

Healthy Food Marketing Strategy on Online Platforms: Key Insight into Slovak Customers

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Abstract: Online marketing is crucial for companies in the healthy eating sector, where increasing competition demands effective communication and strong brand building. This study highlights the importance of marketing strategies on online platforms and evaluates their impact on consumer behavior. It analyzes both rational and emotional factors that influence consumer preferences when choosing healthy food products and explores how businesses can leverage these factors to optimize their online marketing strategies. To confirm the research hypothesis, the study employed methods that analyze digital marketing strategies, including the use of advanced analytics, personalized content, and engagement through social media to better understand consumer needs. The results show that businesses can improve their online presence by creating visually appealing, authentic content, engaging influencers, and utilizing consumer feedback. These findings offer a guide to effectively applying digital tools in the competitive healthy food industry.

Keywords: digital marketing, marketing communication, marketing strategies, online communication channels, online marketing activities.

JEL Classification: M31, M37

1 Introduction

The aim of this paper is to highlight the importance of marketing strategies for healthy food on online platforms, focusing on current trends in digital marketing communication, and to evaluate their impact on consumer behavior. In recent years, healthy nutrition has become one of the most important aspects of modern lifestyle, with consumers increasingly seeking products that support their health and well-being. The significance of marketing in this area is growing due to increasing competition and the rising interest in healthy foods. However, despite the current high interest in healthy nutrition, marketing strategies targeting this sector still face challenges in effectively communicating with consumers, who are influenced by various emotional and rational factors in their decision-making. This paper focuses on analyzing these factors and explores how businesses can leverage digital tools such as personalized ads and social media to optimize their online marketing strategies. The research also addresses the gaps in the current understanding of the mechanisms influencing consumer behavior, particularly in the field of healthy food marketing. Such an approach is essential for businesses to adapt to current trends and meet the growing demands of consumers for healthy and sustainable products.

Studies have shown that digital marketing on social media mainly targets ultra-processed foods and contributes to increased consumption of unhealthy items. This marketing influences product recognition, consumer opinions and preferences, purchase intentions, food choices and overall eating habits. Botelho (2022) Nutrition is a factor of the external environment that significantly affects the quality of life of a person. Proper nutrition is an essential prerequisite for healthy human development. The way of nutrition and its trends have changed in the past under the influence of social, societal changes (Rovný I., 2004).

Consumers tend to believe that healthy food choices help them to achieve long-term health goals. Manufacturers have noticed this trend and see healthy food as a growing consumer market and have expanded investment in healthy food production. However, marketing performance shows that healthy food do not sell as well (Xiaofei, 2024). Marketing communication is constantly evolving and finding new ways to capture consumers attention and generate their interest in products. In marketing, visual elements play a key role in creating emotional reactions and motivations in consumers. These visuals have a strong potential to influence how consumers perceive a product,

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decide to buy it and form an emotional attachment to it (Ripinka, 2024). People around the world are increasingly active and connected through web technologies and social media. At the same time, companies are beginning to see these innovations as powerful tools to improve communication with their customers (Alalwan, A. A., 2017). As a result of this growth companies in all sectors of the economy are forced to use social media to keep up with customer behaviour and stay connected (Matikiti, R. K., 2016). The online industry has been very proactive in the way it develops new markets and cultivates consumer eating habits (Li, 2020). During the COVID-19 pandemic, digital marketing communication, i.e. communication between businesses and consumers through digital or electronic media, has seen significant growth. This phenomenon has been analysed in detail in the study by Shankar et al. (2022) who highlight that the global health crisis has accelerated the transition to digital platforms, with many businesses having to quickly adapt their marketing strategies to the new conditions. The limitations of physical contact and the increase in online purchases have created new challenges and opportunities in digital communication, leading to a significant increase in the use of digital tools and platforms. This trend reflects not only the adaptation of the business environment to the crisis, but also a permanent change in consumer behaviour, who increasingly prefer digital channels for interacting with businesses. Sheremetyeva et al. (2021) suggest that the internet has become a key marketing tool for firms, with the digitisation of marketing enabling customers to access products and brands at the very moments they need them. Food marketing strongly influences the dietary preferences of both children and adults, with the promotion of unhealthy foods being a major contributing factor to rising obesity. Nevertheless, there are gaps in knowledge about the impact of marketing strategies aimed at promoting healthier food. As Folkvord (2020) notes, although junk food marketing has been extensively researched, less is known about the effectiveness and mechanism by which healthy food marketing operates. This study focuses on research over the past five years, with an emphasis on the impact of healthy food marketing on eating behaviour and an exploration of the psychological and behavioural mechanism through which it operates. This review study focuses on research over the past five years, with an emphasis on the impact of healthy food marketing on eating behaviour and an exploration of the psychological and behavioural mechanisms through which it operates. Understanding these dynamics is key to designing effective interventions aimed at improving public health through marketing strategies.

According to the research, 61.16% of respondents are aware of what constitutes 'innovative or functional' food. They perceive these foods as healthier and of higher quality, though they are often seen as more expensive. Consumers have also noticed an increasing presence of organic food in stores. The largest group of consumers in Slovakia (48.77%) consists of those who consume all types of food without engaging in rational eating. A significant portion, however, (43.5%) consists of individuals who prefer a balanced diet Horská et al. (2021).

2 Methods

In this study, we explore the importance of digital marketing, particularly the latest trends in marketing communications, and their impact on consumer behaviour. By analyzing both rational and irrational factors that drive consumer preferences, it seeks to understand how businesses can effectively promote their products on online platforms. The insights gained will help marketers craft strategies that resonate with consumers, leveraging digital tools to enhance engagement and conversion rates. Ultimately, this research aims to provide a comprehensive guide for businesses looking to succeed in the competitive online marketplace.

For the processing and evaluation of the questionnaire survey we defined and then verified the following research assumptions:

Research assumption 1: We assume the existence of a relationship between the media campaign and the respondents' decision to consume healthy products.

Primary and secondary sources of information were collected and used to achieve the stated objective. Secondary data were obtained from studies and articles by domestic and foreign authors, WoS and SCOPUS databases and available internet sources.

The questionnaire was processed through Google Forms and distributed through the Facebook account. The questionnaire survey was conducted on a sample of 301 respondents. Of this number of respondents, 60% were female and 40% were male (Figure 1). This may be due to the fact that women are more interested in healthy eating compared to men.

Period of data collecting

In order to verify the importance of marketing activities, with a particular emphasis on the area of healthy nutrition, we conducted a questionnaire survey, which served as the main tool for data collection. The questionnaire was distributed among 301 respondents, which represented a relevant sample for our study.

Data collection took place between 8 November 2023 and 31 December 2023. During this period, respondents were contacted electronically, ensuring anonymity and voluntary participation in the survey. Questions on healthy eating explored respondents' awareness of the importance of good nutrition, their attitudes towards marketing campaigns promoting healthy eating, and the impact of these campaigns on their purchasing behaviour.

We further processed data from the questionnaire survey into tables and graphs and interpreted the results. The first step was to verify the representativeness of the sample according to the gender of the respondents using the Chi-square test of good agreement.

- Chi X2 squared contingency was used to test for the existence of statistical dependence between variables at the significance level $\alpha = 0.05$. In chi x2 square contingency test method, it is necessary to calculate the test criterion as:

$$\chi^2 = \sum_{i=1}^k \frac{(E_i - T_i)^2}{T_i} \quad (1)$$

Where:

χ^2 – test statistic,

E_i – empirical frequencies,

T_i – theoretical frequencies.

In Microsoft Office Excel, using the CHINV function at a significance level of $\alpha = 0.05$, we calculate the critical value and compare it with the test statistic. If the test statistic is greater than the critical value, we reject the assumption. If the test statistic is less than or equal to the critical value, accept the assumption. (Matejkova et al. 2018)

We chose the Friedman test because it is an appropriate statistical method for comparing several baseline sets based on dependent samples. It is a nonparametric analogue of the two-factor analysis of variance. The calculation of the test characteristic as follows :

$$F = \left(\frac{12}{n \cdot k \cdot (k + 1)} \right) \cdot \sum_{j=1}^k R_j^2 - 3 \cdot n \cdot (k + 1) \quad (2)$$

Where :

- n - sample size

- k - number of variants

- R_j - sum of the ranks in the column

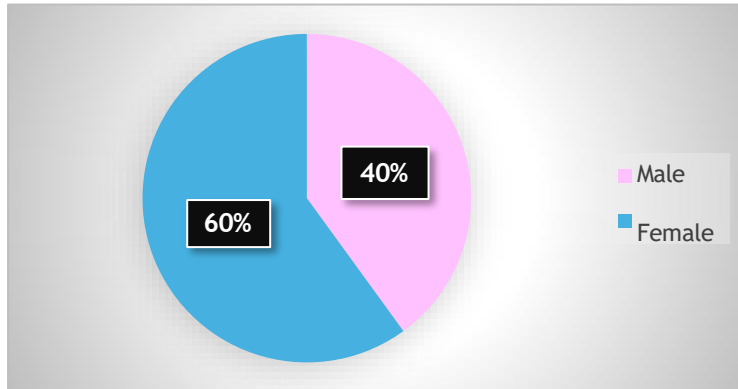
Test evaluation : if $F \geq \chi^2(\alpha, k-1)$ comes out, hypothesis H_0 is rejected.

- We used Nemenyi's method as an addition to Friedman's test to detect statistically significant differences.

3 Research results

In the realm of digital marketing, effectively promoting on online platforms has become essential for businesses, especially in the healthy food sector. This section explores the findings related to digital marketing strategies and their impact on consumer behavior.

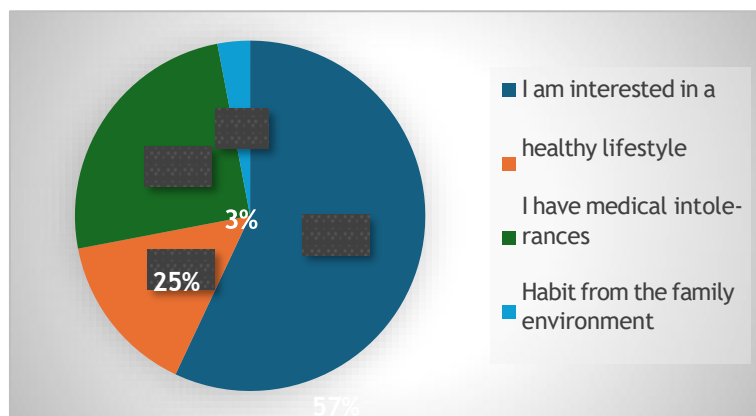
Figure 1 Gender of respondents



Source: Own processing

Next, we asked why respondents chose to consume healthy products. Respondents could add their own answer to the predetermined answers. Most respondents - 57% (172 people) - said that they were interested in a healthy lifestyle. 74 respondents, which is 25%, mentioned healthy eating as a habit from their family background. Due to health intolerances, 46 persons had to start consuming healthy products, which is 15%. The remaining respondents took the opportunity to express themselves, where the answers were: weight loss after children, exercise, personal decision, influence of an influencer who started eating healthy, more varied diet, overweight, improvements in health and appearance, autoimmune disease, working as a fitness trainer, healthy eating, or trend, trying something new, balanced diet. 3% of the respondents did not address their diet, which was 9 people. ²

Figure 2 Consumption decision for healthy products

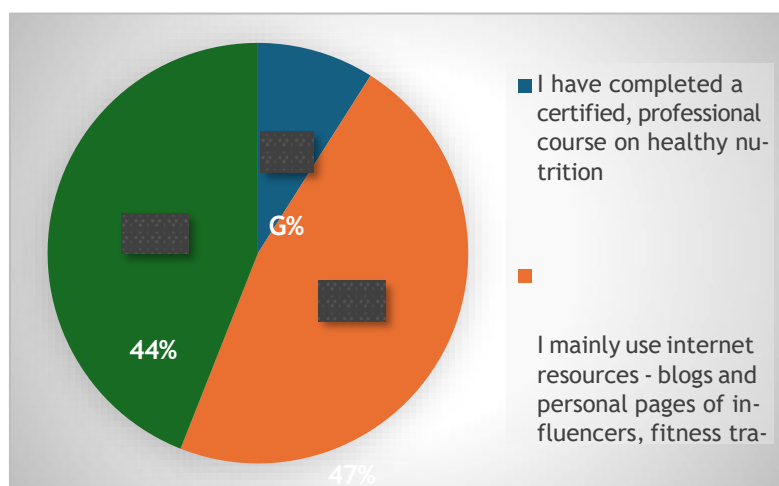


Source: Own processing

²Data collected through the questionnaire applied to prepare this text.

We asked respondents how they try to change their eating habits and lifestyle (in case of their own dissatisfaction). The most frequent answer was the use of internet resources: blogs, personal influencer sites or fitness coaches. 47% of respondents (101 respondents in total) answered this way. This may be due to the fact that they engage in transformations with nutrition counsellors with precisely set "diets" or seek inspiration for healthy foods on blogs. The second most frequent answer was consultation with a doctor, nutrition advisor trainer (goal, change of diet, physical activity, body weight), which was indicated by 44%, which is 96 respondents. A certified, professional course on healthy eating was taken by 9% of respondents (19 persons).³

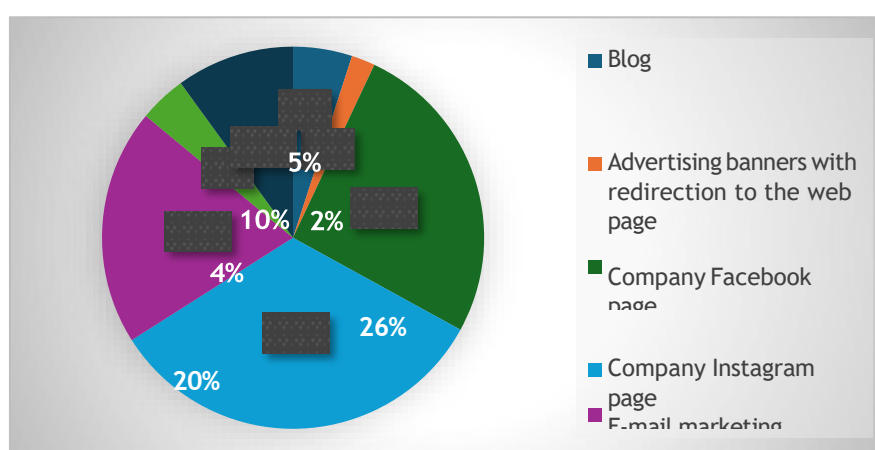
Figure 3 Mode of dietary and lifestyle change



Source: Own processing

In the survey, we asked respondents which online promotion tools they think are the most effective. The Instagram business page was mentioned by 99 respondents, which represents 33% of the respondents. The second most effective online promotion tool, according to respondents, is the company Facebook page, with 80 people marking the answer, representing 26% of respondents. The reason for choosing these two answers may be due to the fact that respondents get their inspiration for healthy food on these networks, where quality content in the area of healthy eating is added daily, as well as advertisements from influencers. Email marketing was identified by 60 respondents, representing 20%. Other effective tools according to respondents are: influencer marketing (10%), blog (5%), newsletter (4%) and banner ads with redirection to the website (2%).⁴

Figure 4 Effectiveness of online tools



Source : Own processing

³ Data collected through the questionnaire applied to prepare this text.

⁴ Data collected through the questionnaire applied to prepare this text.

We used statistical research assumptions because we wanted to find out what impact healthy foods have on online platforms. In this way, we focused on analyzing the effectiveness of digital marketing tools and strategies around healthy eating to better understand how these factors influence consumer decision-making.

Assumption 1: We assume the existence of a relationship between the media campaign and the respondents' decision to consume healthy products. To verify it, we used Chi X2 square contingency test to see whether its evaluation of the first assumption is confirmed or not.

Table 1 shows the results from the statistical test where we addressed the difference between the influence/dependence between eating healthy products and which contained the individual responses. The table includes the number of respondents for each combination of responses to questions related to health intolerances, consumption habits from family background and interest in healthy lifestyle.

Table 1 ChiX2 Square Test

ChiX2 Square test			
	Value	Degree of freedom df	Asymptotic meaning (2-sided)
Pearson Chi	6,563 ^a	2	0,038
Likelihood Pomer	6,594	2	0,037
N valid cases	309		

Source: Own processing

The value of asymptotic significance for the two tests is approximately 0.038 and 0.037, which is below the threshold often considered the cutoff value for statistical significance. This indicates that there is no dependency between the media campaign and the respondents' decision to consume healthy products, so we can accept the stated assumption is significant. ⁵

Assumption 2: We assume that there is a statistically significant difference in purchase preferences. We used Friedman's test to verify it.

Table 2 Friedman test

Q (Observed value)	374,028
Q (Critical value)	9,488
DF	4
P-value	<0,0001
alpha	0,05

Source: own processing

Using Friedman's test, the results (p-value=<0.0001) confirmed that there are statistically significant differences in purchase preferences . Furthermore, we subsequently subjected these factors to a non- parametric contrast test using Neményi's method.

⁵ Data collected through the questionnaire applied to prepare this text.

Figure 3 Neményi method

Sample	Frequency	The sum of the values	Average of values	Groups				The importance of the factor
Taste	309	639,000	2,068	A				The most important
Price	309	846,500	2,739		B			
Nutritional value	309	849,000	2,748		B			
Recommendation	309	1087,000	3,518			C		
Advertising	309	1213,500	3,927				D	The least important one

Sources : own processing

The individual factors were divided into four groups (A, B, C, D) according to importance. Table 3 shows that respondents ranked taste the most important, while advertising was considered the least important. This may indicate that consumers rely more on personal experience and recommendations than on advertising campaigns, which may appear exaggerated. In addition, the availability of information from other sources, such as reviews and social media, reduces the perceived value of advertising in healthy food consumption decisions.

Discussion

According to Liu (2023), food is one of the most discussed topics on social media. Therefore, more and more brands are looking for foodbloggers to market their food products and services. People like to look at food. Videos and photos that highlight tasty dishes have a great success rate nowadays.

Patrick et.al (2024) writes that consumer preferences are constantly evolving in the dynamic food industry where competition is fierce. This is why successful food marketing now relies on more than just product quality and innovation. It also depends on aligning brand values with consumer expectations.

Rosário et.al (2021) writes about just that, it is a multifaceted process that involves researching market trends, developing products that meet consumer demands, setting competitive prices, choosing the right places to sell, and promoting those products through a variety of communication channels.

4 Conclusion

Promoting food online has become an indispensable element in the modern food industry, with businesses ranging from restaurants to small food producers leveraging the internet's vast potential. As outlined in the literature review, the digital landscape offers an unprecedented opportunity to reach target audiences, build brand awareness, and foster customer loyalty. Theories on digital marketing strategies, such as those discussed by Chaffey and Ellis-Chadwick (2022), emphasize the importance of visual appeal, content consistency, and audience engagement as key components for success in online food promotion. The first step in crafting an effective online food strategy is creating attractive and unique content, a concept supported by the aesthetic aspect of consumer behavior. As discussed earlier, people often "eat with their eyes," and well-presented food can trigger emotional responses, leading to higher engagement rates. The connection between visual marketing and emotional engagement aligns with the emotion-based marketing theory, which suggests that appealing visuals evoke both curiosity and desire in consumers, prompting them to interact more with the content. Furthermore, the importance of storytelling in online food promotion connects to the narrative marketing theory, which emphasizes the power of brand stories in building deeper consumer relationships. Consumers increasingly seek transparency and values in the brands they support, underscoring the relevance of ethical production, sustainability, and local sourcing, as identified by various researchers on sustainable consumer behavior (e.g., White et al., 2019). Social media platforms like Instagram, Facebook, and TikTok serve as the primary channels for food brands to communicate with their communities. As explored in the theoretical background, these platforms offer diverse ways to engage with audiences through content sharing, customer feedback, and influencer collaborations. The social influence theory demonstrates that influencers and food bloggers can act as powerful agents in shaping consumer attitudes and driving purchasing decisions, often more so than traditional advertising methods. As such, engaging with influencers allows brands to build credibility and trust, which are pivotal for establishing long-term consumer loyalty. Finally, customer reviews and feedback play an essential role in online food marketing, reflecting the importance of reputation management in digital marketing. Consumer opinions not only impact brand reputation but also influence purchasing decisions. Responding to both positive and negative reviews promptly, as suggested in the theoretical discussions on online trust-building is crucial to maintaining a transparent and trustworthy relationship with customers. In conclusion, the success of online food promotion hinges on adapting to current trends, understanding consumer needs, and effectively using

technology to streamline marketing efforts. The theoretical frameworks reviewed in the literature, including visual marketing, narrative storytelling, social influence, and reputation management, provide valuable insights for developing strategies that can drive engagement, loyalty, and growth in a competitive digital space. By integrating these theoretical perspectives with practical applications, businesses—whether small or large—can achieve long-term success in the dynamic and evolving food industry.

References

- Alalwan, A. A. (2017). Social Media in Marketing: A Review and Analysis of the Existing Literature. *Telematics and Informatics*, 34(7), 1177-1190
- Almeida, A. M., & Teixeira, L. (2020). Digital marketing and sustainable development: A systematic literature review. *Sustainability*, 12(14), 5528. doi:10.3390/su12145528
- Botelho, L. V., Freitas, J. V., & Camara, A. O. da. (2022). Digital marketing of online food delivery services in a social media platform before and during COVID-19 pandemic in Brazil. *Public Health Nutrition*, Published online 10 October 2022. doi:10.1017/S1368980023000940.
- Chaffey, D., Ellis-Chadwick, F. *Digital Marketing*. 9th ed. Harlow: Pearson Education, 2022. Retrieved from: https://www.pearson.com/nl/en_NL/higher-education/subject-catalogue/marketing/chaffey-chadwick-digital-marketing.html
- Francisco, C. (2021). Influence of social media as a marketing platform for food-related products in the new normal. *ResearchGate*. doi:10.13140/RG.2.2.21505.66407.
- Folkvord, F., Anschutz, D. J., & Buijzen, M. (2020). Attentional bias for food cues in advertising among overweight and hungry children: An explorative experimental study. *Food Quality and Preference*, 79, 103792. doi: 10.1016/j.foodqual.2019.103792.
- Horská, E., Predanócyová, K., Šedík, P., Grunert, K. G., & Hupková, D. (2023). Consumer perception of functional foods and determinants of functional foods consumption in the Slovak Republic. *British Food Journal*, 125(7), 2478-2492. doi:10.1108/BFJ-07-2022-0656.
- Li, X., Wang, S., Ruan, Y., Pan, Y., & Huang, Y. (2024). Taste or health: The impact of packaging cues on consumer decision-making in healthy foods. *Appetite*, 188, 107636. doi: 10.1016/j.appet.2024.107636.
- Liu, J., Yang, Z., Liu, S., Zhang, T., Chen, C., & Xiao, Y. (2023). Food and beverage cues in digital marketing: Special considerations for social media, gaming, and livestreaming environments. *Frontiers in Nutrition*, 10, 1325265. doi:10.3389/fnut.2023.1325265.
- Matejková, E. – Pietriková, M. – Poláková, Z. (2018): *Praktikum zo štatistiky*. 4. edition. Nitra: Slovenská poľnohospodárska univerzita.
- Martinho, V. J. P. D. (2020). Food marketing as a special ingredient in consumer choices: The main insights from existing literature. *Foods*, 9(11), 1651. doi:10.3390/foods9111651.
- Matikiti, R. K. (2016). The Usage of Social Media as Marketing Tool in Two Southern African Countries. *Development of Southern Africa*, 33(5), 740-755.
- Montenegro de Souza, F., Rauber, F., Santos, F. S., Gallani, M. C., & Dean, M. (2021). Digital marketing of online food delivery services in a social media platform before and during COVID-19 pandemic in Brazil. *Public Health Nutrition*, 24(11), 2269-2276. doi:10.1017/S1368980020004651.
- Patil, R. K., & Szocs, C. (2024). Effects of bitten food images in marketing communications. *Appetite*, 188, 107566. doi: 10.1016/j.appet.2024.107566.
- Rosário, A., & Raimundo, R. (2021). Consumer marketing strategy and e-commerce in the last decade: A literature review. *e-Commerce Analytics*, 16(7), 3003-3024. doi:10.3390/jtaer16070164.
- Rovný, I. (2004). Výživa, potraviny, spoločné stravovanie: Retrospektíva a perspektíva. *Časopis Fakulty verejnej správy Žilinskej univerzity*, 2(4), 22-30.
- Shankar, V., Grewal, D., Sunder, S., Fossen, B., Peters, K., & Agarwal, A. (2022). Digital marketing communication in global marketplaces: A review of extant research, future directions, and potential approaches. *International Journal of Research in Marketing*, 39(2), 541-565. doi: 10.1016/j.ijresmar.2021.12.005.
- Sheremetyeva, E. N., Gorshkova, L. A., & Mitropolskaya-Rodionova, N. V. (2021). Digital Marketing Transformation: Trends and Realities. In *Springer Nature* (pp. 497-504). doi:10.1007/978-3-030-83175-2_62
- White, M., Thompson, G., & Henderson, J. *Consumer Behavior in Digital Marketing: Emerging Trends and Theories*. Journal of Business and Marketing, 2019. Retrieved from: <https://www.scirp.org/reference/referencespapers?referenceid=3413574>.