
Factors Influencing Consumers' Purchase Decisions Regarding Eco-Friendly Products in Online Sales

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Abstract:

Purpose: The purpose of this article is to identify key factors influencing consumer purchasing decisions regarding organic products in online sales. The analysis aims to understand which determinants have the greatest impact on consumer choices in the context of the growing interest in organic products.

Design/Methodology/Approach: The research was conducted using a survey method on a sample of 620 respondents. Statistical analysis was used, including mode calculation, to identify the most frequently selected values for individual factors influencing purchase decisions.

Findings: The results indicate that the most important factors influencing consumer purchasing decisions are price, product quality and availability of information about their environmental aspects. User reviews and delivery speed also play a significant role in the decision-making process.

Practical Implications: The results obtained have significant implications for companies offering organic products online, helping them to better adapt their marketing and operational strategies. Understanding consumer preferences can help increase sales and customer loyalty.

Originality/Value: The article provides an original analysis of the determinants of consumers' purchasing decisions in the context of organic products sold online, which is an important contribution to the development of knowledge on sustainable consumption and e-commerce.

Keywords: Purchasing decisions, consumers, online sales, organic products, internet.

JEL codes: I21, I23.

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1. Introduction

The topic related to consumers' purchasing decisions regarding green products in online sales is currently becoming increasingly important. The growing ecological awareness of society and the growing interest in a sustainable lifestyle mean that consumers are increasingly looking for products that are environmentally friendly (Hu, Yan, Guo, Cui, and Dong, 2017).

In this context, it is important to understand what factors influence their purchasing decisions and what determinants encourage them to choose green products in online sales channels.

The Internet, as a dynamically developing commercial space, creates new opportunities for both consumers and companies offering organic products. The growth of online sales and the global reach of this channel allows for the wide dissemination of organic products, which affects their availability and differentiation.

However, in order for companies to effectively compete in this growing market, they must understand consumer preferences, as well as what factors play a key role in the decision-making process to purchase organic products (Gao, Zhang, Gong, and Li, 2020).

Studying the determinants of consumer purchasing decisions in the context of online organic products is important for several reasons. First, it allows for the identification of those factors that most motivate consumers to choose organic products, such as price, quality, opinions of other users or availability of information.

Second, the analysis of these determinants allows companies to adjust their marketing and operational strategies so that they respond to the real needs of customers and strengthen their involvement in pro-ecological activities. Finally, understanding consumer purchasing behavior in the online space is crucial for the future of the organic products market, because it determines how this sector will develop in the face of growing consumer expectations and global ecological challenges.

For this reason, the study, which focuses on identifying key factors influencing purchasing decisions, is an important contribution to the development of knowledge on e-commerce and the market for ecological products.

The analysis of these factors also allows for a better understanding of which aspects are most important for consumers, which in turn can contribute to a more effective design of the offer of environmentally friendly products and the promotion of sustainable consumption practices in the online space.

2. Literature Review

2.1 The Modern Consumer on the Web

The modern online consumer is characterized by significantly different behaviors and expectations compared to the traditional consumer. The development of digital technologies and widespread access to the Internet have changed the way consumers make purchasing decisions and interact with brands. The online consumer has much more information and tools at their disposal, which makes the decision-making process more conscious and at the same time more complex (Borowski and Karlikowska, 2023).

One of the key aspects of the modern online consumer's behavior is the need for immediate access to information. Consumers can compare prices, read product reviews, learn about the features of a given item, and check availability in different stores at any time (Akkaya, 2021). This easy access to online resources means that consumers expect fast, clear, and comprehensive information to help them make a decision.

They also expect the purchasing process to be smooth and seamless, so user interfaces must be intuitive and transactions must be carried out quickly and securely (Lambri, Sironi, and Teti, 2024).

The modern online consumer is also more demanding in terms of personalization of the offer (Adamik, 2019). Thanks to advanced AI algorithms, companies can adapt their marketing messages, advertisements and product recommendations to the individual preferences of the user. The consumer expects brands to understand their needs and adapt the offer to their preferences, which means that personalization is not only welcome, but even expected in the digital shopping environment. In this context, customer loyalty increasingly depends on the extent to which the brand is able to meet these personalized expectations (Attar, Almusharraf, Alfawaz, and Hajli, 2022).

Trust in the brand and security of transactions are other important elements of the modern consumer's behavior. In the era of numerous threats related to cybercrime, consumers expect that transactions will be protected and their personal data will remain safe. Therefore, companies need to invest in security technologies and transparency of privacy policies to build trust of their customers (Bhati, Hansen, and Chan, 2017).

It is also worth noting that online consumers increasingly make purchasing decisions based on other users' opinions. Review platforms, social media, and online forums play a significant role in the decision-making process (Brown, 2009). Consumers closely follow product opinions and other people's experiences, which means that brands must carefully take care of their online image and monitor customer

feedback. Negative opinions can quickly reduce trust, which is why online customer service, as well as active image management, are key elements of a modern business strategy (Fitzgerald and Stol, 2017; Loeser, 2013; Almahamid, Awwad, and Adams, 2010).

The change in consumer behavior on the Internet is also due to the growing social and ecological awareness (Prahalad and Ramaswamy, 2004). More and more people pay attention to how their purchases affect the natural environment and what values the brands they use represent. As a result, consumers are more willing to choose products from companies that demonstrate commitment to sustainable development, ethical production and social responsibility (Kt and Sivasubramanian, 2023).

The modern online consumer is therefore an aware, well-informed and demanding person. They use modern technologies to compare products, expect a personalized offer and transparency from brands, and also pay attention to aspects related to security, shopping convenience and social responsibility. All this means that companies must dynamically adapt their strategies to meet these growing expectations and provide positive shopping experiences, which will be key to building long-term customer loyalty (Awasthi and Awasthi, 2023).

2.2 Online Organic Products Market

The online organic products market is a segment that is developing dynamically, responding to the changing needs of modern consumers (Chen and Siau, 2020). The growing interest in ecology, sustainable development and a responsible lifestyle means that more and more consumers are looking for products that meet specific ecological standards.

Online sales play a key role here, enabling access to a wide range of organic products regardless of location, which means that companies can reach a larger group of consumers interested in a healthy and conscious lifestyle (Patón-Romero, Baldassarre, Piattini, and Rodríguez de Guzmán, 2017).

Organic products cover a variety of categories, from organic food to natural cosmetics, clothing, and household items made from environmentally friendly materials (Joiner, 2019). A key feature of these products is their compliance with the principles of sustainable development, meaning that they are manufactured with respect for the natural environment, often from renewable raw materials, with minimal use of chemicals and environmental pollution.

This approach is attracting an increasing number of consumers who are concerned about the impact their purchases have on the planet and future generations (Ojo, Raman, and Downe, 2019).

E-commerce, as a sales tool, allows companies offering organic products to

effectively reach a specific group of consumers who are interested in such products but may have limited access to them in traditional stores. For this reason, the market for organic products in online sales is growing faster than other segments, because the Internet provides an opportunity to reach consumers in regions where the organic offer is limited.

Companies operating in this sector increasingly offer a wide range of products available globally, which in turn contributes to the increase in market competitiveness (Petrescu, Bilcan, Petrescu, Popescu, and Anghel, 2020).

One of the key factors driving the growth of the organic products market in online sales is the growing awareness of consumers about the impact of their consumption choices on health and the environment. Consumers who decide to buy organic often attach great importance to the origin of products, their production methods and brand transparency.

Therefore, companies must not only ensure the appropriate quality of products, but also provide detailed information on production processes, organic certificates and social responsibility (Nath and Agrawal, 2020).

An important aspect of this market is also the issue of logistics (Raschke, 2010). Due to the increasing number of online orders for ecological products, there is a growing demand for sustainable logistics solutions that will minimize the carbon footprint (He and Harris, 2021).

Companies operating in the e-commerce sector must pay attention to the efficiency of deliveries, reducing excessive packaging and investing in ecological transport options. Such actions are increasingly appreciated by consumers who want the entire value chain, from production to delivery, to be as environmentally friendly as possible (Prieto and Talukder, 2023).

The online organic products market is also changing under the influence of technological innovations (Doz and Kosonen, 2008). The development of tools enabling the personalization of the offer, such as advanced recommendation algorithms, and the growing importance of social platforms and influencer marketing contribute to the popularization of ecological lifestyles and products.

Companies use social media and blogs and vlogs promoting ecology to effectively reach conscious consumers who are increasingly guided by the recommendations of authorities and social groups involved in environmental protection (Jones and Adam, 2023).

Another challenge in the online organic products market is maintaining credibility and authenticity (Chen and Li, 2021). Consumers are often afraid of the so-called "greenwashing", a situation in which brands promote their products as organic, even

though they do not meet the appropriate standards. As a result, customer trust in organic brands must be built through transparency and confirmed certificates. In this situation, it becomes necessary to provide reliable and easily accessible information on ingredients, the production process and compliance with organic standards (Mrugalska and Ahmed, 2021).

The development of the organic products market in online sales is also associated with increasing competition (Adan and Fuerst, 2016). More and more companies are entering this market, both large global brands and small, local producers (Sajdak, 2021).

On the one hand, larger companies can offer a wider range and competitive prices, but on the other hand, small companies often distinguish themselves with authenticity, local character of products and strict adherence to the principles of sustainable development. For this reason, there is a large variety of offers on the market, which allows consumers to choose products that best suit their needs and values (van den Brom, Meijer, and Visscher, 2018).

In summary, the online organic products market is a segment with high growth potential, driven by the growing ecological awareness of consumers and access to modern sales technologies. Companies operating in this sector must meet the challenges of transparency, authenticity and a sustainable approach to logistics and production in order to gain the trust of increasingly demanding consumers.

3. Determinants of Consumers' Purchasing Decisions Regarding Organic Products in Online Sales

The determinants of consumers' purchase decisions regarding online green products are the result of many different factors that affect the decision-making process. In the context of green products, not only traditional aspects related to online shopping, such as price or convenience, are crucial, but also specific elements related to the green nature of products, which attract increasingly conscious consumers (Luo, Ren, Cao, and Hong, 2020).

One of the most significant factors determining consumers' purchasing decisions for organic products is cost (Alshehhi, Nobanee, and Khare, 2018). Although organic products are often characterized by higher prices compared to conventional products, consumers are willing to pay more if they perceive that the higher price reflects quality and compliance with their organic values (Anderson and Wilson, 2017).

Price remains a critical factor that may limit the availability of such products to a wider group of consumers. When organic products are price competitive, consumers are more likely to choose them, which indicates the need for companies to balance between organic production and affordability (Rosário and Raimundo, 2021).

The quality of organic products is another key factor. Consumers who decide to buy products labeled as organic expect them to meet higher quality standards than conventional products. In this context, quality is not only a matter of durability or effectiveness of the product, but also its environmental friendliness, i.e. compliance with environmental protection standards.

Consumers look for products that are free of chemicals, produced with respect for the environment and often certified by appropriate organizations. The high quality of organic products is therefore a key element influencing consumer satisfaction and brand loyalty (Zou and Cheshmehzangi, 2022).

Delivery time in the context of online sales plays a significant role, especially in the case of online purchases, where physical access to the product is delayed. Consumers expect that ordered products will arrive quickly and without problems.

Although ecology may be associated with a more sustainable, and therefore potentially longer, supply chain, for many buyers it is crucial that even ecological products are delivered in a sufficiently short time. The speed of order fulfillment, while maintaining ecological standards, can be crucial in attracting and maintaining customer loyalty in e-commerce (Ramadhana, 2021).

The availability of information about organic products is extremely important. Consumers who decide to buy organic products are usually more demanding and aware (Womack and Jones, 2003). They expect to have full access to information about the origin of the product, its production methods, organic certificates and environmental impact (Trotta, 2018).

Transparency in this area is crucial because it allows consumers to make sure that their choice is in line with their values and expectations. The lack of information or its insufficient quality can effectively discourage potential customers from buying. Therefore, brands offering organic products must place special emphasis on communication and ensuring easy access to such information (Sedej and Justinek, 2021).

Payment options also affect the decision-making process. Consumers expect flexibility and security in terms of payments. Companies offering organic products online must provide diverse, yet secure payment methods that meet contemporary market standards. In the context of online sales, the speed and security of transactions play an important role, and consumers are more likely to choose stores that offer modern and convenient payment methods, such as online transfers, credit cards, or mobile payments (Modanval *et al.*, 2021).

The opinions of other users on the web are another important factor determining purchase decisions (Torres, 2023). In the era of the growing importance of social media and review platforms, consumers often rely on the experiences of others

before making a purchase. Opinions and reviews can have a significant impact on the perception of organic products, especially in the context of their quality, effectiveness and compliance with ecological standards.

Consumers value authentic recommendations and experiences of other users, which means that brands need to take care of their online reputation and actively respond to customer feedback (VersionOne, 2020).

After-sales service also plays a role, especially in the context of online shopping (Borowski, 2021). Consumers expect that in the event of a product issue, an eco-friendly company will be able to provide efficient service, quick resolution of the problem, and refunds or exchanges in line with their expectations. The quality of customer service after a purchase can affect the long-term relationship of a consumer with a brand, as well as their willingness to buy again (Zhou and Yang, 2016).

The last important factor is the ecological origin of products, which is an important element of the purchase decision for consumers. Products must meet certain ecological standards, but their origin alone is not always a decisive factor at the time of purchase. Consumers expect their choice to be in line with ecological values, but the priority remains the quality, availability of information, and price of the product (Kurnia and Chien, 2020).

In summary, the determinants of consumers' purchasing decisions in the context of online organic products include various factors, from price and quality, through the availability of information, to the opinions of other users and payment options. All these elements combine to create a coherent image of a consumer who strives for an informed, sustainable choice, while expecting convenience and high standards of service in online sales.

4. Methodology

The aim of the research was to identify the key factors influencing consumers' purchasing decisions in the context of organic products offered for sale online. The research aimed to understand which aspects are most important for consumers when choosing organic products online. Particular attention was paid to factors such as cost, product quality, availability of information about organic products, delivery time and opinions of other users. An analysis was conducted to determine which of these factors have a decisive influence on purchasing decisions and which are less important.

The research hypothesis assumed that the price and quality of eco-friendly products will have the greatest impact on consumers' purchasing decisions, while factors such as user-friendliness and after-sales service will play a lesser role. It was also assumed that information about the ecological aspects of products and the opinions of other users can have a significant impact on consumers' decisions.

The research questions focused on which factors are most important when choosing organic products for online sale. It was investigated how important individual aspects are to consumers, such as price, quality, organic origin, payment options, speed of delivery, and to what extent the opinions of other users influence purchase decisions. In addition, it was analyzed whether there is a correlation between the degree of consumer involvement in ecological issues and their purchase preferences.

The research was conducted in 2023 using a survey method on a sample of 620 respondents. The survey aimed to collect data from consumers on their preferences and key factors that influence their decisions when purchasing ecological products online. Respondents assessed the importance of individual factors, which allowed for the identification of patterns in their preferences.

In order to better interpret the obtained results, the mode was calculated for each of the studied factors. The mode, as the most frequently occurring value, allowed us to determine which of the levels of significance of individual factors were most often chosen by respondents. Determining the mode was aimed at understanding which aspects of online organic products were most important to consumers and which were less important.

This allowed us to formulate conclusions regarding general consumer preferences and to indicate key areas on which companies offering online organic products should focus. The research provided sociodemographic data that allowed for a precise description of the respondents in terms of age, place of residence, level of life satisfaction, professional status and frequency of online purchases.

Both women and men participated in the study. In the age group under 20 there were 362 people, while in the 21-25 age group there were 172 respondents. In the next age groups, covering people aged 26-30 and 31-35, 112 and 62 people were obtained, respectively. The smallest age group were people over 35 years of age, of whom there were 61.

The respondents lived in various places, from villages to large cities. There were 284 people living in the countryside, while 77 people lived in small towns of up to 20,000 inhabitants. There were 199 respondents living in cities with a population of 21 to 50,000 inhabitants, and 42 people in larger cities with a population of 51 to 200,000.

The largest group of respondents, 339 people, lived in cities with more than 200,000 inhabitants. Life satisfaction was assessed by the respondents as very good, good, average or poor. There were 50 respondents in the group of people very satisfied with their life, while 344 people gave a good assessment. Average life satisfaction was declared by 199 respondents, and 15 people rated their satisfaction as poor.

In terms of professional status, respondents were divided into several groups. 110

people did not work, while the largest group, numbering 276 people, worked full-time. Another 187 people worked on a contract for services or a contract for specific work, and 44 people ran their own business. Only 3 people declared that they ran a farm.

The frequency of online shopping also varied. 6 people made purchases every day, while 70 people did so several times a week. Another 49 people bought products online weekly, and 251 respondents several times a month. 106 people made purchases once a month, and 138 respondents declared that they made online purchases only several times a year.

5. Research Results and Discussion

The research aimed to identify factors influencing consumers' purchasing decisions regarding online organic products (Figure 1). Aspects such as product cost, user-friendly interface, quality of organic products, delivery time, warranty, availability of information about the product's ecological nature, payment options, online organic opinions, after-sales service and organic origin of products were analyzed.

In the case of product cost, only 17 respondents considered this factor to be definitely unimportant, while the same number assessed it as rather unimportant. In turn, 12 people had no opinion, while the vast majority, as many as 211, considered cost to be rather important, and 363 as definitely important.

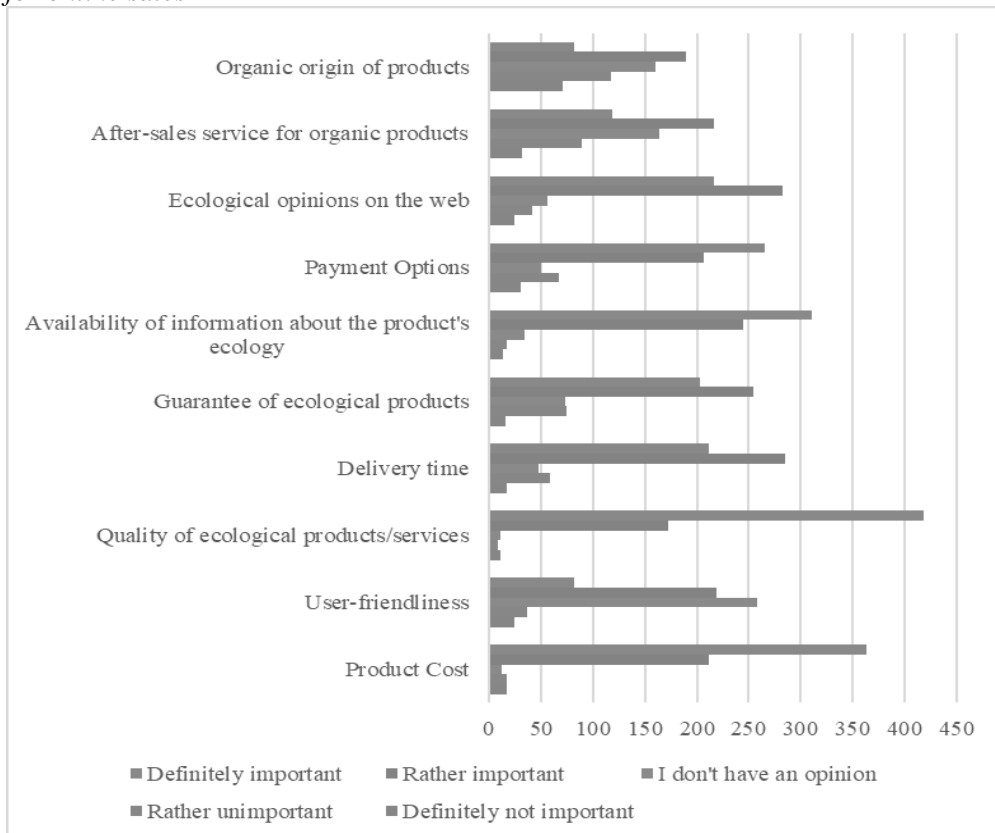
User-friendliness of the user interface was assessed as definitely unimportant by 24 people, and rather unimportant by 37 people. As many as 258 respondents expressed neutrality, i.e. they had no opinion on this subject. At the same time, 219 considered this factor to be rather important, and 82 as definitely important.

In terms of the quality of eco-friendly products and services, only 11 respondents considered it to be definitely not important, and 8 rather not important. Another 11 people had no opinion, while 172 rated it as rather important, and 418 as definitely important. In the case of delivery time, 17 respondents considered it to be definitely not important, and 59 rather not important. In turn, 48 people had no opinion, while 285 rated it as rather important, and 211 as definitely important.

The guarantee of ecological products was considered as definitely not important by 16 people, and rather not important by 74 people. In turn, 73 respondents had no opinion, while 254 rated this factor as rather important and 203 as definitely important.

The availability of information about the product's ecological character was rated as definitely not important by 13 people, and rather not important by 17 people. Only 34 people had no opinion on this subject, while 245 respondents rated this factor as rather important, and 311 as definitely important.

Figure 1. Factors influencing consumers' purchasing decisions for organic products for online sales



Source: Authors' calculations.

In terms of payment options, 31 respondents rated them as very unimportant, while 67 rated them as somewhat unimportant. Another 50 had no opinion, while 207 rated this factor as somewhat important, and 265 as very important. Online ecological reviews were rated as very unimportant by 24 people, and as somewhat unimportant by 41 people. Only 56 respondents had no opinion, while 283 rated the reviews as somewhat important, and 216 as very important.

After-sales service for organic products was rated as definitely unimportant by 32 people and rather unimportant by 89 people. Another 164 people had no opinion, while 217 respondents considered this factor rather important and 118 as definitely important.

Finally, the organic origin of products was rated as definitely unimportant by 71 people and rather unimportant by 117 people. In turn, 160 respondents had no opinion, while 190 considered this factor rather important and 82 as definitely important.

In order to better understand the research results, it is crucial to determine the mode for each of the factors studied. The mode, i.e., the most frequently occurring value, allows to determine which level of significance a given factor achieved most often in the respondents' assessment.

Determining the mode provides important information for interpretation, because it allows to indicate what importance individual factors had for the studied group of consumers. The mode also allows to identify those factors that were assessed in the most consistent way, which makes it easier to determine the general preferences of the respondents.

For the product cost factor, the mode indicates the answer "definitely important", which means that most respondents consider this aspect to be very important. In the case of user-friendliness of the user interface, the mode falls on the answer "I have no opinion", which may suggest that this factor is not perceived as key or that consumers have difficulties in assessing its impact on purchase decisions.

The quality of ecological products and services reaches the mode at the level of "definitely important", which emphasizes that for most consumers the quality of ecological products is one of the most important elements when making purchase decisions.

Similarly, the mode for delivery time indicates "rather important", which means that the speed of delivery is of great importance, although it is not perceived as a key factor. For the guarantee of ecological products, the mode also indicates "rather important", which suggests that consumers attach some importance to this aspect, but it is not considered decisive. In relation to the availability of information about the ecology of the product, the mode falls on the answer "definitely important", which emphasizes the importance of this factor for the surveyed group.

Payment options achieved a dominant level of "very important", which suggests that flexibility in payment methods is key for consumers when selling online. Ecological opinions online achieved a dominant level of "rather important", which indicates that consumers attach great importance to this aspect, although it is not a dominant factor.

After-sales service for ecological products achieved a dominant level of "I have no opinion", which may indicate a lack of clear expectations or experiences of consumers in this area. Finally, the ecological origin of products, although an important factor, achieved a dominant level of "rather unimportant", which may suggest that it is not a decisive factor when choosing products in this group.

Determining the dominant allows for a better understanding of which aspects of online organic products are most important to consumers and which are less important.

This allows for more accurate interpretation of research results and formulation of conclusions regarding shopping preferences in the context of organic products.

The research results allowed us to understand what consumers pay attention to when buying organic products online. Analysis of the collected data indicates that not all factors are equally important in the purchasing decision-making process, and consumer preferences are diverse.

One of the key factors turned out to be the cost of the product, which most respondents considered very important. This means that despite growing ecological awareness, price still plays a significant role in consumer decisions. Organic products, although often perceived as higher quality, must be offered at competitive prices to attract a wider group of buyers.

The quality of organic products and services was rated equally high, confirming that consumers pay special attention to the quality of the items they buy. It is clear that those who choose organic products expect them to meet higher quality standards, which strengthens their belief in the health and environmental benefits of these purchases.

Delivery time was another important factor. Although it was not rated as high as cost or quality, the speed of order fulfillment is still important to consumers. This suggests that in online sales, where immediate access to products is limited, timely delivery has an impact on overall customer satisfaction.

The availability of information about the ecology of a product was also highly rated. Consumers want to be sure that the products they choose actually meet certain ecological standards. This is related to the growing need for transparency and education about the impact of products on the environment.

Appropriate information about the origin and eco-certification are key to building customer trust in a brand. Surprisingly low importance was given to the ecological origin of products, which may suggest that the slogan "ecological" alone is not enough if the product does not meet other consumer expectations, such as quality or price. This means that manufacturers and sellers should pay attention to the overall customer experience, and not only emphasize the environmental friendliness of their products.

An interesting result was a neutral attitude towards the user-friendliness of the user interface and after-sales service. It seems that for many consumers these elements do not have a decisive influence on the choice of organic products, although they may be important in the long term.

It is possible that among buyers of organic products, the dominant belief is that other factors, such as quality or availability of information, are more important. Organic

opinions on the web also play an important role, which shows that consumers value the opinion of others who have already had experience with a given product. In the digital era, opinions and reviews are increasingly influencing purchasing decisions, which means that sellers should invest in building a positive image of their products through opinion-forming platforms.

In summary, the research results show that consumers of organic products are primarily guided by price and quality, but other factors, such as availability of information and delivery time, are also of great importance. Issues related to the technical support of the online store or the origin of the products themselves are less important to them, as long as they meet high ecological standards.

Determining the dominant in these studies allows for a better understanding of which aspects should be considered when creating an online offer of organic products to meet the expectations of modern consumers.

6. Conclusions, Proposals, Recommendations

Based on the research results, several key recommendations can be made for companies offering organic products online. First of all, special attention should be paid to price competitiveness. Although organic products are associated with higher quality, their price still plays a significant role in the consumer decision-making process. Therefore, companies should strive to optimize production and distribution costs in order to be able to offer organic products at attractive prices, while maintaining quality.

Highlighting the high quality of organic products is equally important. Consumers expect these products to be not only environmentally friendly, but also to meet the highest utility and health standards. It is worth investing in quality certificates and communicating clearly and transparently the benefits of choosing organic products, which can increase consumer trust and brand loyalty.

Another area that companies should focus on is optimizing delivery times. Consumers expect orders to be fulfilled quickly, even for organic products. For this reason, companies should invest in logistics improvements to ensure that orders are delivered quickly and reliably. This could include developing local warehouses, optimizing the supply chain, and working with courier companies that offer shorter lead times.

It is equally important to provide consumers with full information about the ecology of a product. Customers need clear, reliable data on the origin of products, their production methods, and their impact on the environment. Transparency in this area is key because it builds trust and helps consumers make informed decisions. Companies should consider investing in tools that will allow consumers to easily access this information, for example through ecological certificates, detailed product

descriptions or information labels.

Although user-friendliness and after-sales service were not found to be key factors in the research, they cannot be completely ignored. Providing a simple and intuitive shopping process and appropriate after-sales service can affect overall customer satisfaction and loyalty. Companies should therefore take care to optimize the shopping process on their online platforms and invest in high-quality customer service, which can translate into positive online reviews in the long run.

Finally, it is worth noting that although the ecological origin of products has not proven to be a decisive factor for consumers, it is still important for many when making a choice. Companies should continue to communicate the ecological values of their products, but it cannot be the only element that distinguishes the offer.

Customers expect a holistic experience that combines a favorable price, high quality, access to information and fast delivery. Meeting these expectations will allow companies to better adapt their offer to the needs of modern consumers, thus increasing their competitiveness in the market.

Future research directions may focus on an in-depth analysis of consumers' motivations for purchasing organic products in the context of their growing environmental awareness. It is worth investigating how changing consumer attitudes affect purchasing preferences, and whether the perception of their value among different demographic groups changes with the increasing availability of organic products. In particular, it may be interesting to examine the impact of socioeconomic variables, such as income, age, or education level, on purchasing decisions regarding organic products.

Another direction of research may be to analyze the role of technology in the process of purchasing green products online. It is necessary to examine how technological innovations such as artificial intelligence, personalization of the offer or data analysis tools can affect the growth of consumer interest in green products. It may also be important to look at how changing online sales platforms, including the development of mobile applications or subscription-based e-commerce, can affect the way consumers make green choices.

Further research could also focus on the role of brands and marketing strategies in promoting green products. It is worth examining how marketing communications related to ecology, sustainable development and social responsibility affect product perception and consumer loyalty. It is also possible to analyze which forms of communication are most effective in building ecological awareness and attracting customers to products of this type.

Another important direction of research may be to examine the impact of external factors, such as legal regulations, environmental taxes, government initiatives or

climate change, on consumers' purchasing preferences for ecological products. It will be important to understand how the changing political and social environment may affect the increase in demand for environmentally friendly products and how companies can adapt their strategies to these changes.

Finally, future research could focus on regional market differentiation. It could be interesting to compare consumer preferences across countries and regions and examine how local cultures, social norms, and environmental awareness affect purchasing decisions for green products. This type of analysis could provide valuable guidance for companies operating in international markets on how to tailor their offerings to local market specifics.

7. Limitations

The limitations of the research result primarily from the adopted methodology, which was based on surveys. Despite the large research sample of 620 respondents, the results may not fully reflect the diverse attitudes of consumers, especially in the context of geographical, cultural or demographic differences.

The survey, as a research tool, has its limitations, because respondents may not always provide honest answers, and their opinions may be dependent on current moods or limited understanding of the questions asked. Therefore, the results may be partially burdened with subjectivity.

Another limitation was that the research was based solely on the responses of people who were active online, which may mean that the data is not representative of the entire consumer population, especially those who are less likely to shop online. The study also did not include a detailed analysis of the motivations behind consumer preferences, which limits a deeper understanding of decision-making processes.

In addition, the scope of the research was limited to selected factors influencing purchase decisions, which could have omitted other important aspects, such as brand loyalty, the impact of advertising or promotion, as well as psychological or emotional factors.

Limitations also included the lack of consideration of dynamic changes in consumer preferences, which may result from external factors, such as legal, political or economic changes, which could have occurred after the study was completed.

It is also worth noting that the study focused on green consumers, which narrows the perspective and may not apply to the general purchasing behavior of consumers in the online marketplace. Such studies may also not reflect changes in consumer preferences that may occur in the future due to growing environmental awareness or the development of new shopping technologies.

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