent variables' intensity indicates a very low dependency. Furthermore, statistical hypothesis 3 was verified using the method testing a single proportion. Table 7 demonstrates the results of verification.

Table 7. Verification of statistical hypothesis 3

Calculation of the sample proportion: $p = \frac{m}{n}$	Satisfaction of the condition: $n * \pi_0 * (1 - \pi_0) > 5$	Test criteria	Critical field	Inequality	Acceptance or rejection of the hypothesis
Hypothesis 3: H_0 : 50% of users of the selected brand portal are female. H_1 : More than 50% of users of the selected brand portal are female.					
$p = 0.53$	$94.5 > 5$	1.1665	1.6449	$1.1665 > 1.6449$	H_0 accepted

Sources: developed by the authors.

Significance level α was determined at 0.05. The test criteria were calculated according to:

$$T = \frac{p - \pi_0}{\sqrt{\frac{\pi_0 * (1 - \pi_0)}{n}}} \quad (1)$$

The critical value for the right-tailed test was found using the normalized normal distribution tables (2).

$$T > z_{2\alpha} \quad (2)$$

Table 7 shows that in hypothesis 3, the inequality does not apply. Therefore, hypothesis H_0 was accepted. It could be said that 50% of users of the Nehnutelnosti.SK portal is female, no more. The data obtained from the analysis and marketing survey determined that the brand Nehnutelnosti.sk has a good

reputation among Slovak consumers, and its competitive position is also good. However, customers have given several reasons why in certain cases, they prefer competitive services. However, the survey results showed that a large number of respondents did not sufficiently perceive the brand's activity in the digital environment, and a significant number of respondents are not even a fan of it on social networks. This fact could be the reason for the very low dependence between the use of the brand portal and the brand's following on social networks by consumers. Besides, according to the obtained results, the significant dependence was assumed between the brand's following on social networks and the gender of respondents. The majority of respondents are female. Thus, it may be appropriate to target digital marketing communication primarily to female customers. However, this assumption was only partially confirmed. The results showed only very low dependence also between the brand's following on social networks and the gender of respondents. Females represent only 50% of portal users.

Based on previous research emphasizing the impact of effective digital marketing on increasing competitiveness using new trends and strategies gradually evolving in the conditions of high-tech industry (Dave, 2018; Hitka et al., 2017; Sceulovs and Gaile-Sarkane, 2011; Sharma and Baoku, 2012; Lekaj and Kiercini, 2017; Kritzinger and Weideman, 2017; Lorente-Paramo et al., 2020; Hammou et al., 2020), the following recommendations for improving the competitive advantage of the advertising portal *Nehnuteľnosti.SK* could be proposed:

1. Content optimization on the YouTube social network. Regular publishing of video formats focused on instructions, tests, procedures, or housing-related inspiration, which would bring the YouTube platform a greater impact on viewers. The channel could gain more subscribers over time. At the same time, conversions would increase due to attracting new customers. It includes performing keyword analysis and, based on the results found, incorporating the most appropriate keywords into the video titles and descriptions to reach as many viewers as possible in the proposed videos. At the same time, it could be appropriate to promote this content through social networks Facebook and Instagram and email campaigns. It also opens up the opportunity to establish new collaborations with other brands. Through YouTube Studio, the brand has a comprehensive evaluation of its content on this platform. With clear metrics, it could track video views, video interaction rates, total channel traffic, and subscriber increments and decrements.

2. Podcasts. Currently, the brand has podcasts focused on interviews with real-estate market experts, which listeners could find on Facebook, Instagram, and some other portals. Due to the lack of information, it would be appropriate to make podcasts visible by extending their availability to podcast applications such as Spotify. The use of podcast applications would bring the brand more viewership and at the same time help to increase popularity and perception.

3. Facebook and Instagram social networks. The brand's content on the social networks earned positive reviews from most respondents, but it has a relatively low audience. Therefore, it is appropriate to focus on content published on social networks to gain new fans. It could contribute to a higher degree of interaction, more effective feedback, and, last but not least, increase awareness of other brand activities promoted on these social media networks.

4. Website. The brand should edit website content based on consumer feedback in the marketing survey. The most common requirement to unify the listing of rental prices and the possibility of filtering the results offers and the availability of a web portal is at least one world language (e.g., English).

5. Mobile application promotion. Based on the findings, the consumers have insufficient information on the existence of a mobile application.

The implementation of the proposed measures may have many benefits for the analyzed brand. From an economic point of view, it includes the acquisition of new customers and fans on social networks. Applying the above suggestions would increase the conversion rate in the more frequent use of the advertising portal services. The non-economic benefits are primarily the improvement of obtaining

feedback from customers, which at the same time streamlines communication between the brand and the customer. In turn, these benefits could lead to building customer loyalty, an overall increase in brand awareness. Thus, the brand could gain a competitive advantage over competing entities.

Conclusions. Digital marketing represents a form of marketing that offers companies a wide range of opportunities for self-presentation, presentation of their products, and establishing contacts with consumers. That is an effective means of obtaining feedback. In this context, brands applying digital marketing gain a clear competitive advantage over brands that use only traditional marketing tools. To achieve set objectives, it is necessary to choose an appropriate marketing strategy using digital tools, oriented to target groups of customers. With an efficient strategy, the brand may achieve business success and gain more benefits. The first crucial limitation in this research is its territorial validity. Secondly, the applicability of the suggested recommendations based on research outcomes is justified only according to the customer's preferences of the analyzed brand. It means that it is not fully possible to apply these claims and recommendations to generally effective practice. However, this limitation could be removed if the research is tailored to consumers of the selected brand. In the case of a foreign brand, national and cultural specifics would be taken into account. In this way, the research results could be considered relevant, and they could be subject to subsequent verification in the specific environment, including foreign. The research outcomes provide an overview of digital marketing and its tools in business practice, which could be considered as the article's main theoretical benefit. It also provides space for further discussions on specific digital marketing activities as a source of competitive advantage.

Based on this, the main managerial recommendation is the effective application of digital marketing in business practice focused on the new trends and strategies that are gradually evolving in the conditions of high-tech industry. It includes customizing the communication according to the specific preferences of targeted customer segments of the brand. It follows from the above that digital marketing as a source of competitive advantage has great potential for further research. It would be appropriate to examine and compare the impact of digital marketing and its perception by consumers in particular fields.

Author Contributions: conceptualization, M. N., J. M. and L. G.; funding acquisition, J. M.; methodology, M. N.; project administration, L. G.; investigation, M. N. and J. M.; resources, L. G.; writing – original draft preparation, M. N., J. M. and L. G.

Funding: This paper is a partial output of the project VEGA no. 1/0064/20: Behaviorism in a socially responsible communication strategy of enterprises.

References

- Dave, N. (2018). 11 Digital Marketing Trends You Can No Longer Ignore in 2019. *Single Grain*. Retrieved from [\[Link\]](#)
- Davidaviciene, V., Pabedinskaite, A., & Davidavicius, S. (2017). Social networks in B2B and B2C communication. *Transformations in business & economics*, 16(1). [\[Google Scholar\]](#)
- Hammou, I., Aboudou, S., & Makloul, Y. (2020). Social media and intangible cultural heritage for digital marketing communication: Case of Marrakech crafts. *Marketing and Management of Innovations*, 1, 121-127. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Harrigan, P., Daly, T. M., Coussemment, K., Lee, J. A., Soutar, G. N., & Evers, U. (2021). Identifying influencers on social media. *International Journal of Information Management*, 56, 102246. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Hitka, M., Lorincova, S., & Lizbetinova, L. (2017). Comparison of Using Social Networks for Seeking Employment in Italy and Slovakia. *Proceedings of the 30th International Business-Information-Management-Association Conference* (pp. 1579-1586), Madrid, Spain. [\[Google Scholar\]](#)
- Hitka, M., Lorincová, S., Potkány, M., Balázová, Ž., & Caha, Z. (2021). Differentiated approach to employee motivation in terms of finance. *Journal of Business Economics and Management*, 22(1), 118-134. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Janouch, V. (2010). *Internet Marketing: Promote yourself on the web and social networks*. Brno: Computer Press.
- Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 3.0. Moving from Traditional to Digital*. Hoboken: John Wiley & Sons.
- Kritzinger, W. T., & Weideman, M. (2017). Parallel search engine optimisation and pay-per-click campaigns: A comparison of cost per acquisition. *South African Journal of Information Management*. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Lekaj, E., & Kercini, D. (2017). The impact of social media on e-commerce. *Proceedings of the 5th International Academic Conference on Social Science, Multidisciplinary and European Studies (MIRDEC)* (pp. 53-58), Vienna, Austria.
- Lizbetinová, L. (2014). The quality of communication in the context of regional development. *Deturope-The central european journal of regional development and tourism*, (3). [\[Google Scholar\]](#)

- Lombardi, C. M., & Hurlbert, S. H. (2009). Misprescription and misuse of one-tailed tests. *Austral Ecology*, 34(4), 447-468. [[Google Scholar](#)] [[CrossRef](#)]
- Lorente-Páramo, Á. J., Chaparro-Peláez, J., & Hernández-García, Á. (2020). How to improve e-mail click-through rates—A national culture approach. *Technological Forecasting and Social Change*, 161, 120283. [[Google Scholar](#)] [[CrossRef](#)]
- Macfie, B. P., & Nufrio, P. M. (2006). *Applied Statistics for Public Policy*. ME Sharpe. Inc., Armonk, New York, 536. [[Google scholar](#)]
- MacGregor, R. K., Sroka, W., & MacGregor Pelikánová, R. (2020). A comparative study of low-level management's attitude to marketing and innovations in the luxury fashion industry: pro-or anti-CSR?. *Polish Journal of Management Studies*, 21. [[Google Scholar](#)] [[CrossRef](#)]
- McHugh, M. L. (2013). The chi-square test of independence. *Biochemia medica*, 23(2), 143-149. [[Google Scholar](#)] [[CrossRef](#)]
- Nair, K., & Gupta, R. (2021). Application of AI technology in modern digital marketing environment. *World Journal of Entrepreneurship, Management and Sustainable Development*. [[Google Scholar](#)] [[CrossRef](#)]
- Oklander, M., & Oklander, T. (2017). Segmentation and Communication in digital marketing. *Marketing and Management of Innovations*, 3, 69-78. [[Google Scholar](#)] [[CrossRef](#)]
- Prikylova, J., & Jahodova, H. (2010). *Modern marketing communication*. Praha: Grada Publishing.
- Rimarcik, M. (2007). *Statistics for practice*. Marian Rimarcik: Kosice, Slovakia.
- Ruxton, G. D., & Neuhäuser, M. (2010). When should we use one-tailed hypothesis testing?. *Methods in Ecology and Evolution*, 1(2), 114-117. [[Google Scholar](#)] [[CrossRef](#)]
- Ryan, D., & Jones, C. (2009). *Understanding digital marketing: Marketing strategies for engaging the digital generation*. London: Kogan Page Limited. [[Google Scholar](#)]
- Ščeuľovs, D., & Gaile-Sarkane, E. (2011). Social Networks for Business: Tool for Enterprise Competitiveness Increase. *Current Issues in Management of Business and Society Development*, Riga, 156-161. [[Google Scholar](#)]
- Scott, D. M. (2010). *The new rules of marketing and PR*. Hoboken, New Jersey: John Wiley & Sons. Retrieved from [[Link](#)]
- Sharma, G., & Baoku, L. (2012). E-Marketing on Online Social Networks and Ethical Issues. *International Journal of Online Marketing (IJOM)*, 2(4), 1-14. [[Google Scholar](#)] [[CrossRef](#)]
- Shpak, N., Kuzmin, O., Dvulit, Z., Onysenjo, T., & Sroka, W. (2020). Digitalization of the Marketing Activities of Enterprises: Case Study. *Information*, 11(2), 109. [[CrossRef](#)]
- Shpak, N., Seliuchenko, N., Kharchuk, V., Kosar, N., & Sroka, W. (2019). Evaluation of Product Competitiveness: A Case Study Analysis. *Organizacija*, 52(2), 107-125. [[Google Scholar](#)]
- Stokes, R. (2011). *eMarketing: The essential guide to digital marketing*. Cape Town: Quirk eMarketing (Pty) Ltd. Retrieved from [[Link](#)]
- Vrtana, D., Krizanova, A., Skovagova, E., & Valaskova, K. (2020). Exploring the Affective Level in Adolescents in Relation to Advertising with a Selected Emotional Appeal. *Sustainability*, 12(19), 8287. [[Google Scholar](#)] [[CrossRef](#)]

Маргарета Наданьова, Ph.D., доцент, Жилінський університет, Словачька Республіка

Яна Масрова, Ph.D., доцент, АМБІС Університет, Чеська Республіка

Любція Гаянова, Ph.D., Жилінський університет, Словачька Республіка

Цифровий маркетинг як конкурентна перевага: на прикладі Словачької Республіки

У статті проаналізовано вплив цифрового маркетингу на розвиток компанії. Авторами наголошено, що стрімке зростання доступу до мережі Інтернет в останнє десятиліття мало суттєвий вплив на зміни купівельної поведінки та комунікації зі споживачами. Таким чином, застосування інструментарію цифрового маркетингу для покращення комунікації з наявними клієнтами та залучення нових в умовах високої конкуренції є актуальним. Головною перевагою цифрового маркетингу над традиційним є ефективніший механізм налагодження зв'язку із клієнтами та більший вплив на їх рішення у онлайн-середовищі. Головною метою дослідження є аналіз особливостей цифрового маркетингу на прикладі словацького бренду, визначення сприйняття словацькими споживачами цифрового маркетингу та формування рекомендацій для більш ефективного застосування інструментарію цифрового маркетингу у досліджуваній компанії. Для досягнення поставленої мети проведено теоретичний аналіз наукових напрацювань словацьких та міжнародних авторів. Вихідні дані для дослідження сформовано на основі наукових публікацій, професійних видань, щорічних звітів компанії та даних статистичної служби. Для визначення рівня сприйняття інструментів цифрового маркетингу споживачами, у ході дослідження проведено анкетування словацьких споживачів (старших 18 років). Джерелом даних для формування демографічного профілю споживачів стала державна служба статистичних даних Словачької Республіки. У ході дослідження застосовано загальнонаукові методи (порівняльний аналіз, дедукція та індукція) для опрацювання теоретичних даних, тоді як математико-статистичні методи – для оцінювання результатів анкетування, застосовуючи інструментарій програмного забезпечення IBM SPSS Statistics. За результатами анкетування визначено рівень обізнаності, відношення та задоволеність споживачів досліджуваним брендом. Результати теоретичного аналізу та анкетування засвідчили, що головними перевагами інструментів цифрового маркетингу є зростання конкурентних переваг компанії, підвищення рівнів лояльності клієнтів до бренду та його впізнаваності.

Ключові слова: цифровий маркетинг, конкурентна перевага, маркетингові комунікації, соціальні мережі, споживачі.