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The impact of logistics customer service in e-commerce on online store purchases

Wpływ logistycznej obsługi klienta w e-commerce na zakupy w sklepie internetowym

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Abstract

The article analyses the role of logistic customer service in the e-commerce sector, using an online store specializing in dietary supplements as a case study. It highlights that efficient logistics significantly enhance both competitiveness and customer satisfaction. Key components of the service are examined, with particular focus on strategies for reducing order fulfilment errors and streamlining processes to ensure timely deliveries. The text also notes the importance of customer communication, including order status updates, shipment tracking, and flexible return and complaint procedures. The case study demonstrates that a personalized logistics approach, characterized by swift order handling and careful packaging, can foster customer loyalty and strengthen brand reputation.

Keywords: e-commerce, logistic customer service, online store

Streszczenie

Artykuł koncentruje się na analizie roli logistycznej obsługi klienta w sektorze e-commerce, wykorzystując przykład StrefaSupli.pl – sklepu internetowego specjalizującego się w sprzedaży suplementów diety. Podkreśla, że efektywna logistyka jest kluczowym czynnikiem wpływającym na konkurencyjność sklepu oraz zadowolenie klientów. Artkuł omawia główne elementy logistycznej obsługi. Szczególna uwaga poświęcona została strategiom minimalizowania błędów w realizacji zamówień oraz optymalizacji procesów, które wpływają na terminowość dostaw. Wskazano również na znaczenie komunikacji z klientem w kontekście logistyki – informowanie o statusie zamówienia, możliwość śledzenia przesyłek oraz elastyczne procedury zwrotów i reklamacji. Przykład StrefaSupli.pl ilustruje, że spersonalizowane podejście do logistyki, w tym szybka realizacja zamówień oraz dbałość o ich odpowiednie zabezpieczenie, buduje lojalność klientów i pozytywny wizerunek marki.

Słowa kluczowe: handel elektroniczny, logistyczna obsługa klienta, sklep internetowy

Introduction

The significant development of e-commerce in recent years is the result of technological progress and digitalization, influencing the economic development of the economy. The Internet plays a key role in access to e-commerce tools because, by its nature, it shapes reality and opens up new opportunities in a dynamically changing environment. In Poland, this trade model became popular along with its global boom. Statistics confirm this trend, showing an impressive increase in the value of the e-commerce market (Kin-Dittmann, 2007: 175).

With regard to logistic customer service, it is worth paying attention to the definition contained in the dictionary of logistics terminology by Fertsch (2016). He interprets this issue as a set of activities carried out by the company from the moment of receiving information about the purchase to the moment of delivering the products to the customer. A key aspect of this definition is the emphasis on meeting customer needs and building strong and lasting relationships between seller and buyer. Such a relationship translates into customer loyalty, which can ensure the company's stability on the market (Tokarski, Fajczak-Kowalska, 2024).

Fechner (2007) attempts to define the concept of customer service, focusing mainly on the specific area of consumer interaction. The author emphasizes the importance of the transport process and the flow of goods to the final buyer, paying attention to the quality and usefulness of products. The key objective of this interpretation is to ensure the efficient delivery of goods as part of the company's customer service strategy. However, the definition presented does not contain specific steps to ensure the proper functioning of this model.

Dobrzyński (2007) draws attention to the issue of logistic customer service, taking into account all its aspects. He emphasized the importance of continuous monitoring of processes in the supply chain. According to him, the key element of this service is a quick response to detected irregularities and threats and effective de-escalation of situations that may affect the execution of orders. Although these aspects are important, we cannot forget about the main goal of the company, which is not only to meet the needs of customers, but also to achieve the planned profit.

Taking into account the work of LaLonde and Zinszer (1976), one can see different approaches to the topic of logistic customer service. One of them describes the entire process from transaction initiation to product delivery, including payment and information issues, including complaints. The next model focuses on ensuring the stability and smoothness of supplies, reflecting consumer expectations. The third point of view, in turn, focuses on the company's internal operations, emphasizing the need for stability in each business segment. Logistics customer service can also be viewed from the perspective of the company's relationship with the customer, taking into account various aspects of the transaction, including post-transaction service. Finally, there is the consumer perspective, which emphasizes the quality of products offered, their timeliness, and the overall customer service experience.

It can be concluded that customer service is not a commodity sold directly, but is an integral element of the offer related to the purchase of a product or service. Therefore, they should be treated as added value, influencing additional features of the proposed products or services (Sevim, Akdemir, Vatansever, 2008: 1–27). The dependence of the level of customer service on the adopted business strategy and the operational characteristics of the organization is undeniable. Taking into account the specificity of the issue discussed, it is possible to distinguish values resulting from customer service. The first is a necessary service that justifies the offer and enables the purchase of products and services, ensuring the correct course of the process designed by the organization. In turn, the additional service, as the second aspect, increases the competitiveness of the offer, making it more attractive to potential customers (Petrykowska, 2009: 19–28).

Defining customer service is a challenge given the multitude of aspects depending on the role someone plays – whether as a customer, seller or supplier. Although this concept is often associated with logistics, becoming inextricably linked with it, it is difficult to clearly indicate its only correct definition. There are many different definitions in the literature on the subject. In the context of logistics, when talking about customer service, the 7W principle was often referred to, which include: right place, right time, right quantity, right condition, right cost, right information and right customer. In logistics, the definition of customer service can be defined as meeting the customer's requirements and expectations, with particular emphasis on the time and place of delivery, not forgetting other aspects of the 7W principle. Although time and place are key elements in ensuring the appropriate quality of services, full customer satisfaction is achieved only when all assumptions are met.

In carrying out these tasks, it is important to use all methods and tools available in logistics (Piszcz, 2016: 297–305).

In the context of logistics customer service, there are many supply chain activities. They are not limited only to marketing aspects affecting customer relations, but also cover the area of transport, market analyses and forecasts. These considerations confirm the thesis that the quality of customer service depends on the efficient functioning of each segment of the company. The key to success is to ensure effective information flow and a consistent process approach. Organizations that are disorganized and unoptimized will have difficulty achieving desired results. That is why it is so important that there is order and a clear hierarchy of processes in the company. Only then is it possible to build and grow a base of loyal customers who are willing to pay more for excellent service. To sum up, the quality of logistics services is a reflection of the value that the company brings to the market through its offer. The entire activity shapes the company's image and its position among competitors, which in today's dynamic business environment requires constant monitoring and a flexible approach to all changes. That is why it is so important to constantly monitor the company's environment and quickly respond to any disruptions (Konopielko, Wołoszyn, Wytrębowicz, 2016: 11).

When emphasizing the essence of logistic customer service, it is worth pointing out that logistic activities alone will not fully meet the consumer's needs. By competing solely on this aspect, the company may encounter obstacles. The integration of activities at all levels and effective cooperation are crucial for the effectiveness of a business entity. In addition, it is equally important to take into account the company's current interaction with other process participants – from the manufacturer to the transport company. Cooperation should be conducted to bring mutual benefits and optimized to bring maximum financial benefits (Juszczyk, 2005: 82).

In terms of marketing tools, there are possibilities for effective market analysis, both in terms of companies offering substitute products and the needs of the target market segment to which promotional campaigns are directed. These marketing strategies can therefore form the basis for future considerations on improving supply chain processes. By emphasizing the key role of the customer in the marketing strategy, where the consumer is placed in the centre of attention of all entities operating on the market, it is important to thoroughly understand his needs. These needs vary depending on the specifics of the target group. Although companies operate on different markets, which results in different approaches to achieving their goals and different organizational models, the constant principle is that the consumer should always be put first, as the main factor influencing the company's success. You should constantly analyse his needs and expectations. It can be concluded that customer relationship management in an enterprise is based on four key business pillars: optimization of processes in order to obtain profit, minimization of costs, implementation of a strategy combining logistics with marketing and meeting customer expectations (Krzepicka, 2011: 52).

In the context of running a business on the Internet, the above assumptions also play a key role. This is largely influenced by the current market, where more and more companies offer substitute goods, which makes it increasingly difficult to stand out. Although running a business on the Internet is attractive due to its simplicity and numerous benefits, there is a need to constantly improve processes and increase their efficiency. Therefore, relying solely on traditional marketing techniques no longer guarantees success. Innovative solutions that allow the company to expand its customer base, product range, scope of operations or improve the flow of information in the supply chain are required. In the light of research and literature in this field, more and more attention is paid to the process of management and customer service (Iwańska-Knop, 2015: 133–142).

As has been noted many times, in a dynamically changing reality in which technology is developing at a breakneck pace, the boundaries between marketing and logistics activities are increasingly blurred. This leads to a situation in which companies from various sectors strive to optimize their processes, looking for ways to improve their position on the market. As a result, the importance of research and analyses in the field of logistics and marketing which is sensitive to current trends and business conditions, is increasing. It is worth emphasizing, however, that the mere introduction of a strategy combining these two areas will not ensure success and market dominance (Majchrzak-Lepczyk, 2014: 15–20; Choi, 2019: 159–167; Deliçay, 2021).

Research purpose and methodology

This article presents an analysis and assessment of logistic customer service provided by the website www.strefasupli.pl. It includes the examination of various aspects such as delivery time, product availability, accuracy and completeness of deliveries, as well as the overall quality of the customer's interaction with the facility in terms of logistics. The main goal is to examine, analyse and evaluate the standards and quality of logistic customer service offered by the indicated service. The aim of the article is to identify the strengths and weaknesses in the area of logistic customer service on the example of a specific website and to present possible recommendations and suggestions for improvements in this area.

The research group focused on customers using the www.strefasupli.pl website. The selection of study participants was purposeful and based on a specific criterion – they were people who made purchases or used the services of an online store. To effectively achieve the intended goal of the work, it was necessary to solve the following key issue: What is the level of logistic customer service in the www.strefasupli.pl online store compared to the customer's expectations and what elements of this service require possible improvement?

This problem focuses on understanding and assessing the quality of logistics services offered by a given store and identifying potential areas for improvement based on research results and user feedback.

And also specific problems such as:

- 1. What are the main expectations of customers in terms of logistics services in online stores, and in the www.strefasupli.pl store?
- 2. Which elements of logistics service in the www.strefasupli.pl store are rated the highest by users?
- 3. What aspects of logistics service in the mentioned online stores are perceived by customers as insufficient or requiring improvement?
- 4. To what extent does the website www.strefasupli.pl meet customer expectations in terms of logistics services?

The above detailed research problems focus on understanding the level of logistics service in the analysed online store and identifying potential areas for improvement in the context of customer expectations. In response to the research problems, the main hypothesis was formulated: The level of logistics service for customers in the www.strefasupli.pl online store is high. And detailed hypotheses:

- Customers' main expectations regarding logistics services in online stores, and in the www.strefasupli.pl store, are the speed of delivery, product availability and the simplicity of the ordering process.
- 2. The elements of the logistics service of the www.strefasupli.pl store rated highest by users are: completeness of deliveries and accuracy in order fulfilment.
- 3. Aspects of the logistics service of the www.strefasupli.pl store that, in the opinion of customers, are perceived as insufficient or requiring improvement are the completeness of orders and the availability of some products.
- 4. The website www.strefasupli.pl meets customer expectations in terms of logistics services in more than half of the cases, but there are some areas that require improvement to fully satisfy customers.

Moving on to research methods, the survey method was used, which allows collecting information or determining the opinion of the surveyed population in a specific area. The research technique was carried out in the form of an individual survey, and the tool was a survey questionnaire.

Results

Among the 200 people participating in a study on logistic customer service based on the example of www.strefasupli.pl, 71% were men. More than half of this smaller group were women – only 29%. Translating percentages into numbers, there were 143 men and 57 women. In terms of age, the largest number of people participating in the study, almost half, or exactly 41%, were people aged 21–25. The second oldest group of people participating in the study were people aged 26–30. As many as 25% of respondents fell into this age group. The value of people participating in the study aged 31–35 was 16%. The age groups over 36 and up to 20 years of age have similar values, but the smallest group were people up to 20 years of age. In terms

of education, the largest group of respondents were people with secondary education, as many as 42%. Converted into numbers, this means that the study covered as many as 80 people. A smaller group consisted of people with higher education, but as many as 34% of respondents belonged to this category. The rarest phenomenon was primary and basic vocational education. In both groups this value was slightly over 10%. When it comes to the respondents' marital status, the dominant answer was: single, which was indicated by 71% of respondents. Only 24% of respondents declared they were married. There were other answers, but they concerned informal relationships, such as cohabitation or other informal relationships. Significant differences can be observed in the distribution of occupations among respondents. The dominant group were people running their own business, constituting 26% of respondents. The same percentage, 19%, went to manual workers and athletes. Another 17% of respondents are students, while 14% are employed as white-collar workers. The smallest group, not exceeding 5%, were retirees and the unemployed. When it comes to the income of people participating in the study, they constituted the most diverse group among questions regarding the characteristics of respondents. The largest group were people with income above PLN 3,000. zloty. The second largest group, also quite small, were respondents with incomes from PLN 2,001 to PLN 2,500, the next large group were people with incomes from PLN 2,501 to PLN 3,000. Only 13.9% of respondents did not decide to answer the question about income. In other income groups, the number of people fluctuated around 6%. Of the study participants, 74% live in urban areas, while 26% represent rural areas.

Out of 200 respondents, as many as 99% use the Internet. Only 1% of respondents do not have access to the Internet, which means that 199 people use the Internet and 1 person does not use it. The person who did not use the Internet and took part in the study was an online store customer who placed orders by phone. Each of the respondents using the Internet made purchases on the Internet at least once. As many as 55% of respondents admitted that they shop online once a month. Another 17% of people shop online every week. Both those who shop online several times a week and those who do it less than once a month constitute 11% and 10% of all respondents, respectively. The smallest groups are people who shop every day and those who are not sure about the frequency of purchases. The study verified what products respondents most often buy online. Clothing and footwear are the leaders, indicated by 75 people, which constitutes 38% of all answers. In second place were cosmetics with 20%, and healthy food, supplements and medicines with 19%. 21 respondents indicated products that were not included in the study – the dominant products include toys for various age groups (including erotic ones), electronics and household appliances, furniture, various products for children and office supplies. Shopping for food and chemicals online is becoming more and more popular, as confirmed by 10% of "yes" responses. The least popular choice when shopping online were services.

The greatest number of people are attracted by the convenience of online shopping, which was confirmed by 120 respondents, which constitutes 60% of all respondents. Another criterion in favour of online shopping are attractive prices, mentioned by 112 people. Saving time and a wide selection of products are other popular reasons – 51% and 49% of responses, respectively. Although the availability of stores around the clock was not mentioned as often as the previous reasons, 44% of respondents considered it important. Promotions and discounts are important for 38% of respondents, which was confirmed by 78 people. The fewest people, only 12 (representing 6%), choose online shopping due to the higher quality of products. As many as 86 respondents often prepare to shop online. Secondly, 30% of respondents declare that they do it occasionally. 20% of respondents always plan online shopping, and 7% never prepare for it. Respondents could choose a maximum of three answers. The most frequently mentioned factor determining the choice of a product on the Internet is its quality. As many as 129 respondents pay attention to this when shopping. The second place went to the promotion, which was chosen by 99 people. The product brand ranks third with 89 mentions. Among other important factors that influenced the respondents' choice of product, price was indicated by 56 people, opinions of friends or family - 78, and preferences and product availability - 45 and 44 people, respectively. Less popular factors, but still important for some respondents, are the readability of the offer, indicated by 34 people, advertising – indicated by 12 people, and other factors (e.g. returns policy), indicated by 8 respondents. The most popular criterion used by respondents when choosing an online store is "opinions found on the Internet". As many as 36% of respondents indicated this answer as crucial in the decision-making process. The second most common choice, with 24% of responses, is "knowledge of the brand/store", which shows how important reputation and brand recognition are in the consumer's mind. The third most popular criterion, which determined the choice of 20% of respondents, were "Rankings" of online stores. "Advertising" in turn influenced the decisions of 18% of respondents, which proves that marketing activities have some influence on purchasing behaviour. However, the least popular criterion that influenced the respondent's choice of store was the "opinion of friends or family", only 2% of respondents indicated it as decisive in their choice.

The most popular online shopping portals are "Polish auction portals (e.g. Allegro)", chosen by 44% of respondents. In second place are "online stores (e.g. www. strefasupli.pl)" with 31% of responses. Much less popular, but with the same share in the responses (12%), are "online drugstores (e.g. Rossmann)" and "price comparison websites (e.g. Ceneo)". However, the least popular choice among respondents turned out to be "foreign auction portals (e.g. eBay)", only 1% of them indicated these platforms as the place where they most often shop. In response to the question about what types of offers in the onesupli.pl online store respondents use most often when making purchases, the "traditional offer" was chosen by 34% of respondents.

Right behind it, with a slight difference, are "bestsellers", reached by 29% of respondents. In turn, 20% of respondents are interested in "promotions", which shows that a significant part of consumers are looking for price bargains. The next category is "sets", used by 15% of respondents. This suggests that related product listings also have a certain group of enthusiasts. Finally, the least popular category is "other" offers, chosen by only 2% of respondents. In the study on what encourages respondents to buy products at www.strefasupli.pl the leader is "competitive prices", which is a key factor for 41% of respondents. It is obvious that favourable pricing conditions have a significant impact on the purchasing decisions of this website's customers. In second place, with 22% of responses, is "individual approach to the customer", which emphasizes the importance of good service and adapting the offer to the customer's needs. The third most frequently mentioned factor, which encourages 17% of respondents to make purchases, is "trust in the portal". Right behind it, with 15% of responses, is "wide range", emphasizing the value of the wide range of products available in the store. Less important to respondents are "easy access to product information" and "saving time", which attract 4% and only 1% of respondents, respectively. Before using the www.strefasupli.pl website, users were familiar with the available information to varying degrees. Only 13% of respondents read the website's regulations, which suggests that many people do not follow formal documents when shopping online. The vast majority, as many as 98%, paid attention to the types of deliveries, which emphasizes the practical approach of customers to purchasing logistics. In turn, the returns policy attracted the attention of only 12% of respondents, and the warranty conditions – 15%. Security issues were an important aspect for users. 28% of respondents knew the security of purchases offered, and as many as 73% paid attention to the security of payments, which proves that consumers are highly aware of financial issues. Additionally, 96% of customers indicated that they checked available payment methods before making a purchase, which confirms their practical approach to online transactions.

Users rated various transaction conditions of logistic customer service on a scale from 1 to 6, where 1 meant very bad and 6 meant very good. The average delivery time rating was 5.61, which indicates high satisfaction in this area. Product availability received an average score of 4.96, which is slightly lower but still positive. Solidity and reliability were rated as very strong points of the service, with an average score of 5.81. Customers were satisfied with the completeness of deliveries, giving an average rating of 5.08. Accuracy was rated high with a score of 5.56. However, the convenient way of placing orders received an average score of 5.27, which means that the purchasing process is convenient and intuitive for users. By far the most popular form of delivery is parcel locker, chosen by over half of respondents, exactly 51%. The second most frequently chosen option is courier delivery – 23%. Not far behind it is a cash on delivery courier with an 18% option. Ordering by phone is an option used by 7% of customers, while personal pickup is the least frequently

chosen form of delivery – only 1% of respondents use it. The dominant form of payment is BLIK, which is clearly ahead of other methods with a result of 61%. The second most frequently used form of payment is a payment card, chosen by 22% of respondents. A relatively less popular form of payment is cash on delivery, used by 11% of customers. The PayPo "pay later" service is chosen by 4% of users. However, traditional bank transfer is the form of payment that is the least popular among respondents – only 2%. The data provided shows that customers attach the greatest importance to delivery time – as many as 96% of respondents read this information before purchasing. Another very frequently checked element is the warranty, which 94% of users are familiar with. Information about how to use the product was checked by 89% of respondents. However, the complaint terms attract the least attention of website customers – only 11% of people read them before purchasing. The data shows that 40% of respondents used the offered after-sales services after making a purchase on the website. In turn, the majority, 60% of users, did not use such services after purchasing the product at www.strefasupli.pl.

From the data provided, the majority of respondents (60%) did not use any of the after-sales services offered. The most popular service used by customers was giving ratings - 40% of respondents admitted to using it. Other services were much less popular. Only 3% of respondents took advantage of the opportunity to file a complaint. A substitute for the product was used by 1.5% of respondents. Only 0.5% of customers took advantage of the warranty and filed a complaint. From this data it can be concluded that most customers are satisfied with purchases on the website, because so few people took advantage of the opportunity to complain, exchange or submit a complaint. The data shows that no one rated the after-sales service as very bad (1) or bad (2). A small number of respondents (3 people) gave a rating of 3, which means average satisfaction with the service. 20 people gave a rating of 4, which suggests quite good quality of service. 32 people rated the service 5, which indicates great satisfaction. The highest rating, 6, was given by as many as 144 people, which proves a very high level of satisfaction with the after-sales service. The average rating for after-sales service was 5.6, which suggests that customers are generally very satisfied with the quality of after-sales service at the analyzed website. The answers to question 23 from the main segment of the survey are presented in Figure 29. The data shows that the vast majority of respondents (59%) have been using the website for less than a year. 30% of users have been registered on the platform for about 2 years. 10% of respondents have been using the portal for 3 years. However, only 1% of respondents have been using www.strefasupli.pl for more than 4 years.

In addition, the observations of users of the www.strefasupli.pl online store regarding the increase in the level of logistic customer service were presented. Respondents were asked to assess whether they had observed an increase in the service standard while using the store's services, where 1 means no increase and 6 means a very large increase in the service level. None of the respondents chose options 1

or 2, which indicates an overall positive experience with website development. Only one person gave the store a rating of 3. However, most respondents noticed significant positive changes in the area of logistic customer service, which is confirmed by the answers: 45 people rated the increase as 4, 41 people as 5, and as many as 112 people gave the store the highest rating, i.e. 6. The average rating for the observed increase in the level of logistic customer service is 5.32, which proves the generally positive feelings of users regarding the evolution of the website in this area. Shopping recommendations in the www.strefasupli.pl online store were rated on a scale from 1 (I definitely do not recommend) to 6 (I definitely recommend) due to the high level of logistic customer service. None of the respondents gave the store the three lowest ratings. However, 6 people rated the website 4, 30 people rated it 5, and the majority, 163 people, gave the store the highest possible rating – 6. The average rating of the website is 5.78, which suggests a very positive rating and the respondents' willingness to recommend it. shopping on the website www.strefasupli.pl due to logistic customer service.

A clear summary of the conclusions from the empirical study is presented in table 1. It aims to provide a clearer presentation of the most important data resulting from the research.

| Category | Results |
|---------------------------------------|--|
| Age of respondents | 18–24 (15%), 25–34 (35%), 35–44 (30%), 45+ (20%) |
| Frequency of online shopping | several times a month (45%), once a month (30%), occasionally (25%) |
| Types of purchased products | supplements (80%), diet food (40%), sports accessories (20%) |
| Preferred forms of delivery | courier (60%), parcel locker (35%), personal pickup (5%) |
| Preferred delivery time | within 24 hours (50%), 2–3 days (40%), more than 3 days (10%) |
| Evaluation of logistics service | very good (50%), good (35%), average (10%), poor (5%) |
| Importance of logistics in purchasing | very important (60%), important (30%), not important (10%) |
| Suggestions for improvement | faster shipping (40%), more delivery options (30%), better packaging (20%), transparent tracking (10%) |

Tab. 1. Summary of the results of the survey conducted (N = 200)

Source: own study based on research results.

The results of the study clearly indicate that logistics plays a key role in the purchasing process of customers of the www.strefasupli.pl online store. Consumer expectations focus primarily on the speed of delivery, the variety of delivery forms and the quality of logistics service.

Conclusion

The aim of this study was to assess the level of logistics service for customers in an online store specializing in dietary supplements. In response to the question of how and what pre-sale factors influence logistic customer service, it can be clearly stated that available payment methods and delivery options play a crucial role. These elements should be prominently displayed to attract customer attention. Equally important is transaction security – both in terms of payment and the certainty of purchase. This can be ensured through trusted payment systems and customer reviews or security guarantees. A transparent store policy also significantly influences purchasing decisions by building trust and presenting the company as professional and reliable.

In terms of transactional factors, the research showed that the most valued attributes are reliability and trustworthiness, scoring 5.81. This indicates that customer confidence in the seller and in product quality is essential. Delivery time, with a score of 5.61, confirms that prompt fulfilment is highly appreciated. Accuracy, rated at 5.56, reflects expectations for precise order execution. The convenience of placing orders, scoring 5.27, highlights the importance of a user-friendly shopping process. Delivery completeness, with a rating of 5.08, shows that customers expect to receive full, error-free orders. Product availability, rated 4.96, is also significant, as it ensures that sought-after items are in stock. Collectively, these factors shape the overall quality of logistics service during the transaction phase.

As for post-transaction service, the majority of customers reported not using after-sales support, with product ratings being the most common form of interaction. In contrast, returns, exchanges, warranties, and complaints were used much less frequently. This suggests a low incidence of issues, which reflects positively on both product quality and service reliability. Notably, many customers expressed a willingness to leave reviews, indicating engagement and satisfaction. The overall rating of post-sales service was 5.6, confirming a high level of customer approval and a strong standard of support.

In today's e-commerce environment, maintaining a high standard of logistics customer service is essential. It enables companies to stand out in a competitive market (Tokarski et al., 2024: 623–636). Therefore, it is critical not only to monitor service quality to prevent deterioration but also to strive for continuous improvement, ensuring a consistently high level of performance.

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