DETERMINANTS THAT SHAPE PURCHASING DECISIONS AS AGILE E-CUSTOMER SERVICE PRACTICES

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Purpose: The aim of the article is to examine the determinants influencing the decision-making process of e-customers in the context of agile service practices. The study focuses on identifying the key factors that shape purchasing behavior in the e-commerce environment.

Design/methodology/approach: The study used a quantitative method in the form of an online survey whose participants were e-customers. Data analysis was carried out using statistical methods of correlation analysis, which allowed for the identification of mutual dependencies between the studied variables.

Findings: The research results indicate that product quality, price, and delivery speed are the most important determinants influencing the purchasing decisions of e-customers. The importance of a user-friendly interface and feedback from other customers varies depending on the demographics of respondents.

Research limitations/implications: The limitations of the study result from its geographical scope and demographic concentration of respondents. Implications for future research include expanding the sample to include more diverse population groups and exploring new determinants such as digital security.

Practical implications: The practical implications of the research highlight the need to adapt e-commerce strategies to identify and meet key customer needs. Understanding and implementing agile practices can significantly improve user shopping experiences and increase user loyalty.

Social implications: Social implications resulting from research indicate growing consumer expectations towards ethical and transparent company practices. Understanding the social determinants of purchases can contribute to companies shaping their offers more responsibly.

Originality/value: The originality and value of the article result from the focus on agile e-customer service practices as catalysts for purchasing decisions. The study brings a new perspective on the combination of technology and consumer behavior, which is crucial for the future of e-commerce.

Keywords: purchasing decisions, e-customer, agile practices.

Category of the paper: research paper.

1. Introduction

The e-customer has become a key element of the modern e-commerce landscape, prompting companies to constantly adapt and innovate to meet growing and changing expectations. In an era where Internet access is widespread and technological possibilities are evolving day by day, digital consumers are becoming more and more demanding and aware of their choices (Ramadhana, 2021). This situation makes understanding the determinants that shape purchasing decisions by e-customers not only desirable, but also a necessity for every company wishing to compete effectively on the e-commerce market (Masoud, Basahel, 2023).

Considering this topic is important because it allows companies to analyze more deeply and better understand the behavior of their customers (Chen, Li, 2021). This allows them to design more engaging and personalized shopping experiences, which are key to building customer loyalty and increasing customer lifetime value. Agile customer service practices, adapting the product offer to individual preferences or optimizing communication channels are just some of the aspects that can be improved by being aware of the determinants that influence them (Kumari, Kumar, 2024).

The need to explore the determinants of e-customers' purchasing decisions also results from the need to predict future trends and adapt to the rapidly changing digital reality. Companies that are able to effectively analyze and respond to these changes gain a significant competitive advantage that enables them not only to survive, but also to thrive in an increasingly saturated market. Additionally, as global interest in privacy and online security grows, understanding how these aspects impact customer purchasing decisions becomes crucial to ensuring compliance and maintaining customer trust.

For these reasons, the study of the determinants shaping purchasing decisions as agile e-customer service practices is not only important from a scientific and theoretical point of view, but above all it has real practical implications that may determine the success or failure of enterprises in the digital commercial space.

2. Literature Review

2.1. e-customer service practices

Agile e-customer service practices are based on quick and effective adaptation to the changing needs and expectations of customers using digital services. The key aspect here is continuous monitoring of customer interactions and analysis of collected data, which allows for the optimization of processes and personalization of the offer (Harraf, Wanasika, Tate, Talbott, 2015). Thanks to technologies such as Big Data and AI, companies can respond in real time to

the preferences and behaviors of their users, which translates into higher satisfaction with services (Kocot, Kwasek, 2022).

Flexibility in managing customer contacts is another important element. CRM systems supported by advanced marketing automation tools allow for customer segmentation and tailoring communication to the individual needs of each of them (Kt, Sivasubramanian, 2023). Chatbots using machine learning are able to handle many queries at the same time, offering quick and accurate answers, which is crucial in maintaining high quality customer service (Mrugalska, Ahmed, 2021). Agility in online customer service also involves the ability to anticipate trends and adapt to the rapidly changing digital reality (Wendler, 2014). An example would be adaptation to the growing popularity of mobile applications and social media as channels of communication with customers. Companies that effectively integrate these tools into their service strategy gain a competitive advantage by increasing their visibility and accessibility (Lambri, Sironi, Teti, 2024).

To sum up, agile e-customer service practices require constant innovation, openness to change and the use of the latest technologies to ensure the highest quality of services. Supporting these processes with advanced analytical tools and communication technologies allows you to build long-term and satisfying relationships with digital customers.

2.2. Profile of a modern e-customer

The profile of a modern e-customer is diverse and dynamically evolving, which is influenced by rapid changes in technology and global consumer trends (Bray et al., 2019). The characteristics of the modern e-customer highlight his increased expectations regarding personalization, speed of service and the availability of online services on various platforms (Torres, 2023). E-customers are increasingly aware of the opportunities available to them and expect companies to not only respond to their needs, but also anticipate potential interests, offering products and services tailored to individual preferences (Prieto, Talukder, 2023).

Modern e-customers are also more mobile, they often use a variety of devices, from computers to smartphones and tablets, to make purchases or manage their services (McNamee et al., 2012). This omnichannel approach requires companies to be agile in managing different platforms and ensuring a consistent customer experience across each of them. The availability and functionality of mobile applications, website responsiveness and integration with social media are currently standards that are necessary to effectively attract and retain e-customers (Skyrius, Valentukevič, 2020).

The ability to quickly adapt to changing market and technological conditions is also important (Kurnia, Chien, 2020). Modern digital consumers expect innovation and are willing to experiment with new solutions, which poses a challenge for companies in the context of constantly updating their offers and technologies (Attar, Almusharraf, Alfawaz, Hajli, 2022). This requires companies not only to invest in technological development, but also in data analysis, which allows for a better understanding of customer behavior and preferences (Rahimi, Mansouri, 2019). We also cannot forget about the growing awareness of e-customers

regarding the security of personal data (Akkaya, 2021). Privacy protection and transaction security are key elements that influence customer trust in digital platforms. Companies that effectively manage these aspects gain customer loyalty and stand out from the competition (Sajdak, 2021).

To sum up, the modern e-customer is demanding, well-informed and uses a variety of digital channels, expecting companies to be agile, innovative and secure in every aspect of digital service. It's a complex picture that requires companies to constantly adapt their strategies and operations to a rapidly changing environment.

2.3. Determinants shaping e-customer purchasing decisions

The determinants that shape an e-customer's purchasing decisions are complex and include a number of factors that influence consumer behavior in the digital environment. In the context of agile e-customer service practices, understanding these determinants is key to optimizing sales strategies and increasing customer satisfaction (Zou, Cheshmehzangi, 2022). The price of a product is a fundamental factor that influences purchasing decisions in every business model, including e-commerce (Joiner, 2019). Digital consumers have easy access to price comparisons across different online stores, prompting businesses to constantly monitor competitors' prices and adapt their own offers to attract and retain customers (Felipe et al., 2020). The quality of the product or service is another decisive element that e-shoppers consider before making a purchase. In an online environment where direct contact with the product is impossible, clear and reliable quality information becomes extremely important. Companies that consistently deliver high-quality products and are transparent about product specifications and capabilities gain consumer trust (Rosário, Raimundo, 2021).

A friendly user interface (UX) is crucial to ensuring smooth website navigation and ease of the purchasing process. Pages that are intuitive and tailored to users with varying levels of technical skills can significantly increase conversions. A well-designed UX should enable you to quickly find the desired product, easily add it to the cart and complete the purchase without any problems. Delivery speed also plays an important role, especially in the era of Amazon and other large market players who have set new standards for order fulfillment times. Customers expect fast and reliable delivery, and any delay may influence their decision to use the store's offer again (Žitkienė, Deksnys, 2018).

Guarantees offered by sellers build trust and security of purchase. Knowing that they can count on support and help in case of dissatisfaction with the product, the customer is more likely to decide to purchase it. Good warranty terms can be a deciding factor, especially for more expensive or risky purchases. Product information must be comprehensive and easily accessible (Jones, Adam, 2023). High-quality product photos, detailed descriptions, technical data and available selection options are essential to attract consumers' attention and help them make a purchase decision (Sedej, Justinek, 2021).

The form of payment also influences purchasing decisions. Flexibility in payment methods, including popular e-wallets, mobile payments, and traditional credit cards and bank transfers,

can attract a wider range of customers (He, Harris, 2021). The opinions of other users are extremely influential in the e-commerce environment, where the experiences and recommendations of other consumers often serve as a guide for potential buyers (Brown, Jones, 2018). Transparency in presenting both positive and negative opinions can increase the store's credibility (Varshney, 2020).

After-sales service, including the ease of returns and complaints as well as the effectiveness of customer service after purchase, is an essential element of building long-term relationships with customers. E-customers expect not only a quick response to their inquiries, but also efficient and honest after-sales service (Chen, Siau, 2020). The ecological origin of products is becoming increasingly important in the purchasing decisions of modern consumers, especially among those who are aware of the impact of their consumerism on the environment. Sustainable and environmentally friendly products are gaining popularity, forcing companies to rethink their production practices and sourcing (Sattler et al., 2022).

Understanding and effectively managing these determinants as part of agile e-customer service practices can significantly impact a company's market success in the dynamically changing world of e-commerce.

2.4. Research Methodology

The aim of the article is to identify and analyze the determinants shaping purchasing decisions by e-customers, with particular emphasis on agile service practices. The conducted research aims to understand which factors are most important for consumers in the context of e-commerce, and how these factors interact with each other. The research hypothesis assumes that among the numerous determinants of purchasing decisions, such as price, product quality, friendly UX, speed of delivery, or ecological origin of products, there are certain key elements that are particularly important for e-customers and may affect the effectiveness of agile service practices.

The research questions focus on identifying these key factors, analyzing, among others: which determinants of purchasing decisions are the most important for customers of online stores? What relationships exist between the various factors that can influence purchasing decisions? Is there a significant correlation between satisfaction with e-customer service and preferences regarding aspects such as price, product quality or ecology? The research method used in this article was a survey conducted in 2023, in which 620 respondents participated. This study allowed for the collection of data on consumer preferences and opinions, which enabled a thorough analysis of purchase determinants in the context of e-commerce. The collected data was then subjected to statistical analysis to identify key relationships and draw conclusions about the impact of individual factors on purchasing decisions.

The survey covered 620 respondents, whose sociodemographic data were presented in several categories: gender, age, place of residence, financial situation and professional activity.

In the gender category, 362 respondents were women and 258 were men. In terms of age, most of the participants are in the 21-25 age group (284 people), followed by the 26-30 age

group (172 people), the 31-35 age group (64 people), and the least number of respondents are under 20 years old (39 people) and over 35 years old (61 people). Respondents were also classified according to their place of residence. Most people come from cities with over 200,000 inhabitants (339 people). The next groups are residents of cities with up to 20,000 inhabitants (112 people), towns with 21,000 to 50,000 inhabitants (77 people), towns with 51,000 to 200,000 inhabitants (42 people) and people living in villages (50 people).

With regard to the financial situation, most respondents assessed their situation as good (344 people). The next group are people with an average financial situation (199 people), then 62 people rated their situation as very good, 15 as bad, and 3 people did not provide this information. The professional activity of respondents varies. 276 people work on a contract of mandate or specific work, 187 people work full-time, 44 people run their own business, 110 people are unemployed, and 3 people run a farm.

2.5. Presentation of Research Findings

The research attempted to identify the determinants shaping purchasing decisions in the context of e-customer service, with an emphasis on agile practices. These factors have been carefully examined to understand which of them have the greatest impact on purchasing decisions in the context of agile e-customer service practices.

The study involved 620 respondents who assessed the importance of various factors influencing their purchasing decisions in the e-commerce environment. Regarding price, 363 respondents rated it as "definitely important" and 211 as "somewhat important". A smaller number, 17 people, considered the price "definitely unimportant", the same number considered it "rather unimportant", and 12 respondents had no opinion.

Friendly UX was rated as "definitely important" by 82 respondents and as "somewhat important" by 219 people. A significant number of respondents, 258, had no opinion on the topic, while 37 people rated UX as "somewhat unimportant" and 24 as "definitely unimportant". The quality of the product or service was an important factor, with 418 respondents rating it as "definitely important" and 172 people rating it as "somewhat important". Only 11 respondents considered this factor to be "definitely unimportant", 8 as "rather unimportant", and 11 had no opinion.

Delivery speed was rated as "definitely important" by 211 people and "somewhat important" by 285 people. 48 respondents had no opinion, 59 considered this factor "rather unimportant" and 17 "definitely unimportant". Regarding the guarantee, 203 people considered it "definitely important", 254 "somewhat important" and 73 people had no opinion. In turn, 74 respondents rated the guarantee as "rather invalid" and 16 as "definitely invalid".

The product information was rated as "definitely important" by 311 people and "somewhat important" by 245 people. Only 34 respondents had no opinion, 17 rated it as "rather unimportant" and 13 as "definitely unimportant". The payment method was considered "definitely important" by 265 respondents, while 207 rated it as "somewhat important". 50 people had no opinion, 67 rated it as "rather unimportant" and 31 as "definitely unimportant".

The opinions of other Internet users were rated as "definitely important" by 216 respondents and "rather important" by 283 people. 56 people had no opinion, 41 rated the opinions as "rather unimportant" and 24 as "definitely unimportant". After-sales service was important to 118 respondents who rated it as "definitely important" and 217 who rated it as "somewhat important." However, 164 people had no opinion, 89 rated it as "rather unimportant" and 32 as "definitely unimportant"The ecological origin of products was rated as "definitely important" by 82 respondents and "rather important" by 190 people. However, 160 people had no opinion, 117 rated this factor as "rather unimportant" and 71 as "definitely unimportant".

Table 1.
Determinants shaping purchasing decisions as agile e-customer service practices, N = 620

	Definitely doesn't matter	Probably doesn't matter	I have no opinion	Rather important	Definitely important
price (1)	17	17	12	211	363
friendly UX (2)	24	37	258	219	82
product/service quality (3)	11	8	11	172	418
delivery speed (4)	17	59	48	285	211
warranty (5)	16	74	73	254	203
product information (6)	13	17	34	245	311
payment method (7)	31	67	50	207	265
opinions of other Internet users (8)	24	41	56	283	216
after-sales service (9)	32	89	164	217	118
ecological origin of products (10)	71	117	160	190	82

Source: Own study based on research.

Table 2 presents the correlations between the determinants shaping purchasing decisions in the context of e-customer service, based on the data from Table 1. These correlations indicate the strength and direction of the relationships between individual factors. The strongest correlations, close to 1, are between product/service quality (3) and price (1), which suggests that respondents who attach great importance to quality usually also consider price to be an important factor. A similar relationship is visible between product information (6) and payment method (7), which may suggest that customers expect detailed product information to go hand in hand with convenient payment options.

Table 2.
Correlation Table, N = 303

	1	2	3	4	5	6	7	8	9	10
1	1									
2	0.04	1								
3	0.98	-0.02	1							
4	0.83	0.35	0.73	1						
5	0.83	0.40	0.74	0.99	1					
6	0.98	0.19	0.94	0.91	0.91	1				
7	0.98	0.13	0.94	0.91	0.91	0.99	1			
8	0.84	0.38	0.75	0.99	0.98	0.93	0.91	1		
9	0.35	0.87	0.25	0.71	0.75	0.50	0.48	0.71	1	
10	-0.05	0.86	-0.17	0.43	0.46	0.12	0.10	0.42	0.904	1

Source: Own study based on research.

Correlations between friendly UX (2) and other factors are generally low, suggesting that the evaluation of user experience is relatively independent of other determinants. On the other hand, friendly UX shows a moderate correlation with the opinions of other Internet users (8), which may mean that good user experiences are sometimes associated with positive online opinions. Factors such as delivery speed (4) and warranty (5) show very strong correlations both with each other and with other variables, especially with the quality of the product/ service (3) and product information (6). This may suggest that these factors are perceived by customers as components of the overall value of the e-commerce offer.

After-sales service (9) shows a strong correlation with the ecological origin of products (10), which may indicate that respondents for whom after-sales service is important also pay attention to issues related to ecology. The negative correlation between price (1) and the ecological origin of products (10) suggests that respondents who attach greater importance to price may pay less attention to the ecological aspects of products. In turn, the positive correlation between the ecological origin of products and after-sales service suggests that these two factors can be perceived as complementary.

The correlations in Table 2 provide additional context for analyzing the results in Table 1, showing how various determinants of purchase decisions are interconnected and how they can interact with each other in the perception of e-customers.

3. Discussion

The presented research allows for the formulation of several conclusions about the determinants shaping purchasing decisions in the context of e-customer service. The analysis showed that the price and quality of a product or service play a key role in the consumer decision-making process. The strong correlation between these factors suggests that consumers who attach great importance to quality also pay attention to price, which may indicate their desire to find products with the best value for money. Friendly UX, although considered an important factor, seems to be relatively independent of other determinants. This may suggest that the assessment of user experience is subjective and not necessarily related to other aspects of the offer, such as price or product quality. However, the moderate correlation with other Internet users' opinions may indicate that positive user experiences are associated with good online reviews, highlighting the importance of opinions in building brand image and consumer trust.

The examined relationships between delivery speed, warranty, product quality and product information suggest that these factors are perceived by customers as components of the overall value of the offer. Consumers expect high-quality products to be backed by adequate warranties and fast deliveries, which together create comprehensive value that is key to purchasing

decisions. The strong correlation between after-sales service and the ecological origin of products indicates that for some consumers these aspects are important in the context of their long-term engagement with the brand. It is possible that customers who value after-sales service are more aware and pay attention to ecological issues, which may be the result of growing public awareness of sustainable development.

Ultimately, the negative correlation between price and the ecological origin of products may indicate the existence of a segment of consumers who are more guided by low prices at the expense of ecological aspects of the offer. This in turn suggests that for some customers price is a more decisive factor than aspects related to environmental responsibility. These studies indicate the complexity of the consumer decision-making process in e-commerce, emphasizing the importance of various factors that, to varying degrees, affect the perceived value of the offer and final purchase decisions. Agile e-customer service practices must therefore take into account these diverse priorities to effectively respond to consumer needs.

Based on the conclusions drawn, several recommendations can be formulated for companies operating in the e-commerce sector (see Fig. 1). First, there should be a strong emphasis on offering high-quality products while maintaining competitive prices. Consumers expect products to be good value for money, which means that optimizing your offering in this respect can increase customer satisfaction and brand loyalty. Another important issue is improving friendly UX on websites, but remember that its importance varies depending on other decision-making factors. For this reason, it is worth investing in personalizing user experiences to better meet the expectations of different customer segments. It is also important to monitor the opinions of other Internet users and build a positive brand image online, which can strengthen positive customer experiences.

Companies should also strive to ensure fast delivery and solid guarantees, which together with product quality create a comprehensive value proposition. This can be key to increasing customer satisfaction and their willingness to make repeat purchases. In this context, it is also worth providing detailed and reliable information about products that can support purchasing decisions and reduce customer uncertainty. After-sales service should be treated as an important element of a sustainable development strategy, especially in the context of consumers' growing ecological awareness. Companies that pay attention to the ecological origin of their products can gain the trust of customers who value social and environmental responsibility. Therefore, it is worth investing in sustainable practices and communicating them effectively to customers.

Finally, understanding differences in customer priorities regarding price and ecology can help companies segment the market and tailor their offerings to different target groups. For some customers, a low price may be a priority, while for others ecological aspects will be more important, which requires a diversified marketing and product strategy. Adapting e-commerce strategies to these recommendations can allow companies to better respond to customer needs, increase their satisfaction and long-term loyalty.
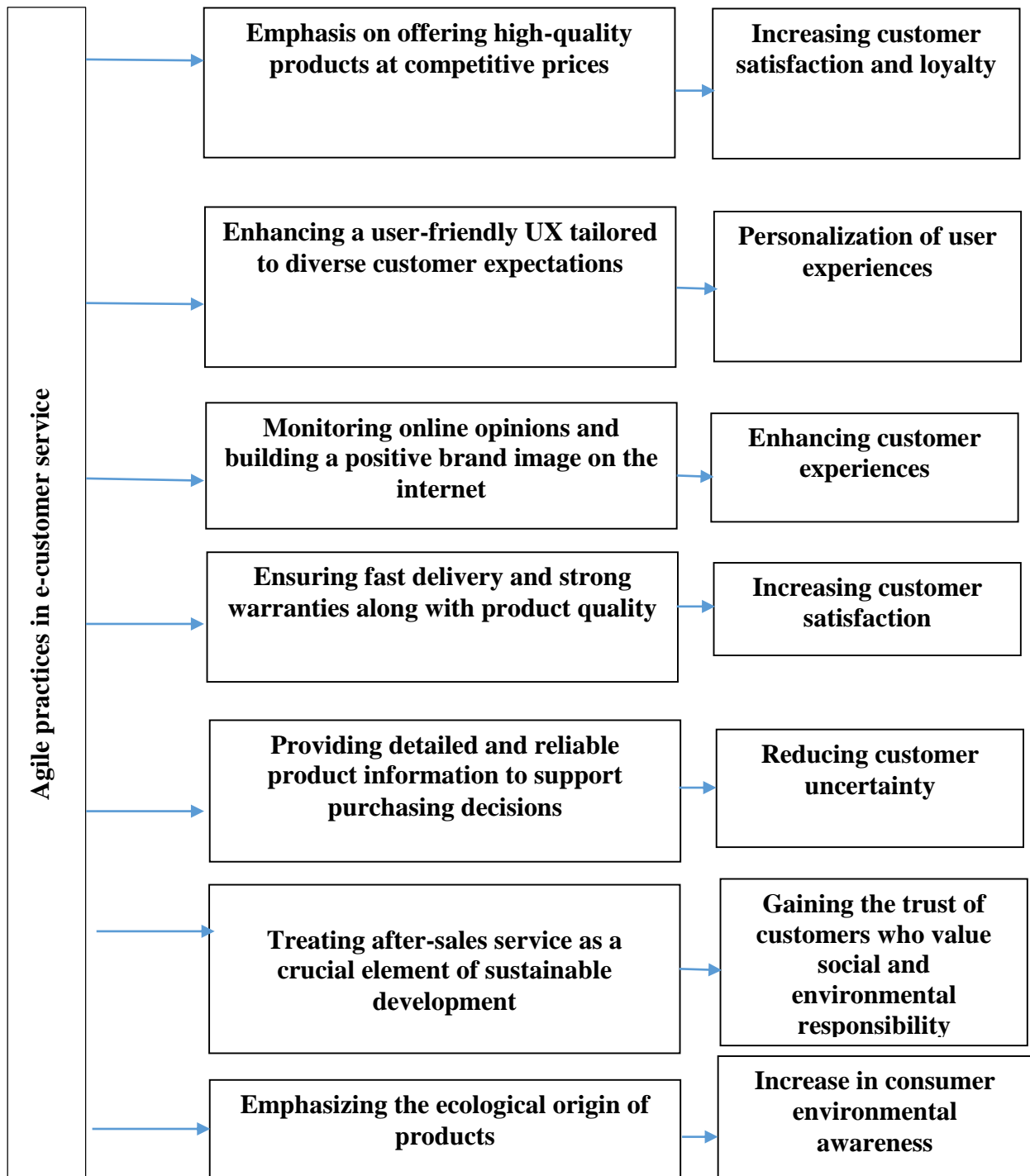
Agile practices in e-customer service	Emphasis on offering high-quality products at competitive prices	Increasing customer satisfaction and loyalty
	Enhancing a user-friendly UX tailored to diverse customer expectations	Personalization of user experiences
	Monitoring online opinions and building a positive brand image on the internet	Enhancing customer experiences
	Ensuring fast delivery and strong warranties along with product quality	Increasing customer satisfaction
	Providing detailed and reliable product information to support purchasing decisions	Reducing customer uncertainty
	Treating after-sales service as a crucial element of sustainable development	Gaining the trust of customers who value social and environmental responsibility
	Emphasizing the ecological origin of products	Increase in consumer environmental awareness

Figure 1. Agile e-customer service practices.

Source: Own study.

The conducted research encountered certain limitations that may affect the interpretation of the results. First of all, the study was based on respondents' declarative answers, which may introduce an element of subjectivity and a tendency to respond in line with social expectations. Moreover, the research sample, although large, is not fully representative of the entire population, which may limit the ability to generalize the results to a wider group of consumers.

Another limitation is the fact that the study focused only on e-shoppers, which excludes the perspectives of people who do not use online shopping and may have different priorities and preferences. It is also worth noting that the study was conducted at a specific time and place, which may affect the validity and universality of the conclusions, especially in the dynamically changing e-commerce environment. Additionally, the analyzed correlations do not necessarily indicate cause -and-effect relationships, but only the co-occurrence of certain factors, which suggests the need for further research to better understand these relationships.

4. Conclusions

It is worth comparing the research results obtained in this article with the research results of other researchers to better understand how the determinants of purchasing decisions in e-commerce are analyzed and interpreted in different contexts. The article states that the most important factors influencing e-customers' purchasing decisions are product quality , price and delivery speed. Similar conclusions are presented by Masoud and Basahel (2023), who in their study on the digital transformation of companies showed that customer experience and technological innovations have a significant impact on the financial performance of companies, highlighting the importance of the same factors identified in this article.

Furthermore, Guo and Xu's (2021) research on the impact of digital transformation on the operational and financial performance of Chinese manufacturing companies also highlights that the intensity of digital transformation is positively correlated with operational performance, suggesting that process quality and innovation are crucial to the success of companies in the context of e-commerce.

Additionally, research by Zhao and colleagues (2024) indicates a significant impact of digital transformation on the productivity and innovation of companies, especially in the context of small and medium-sized enterprises. This study confirms that companies that invest in digital technologies and adapt their processes to changing customer needs achieve better business results, which is consistent with the results obtained in this article.

In summary, the comparison of research results indicates consistency in the identification of key factors influencing customer purchasing decisions in the digital environment. These results emphasize the importance of quality, innovation and delivery speed as determinants of success in e-commerce.

Future research may focus on expanding the scope of the sample to obtain more representative data, covering a broader demographic and geographic cross-section, which will allow for a better understanding of diverse purchasing behaviors in different cultural and economic contexts. Research on specific consumer groups, for example by age, income or level

of technological advancement, could also be further explored to better understand how different segments of the population make purchasing decisions in the e-commerce environment.

Another direction of research could be to examine dynamic changes in consumer preferences in response to the development of technology and changes in e-commerce offers, such as the growing popularity of sustainable and ecological products. Research could also include an analysis of the impact of new technologies, such as artificial intelligence, offer personalization or customer service automation, on the consumer decision-making process.

It is also worth considering comparative research that would analyze the differences in purchasing decisions between online and offline consumers, as well as examining the impact of different marketing channels on the perception of the value of the offer. Further research could also focus on understanding the long-term effects of agile customer service practices on consumer loyalty and brand engagement.

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