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THE POSTAL SERVICES MARKET IN POLAND – LOGISTICS CUSTOMER SERVICE

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Purpose: The article focuses on the analysis of the postal market from the perspective of logistics processes, e.g., parcel delivery. The aim was to examine how the postal market has evolved over the period between 2019 and 2023 and to investigate consumer responses to the activities of postal service providers. The following research hypothesis was proposed: the optimisation of logistics processes in the postal market depends on customer satisfaction and responsiveness to customer needs.
Design/methodology/approach: A survey was conducted to assess customer satisfaction with postal services and to understand consumer expectations regarding courier services. The study also included an analysis of postal service reports from the years 2019 to 2023.
Findings: Logistics processes play a key role in modern organisations, involving the management of the flow of materials, information, and services from the point of origin to the point of consumption. These processes are present in all organisations.
Research limitations/implications: The limitation of the research was the quantity of data obtained from respondents.
Practical implications: A reduction in the number of complaints related to lost or delayed parcels, as well as a decrease in costs.
Social implications: An increase in customer satisfaction with the delivery services provided by postal companies.
Originality/value: The paper presents a novel analysis and presentation of current data on customer satisfaction with postal services, as well as a proposal to introduce a GPS-based service that would allow customers to track their parcels on a map in real time via a mobile application. Miniature GPS transmitters would be installed on parcel labels and in courier vehicles, enabling parcel tracking throughout the entire delivery process. This would also enhance parcel security and address the issue of lost shipments, as the location of each parcel could be easily determined.
Keywords: logistics, courier services, parcel.
Category of the paper: research paper, conceptual paper.

1. Introduction

There are numerous definitions that explain what logistics processes are. One such definition states that they are: "the processes of goods flow, involving the physical movement and storage of raw materials, components, and finished products, as well as the flow of information related to this movement through successive phases of various types of economic processes (…)" (Abt, 1998).

Several key factors of logistics processes have been identified (Figure 1 – appendix).

The primary objective of logistics processes is to achieve minimal costs while maintaining satisfactory customer service and flow optimisation. The entire process should aim to achieve this goal. Although these are often considered auxiliary processes, without them it would be impossible to fulfil core business functions.

Within logistics processes, a distinction is made between primary (core) and supporting (auxiliary) processes.

The core processes include:

- warehousing activities,
- transportation processes,
- transshipment operations,
- materials logistics.

These are elements that directly influence economic outcomes.

Supporting processes include:

- packaging,
- labelling,
- marking,
- order processing,
- preparation of documentation, etc.

These are components that add value to the finished product (Dobrzyński, 2007).

The execution of logistics processes requires infrastructure which should facilitate efficient and smooth physical movement of goods and services from the point of origin to the point of destination, along with the corresponding flow of information (Biesok, 2013).

The infrastructure of logistics processes refers to the entire set of resources, technologies, systems, and facilities that support and enable the execution of logistics operations within an organisation. This group of resources includes the elements presented in (Figure 2 – appendix).

The infrastructure of logistics processes falls under the technical-organisational system, meaning that the key indicator for improvement should be the minimisation of logistics costs while maintaining effective logistics processes. This infrastructure is classified as relatively fixed costs, i.e., costs that remain constant regardless of the scale of operations (Brajer, 2015).

Logistics Services

Logistics services encompass all services aimed at meeting consumer needs by performing specific logistics functions (Figure 3 – appendix).

The goals of logistics services include:

- minimising transportation, warehousing, and inventory management costs,
- reducing the time required to deliver products to the customer by optimising transport routes and warehousing processes,
- assisting in demand forecasting for new products, which enables better production and distribution planning (Coyle, 2002).

Quality of Logistics Services

The analysis of service quality is closely linked to the determinants of quality – that is, the features that a service must meet. The most commonly applied quality determinant in logistics operations is the 7R concept, or Seven Rights. This concept focuses on fulfilling seven key elements (Fechner, 2007):

- the right product,
- in the right quantity,
- at the right time,
- at the right place,
- in the right condition,
- at the right price,
- using the right information.

By adhering to the 7R principle, it is possible to achieve the highest level of customer service.

The quality assurance mechanism in logistics is built on six stages that ensure improvement in service quality:

1. Organisational commitment – management must take an active role in setting goals and fulfilling the defined mission and logistics tasks. A frequent cause of failure in quality management is the lack of engagement from the leadership.
2. Understanding customer needs and requirements – in logistics service, it is crucial to focus primarily on customer demands and expectations, including their internal motivations. Given the dynamic nature of customer needs, continuous research and process enhancement are necessary in order to achieve sustained customer satisfaction.
3. Measuring current performance – accurate studies and result measurements must be carried out in accordance with existing standards. This helps identify discrepancies between customer expectations and actual outcomes, creating opportunities for quality improvement.

4. Developing a quality strategy – this refers to the actions taken to satisfy customers. It includes analysing consumer requirements, implementing appropriate employee training methods, verifying results, and monitoring process variability.
5. Implementing the quality assurance process – based on the developed strategy, the process must be implemented effectively and without additional complications. Employees directly involved in the improvement initiatives play a key role at this stage.
6. Continuous improvement – the organisation must constantly seek opportunities to enhance the process.

Logistics Customer Service

Logistics customer service is crucial for achieving long-term market success. Customer satisfaction is the most important factor within a company.

Logistics customer service can be divided into three stages: pre-transactional (preparing the company to serve customers), transactional (customer contact and order fulfilment), and post-transactional (continuing the relationship). Corporations often overlook the importance of providing high-quality post-transactional service. A common misconception is that the customer relationship ends at this stage; however, in the case of future business, the consumer may choose a different provider. To avoid such outcomes, companies must ensure excellent customer service even after a transaction has been completed. Key elements that influence the quality of post-transactional service include warranty reliability, compensation, repairs, the manner in which warranty claims are handled, and promotional offers for loyal customers. This way, the customer feels appreciated and remembered, making them more likely to return to the same company in the future (Ficoń, 2008).

Achieving customer satisfaction and effectively managing customer relationships requires significant effort. Therefore, logistics customer service can be analysed according to four main elements:

- Time – refers to order fulfilment time, delivery time, and the time required to prepare and dispatch goods. This includes the total time needed for: transmitting the order (ideally through computer networks), processing the order (payment authorisation, preparing shipping documents, communication with the sales and inventory departments), preparing the goods for dispatch (order picking and completion), and shipping the goods (transport and unloading).
- Reliability – concerns adherence to delivery deadlines. It comprises three components: cycle reliability (products are delivered regularly, in proper condition, undamaged, and meeting customer expectations), secured delivery (goods must be adequately protected to prevent damage, as this leads to additional costs and potential complaints), and correctly executed orders (proper order preparation).

- Communication – effective exchange of information between the company and the customer, as well as within internal processes. The consumer must feel they are in continuous contact with the company, for example, through email updates on the status of their order.
- Convenience – customer service must be varied and tailored to the individual needs of each client; it cannot be standardised. Each customer requires a different approach and delivery method, and the company must remain flexible to meet those expectations (Frąś, 2015).

To ensure continuous customer satisfaction, each stage of the customer service process must be improved and monitored regularly.

Analysis of Postal Service Volumes in the Years 2019-2023

Table 1 (appendix) presents the volumes of postal services, which include letter mail, postal parcels, courier shipments, and other services. A year-on-year increase in the volume of postal services has been observed. In 2019, a total of 1,886.2 million items were processed, while in 2021, this figure rose to 1,935.1 million items – an increase of 2.5%. This growth can likely be attributed to the impact of the COVID-19 pandemic, which stimulated the development of the postal market. The introduction of lockdowns eliminated the possibility of in-store shopping and forced society to turn to e-commerce. Even after the pandemic, consumers continued to prefer online shopping, which contributed to a continued increase in volumes, culminating in the highest figure in 2023. Consumer expectations regarding postal services have also evolved. With the development of new technologies, the volume of letter mail has declined. Between 2019 and 2023, a decrease of 32.7% was recorded in this segment. In contrast, courier shipment volumes increased by 58.1% over the same period. The volume of postal parcels has remained relatively stable. A decrease of 29.8% was observed in the category of other services.

Courier Services in the Years 2020-2023

Courier services have exhibited an upward trend in both volumes and revenues from year to year. The main driver of this growth was the COVID-19 pandemic, during which people increasingly turned to e-commerce. This market continues to expand; however, a downward trend can be observed in the number of available courier service providers (Table 2 – appendix). Since 2020, the number of operators has decreased by 18, representing a drop of 20.22%. This reduction is primarily due to the rising costs of operating such businesses and employing staff, coupled with intense market competition. Over the years, the consistent market leaders have been InPost sp. z o.o., DPD Polska sp. z o.o., Poczta Polska S.A., GLS Poland sp. z o.o., UPS Polska sp. z o.o., and FedEx Express Poland sp. z o.o. In 2020, InPost Paczkomaty sp. z o.o. – a branch of InPost sp. z o.o. – also appeared in the rankings. A developing company in this segment is Ruch S.A., which succeeded in appearing in the ranking in 2023.

Analysis of Postal Service Revenues in the Years 2019-2023

Between 2019 and 2023, a noticeable increase in revenues from postal services was observed (Table 3 – appendix). This growth was driven by the continuous expansion of e-commerce, which in turn led to increased demand for courier services. On average, revenues increased by PLN 1,568.03 million per year. The largest increase occurred between 2022 and 2023, amounting to as much as 13%.

The following services were analysed:

- letter mail,
- postal parcels,
- courier shipments.

In the case of courier shipments, revenue has steadily increased over time. Between 2019 and 2023, profits rose by 56%. Revenue from letter mail remained relatively stable, averaging PLN 3,566.08 million annually, with only minor fluctuations year to year. Other services also maintained a comparable revenue level. However, postal parcels recorded a significant decline in revenue, decreasing by 35.33%.

Analysis of Postal Service Complaints in the Years 2019-2023

Complaints regarding services are a relatively common process. They make it possible to monitor service quality and customer satisfaction. There are various reasons for submitting complaints in the postal sector, including: loss of a shipment, loss of contents, damage to the shipment, delays, incorrect completion of proof of delivery for registered items, and other issues (e.g., returning a registered item outside the designated timeframe, or returning a shipment due to an incorrectly stated reason).

Table 4 (appendix) shows that the most frequent cause of consumer complaints between 2020 and 2023 was the loss of a shipment. In 2020, this accounted for as many as 101,068 complaints, representing 55.62% of all submitted claims. However, this category has shown a downward trend. In 2023, there were 22.6% fewer complaints related to shipment loss compared to 2020. This indicates that postal service providers have begun paying greater attention to parcel handling and have implemented improvements in the supply chain. Regarding the loss of contents, the data remained relatively stable, with an average of 845 cases reported annually. Compared to other types of complaints, these numbers are relatively low, indicating that this is not a dominant issue requiring urgent improvement. Another challenge faced by customers is shipment damage. Similar to shipment loss, this category also showed a declining trend. Over four years, complaints in this area decreased by 9.57%. This suggests that shipments are being handled with greater care and that shipment management protocols have improved. The highest number of complaints related to delivery delays and errors in proof-of-delivery documentation was recorded in 2022. This peak may be attributed to the pandemic period and the increased volume of shipments. Other complaint categories also exist, with an average of 57,987 complaints per year. Overall, it is clear that complaints remain a fairly common issue and are difficult to eliminate entirely. However, the number of complaints related to universal services is decreasing, which aligns with the overall decline in the volume of such services.

Analysis of Postal Infrastructure Elements in the Years 2019-2023

Postal infrastructure primarily includes post office branches, parcel lockers, and letter mailboxes. Post office branches are operated by Poczta Polska. Between 2019 and 2023, a slight decline in the number of such facilities was observed. However, these changes were minimal – with only 7 post office branches closed over four years – indicating that the overall number of available service points has remained relatively stable. Letter mailboxes represent another element of postal infrastructure. In 2020, there were 15,989 mailboxes in Poland. However, a significant downward trend has been recorded in recent years. The year-on-year decline has reached 14.23%. This may be due to the growing availability of courier services, which has led to a decline in the use of traditional mailboxes.

In contrast, postal machines (parcel lockers) are becoming increasingly common in Poland. Consumers are eager to use this form of delivery, as it is a much more convenient and accessible option. In 2019, there were 7000 parcel lockers in use, while by 2023, this number had risen to 38,271 units. On average, the number of parcel lockers increased by 53.26% annually, indicating the direction of development in the postal market.

2. Methods

To gain insight into consumer expectations and their satisfaction with postal services, a survey was conducted.

The aim of the study was to assess satisfaction with postal services and to understand consumer expectations regarding courier services.

The survey was carried out using an online questionnaire. Respondents were asked to answer both single- and multiple-choice closed-ended questions, as well as open-ended questions.

Participants answered 23 questions related to courier services, their satisfaction, dissatisfaction, and expectations.

The analysed research group consisted of 100 individuals, including 64 women and 36 men.

Regarding the age of the respondents, the minimum age was 18 years. The majority of responses came from individuals aged 18-29 (57 respondents), followed by 12 individuals aged 30-40, and 19 individuals aged 41-50.

Among the respondents aged 51 and above, 12 people participated – the same number as in the 30-40 age group. In terms of educational background, 2% of respondents had primary education, 34% had secondary education, and 61% held a higher education degree. An additional 3% declined to provide information about their education. The majority of respondents (73%) lived in cities with populations exceeding 300,000. The sampling method was random, and participants were not provided with any additional information about the purpose of the study.

3. Results

Today, e-commerce is highly popular, and more and more people shop online. The peak of such purchases occurred during the COVID-19 pandemic, when it was the only available way to shop. Since then, people have continued to use this method. According to the survey, 96% of respondents shop online, while only 4% still rely exclusively on traditional in-store purchases. The majority of respondents shop online at least once a month (37 people). Slightly fewer (27 people) shop once a week, while 1 respondent reported shopping 2-3 times a week, and 3 respondents shop online daily. On the other end of the spectrum, 25 individuals make online purchases a few times a year, 1 person every few months, and 3 respondents do not shop online at all. Additionally, one respondent indicated that their shopping frequency is irregular and cannot be clearly defined. Online shopping is directly tied to the choice of the delivery method – how the order is delivered and through which channel. Respondents were asked which delivery methods they use. It was a multiple-choice question, so they could select more than one answer. The results showed that 82 people use parcel lockers. Much fewer (31 people) use courier delivery, and 27 choose delivery to pickup points (e.g., Żabka, Orlen). Another 20 respondents prefer in-store pickup. Delivery to a post office was the least popular, with only 2 users. One respondent stated they do not make any online purchases at all. Respondents were also asked about courier companies they are familiar with and, more importantly, which ones they use most frequently. It was a multiple-choice question, so they could select more than one answer. The most commonly used company was InPost, indicated by 79% of respondents. DPD ranked second with 41%, followed by DHL at 28%. One person each indicated FedEx, no online shopping, or only in-store purchases.

Having identified which courier companies respondents associate with deliveries, the survey then addressed whether price is a key factor when choosing the delivery method. For 40% of respondents, price is the most important factor, although they also consider other aspects. Slightly fewer (30%) stated that while price is important, there are more significant considerations. Only 2% of respondents said they do not consider the price at all, and no one stated that the price was irrelevant.

In the next part of the questionnaire, respondents were asked questions about direct customer service. One of the questions concerned the perceived quality of delivery status notifications (via email, text messages, or app notifications). The results indicate that the quality of notifications is assessed positively: 47 consumers rated it as very good, 44 as good, 8 as average, and only 1 person rated it as very poor.

Another assessed factor was timeliness. Respondents were asked to evaluate the punctuality of courier deliveries and how often parcels arrived late. Overall, courier companies were found to perform well in this regard: 47% of respondents said timeliness was at a good level, and 43% rated it as very good. Only 10% gave negative assessments. These results closely resemble the ratings of delivery status notifications, with the only difference being a switch in the leading position.

Regarding late deliveries, this affected 70% of respondents. 55 people experienced delays 1-2 times per year, 12 reported delays 3-5 times per year, and 3 people experienced delays more than 5 times annually. However, 30% of respondents said they had never encountered this issue. Despite advancements in infrastructure and systems, late deliveries remain a persistent problem. Nonetheless, 91% of customers expressed satisfaction with the delivery status updates they receive.

Delivery issues are often linked to communication problems with couriers. Respondents were asked about situations in which parcels were delivered without any direct contact from the courier (e.g., left at the doorstep). This scenario was experienced by 53% of respondents. Fortunately, for most people (42), this only happened once or twice per year. Nine individuals reported 3-5 such instances per year, and 4 people experienced it more than 6 times annually. By comparison, 45% of respondents have never had such an issue. While this delivery method is quick, it leaves customers without control over the pickup time and raises concerns about parcel security.

Failure to meet customer expectations can result in dissatisfaction. According to the survey, 53% of respondents choose contactless delivery options for this reason. Forty-seven respondents use parcel lockers or similar services more than 11 times a year. Twenty-two use them 7-10 times a year, and sixteen – 3-6 times. Only 9% said they use this form of delivery 1-2 times annually, and 6% never use it. Thus, 69% of those surveyed prefer delivery to parcel lockers. This demonstrates that consumers prioritise convenience and flexibility, as this option allows for package collection at any time.

Parcel loss is an increasingly common issue in courier deliveries. As parcel volumes grow, so do challenges related to security and timeliness. While 66% of respondents have never experienced parcel loss, 34% have – highlighting not only customer frustration but also a negative impact on the reputation of courier companies.

The rise in parcel volumes and delivery method diversity can lead to unexpected complications. In such cases, it is crucial that customers report complaints quickly, with the expectation that their issues will be resolved efficiently. Responses on this matter were mixed. The largest group (34%) stated that when they file complaints at courier companies, customer service is effective but too slow. Meanwhile, 29% found it fast and effective. Unfortunately, 12% claimed that their issue was never resolved or that there was no response. A further 25%

of respondents had never submitted a complaint and therefore had no opinion. The complaint process plays a critical role in building trust in courier companies and securing customer satisfaction. Another factor influencing satisfaction is the return process. Since consumers often shop without trying on products, returns have become an integral part of the online shopping experience. According to 69% of respondents, return procedures offered by courier companies are satisfactory, while 16% found them unsatisfactory. Fifteen percent had no opinion. Return procedures should be simple and transparent, as this would encourage more customers to use them.

The final questions focused on service quality offered by courier companies. Respondents were asked to indicate which company they considered the best (Table 5 – appendix). According to the respondents, the best customer service is provided by InPost (55 respondents), due to its fast and contactless service, timely deliveries (including on Saturdays), and a delivery time usually within 24 hours, with a maximum of 48 hours. Respondents also highlighted the wide availability of parcel lockers and pickup points, as well as the user-friendly app that allows them to easily track or redirect parcels. Customers were satisfied with safe, damage-free, and loss-free deliveries. The study revealed a significant gap between InPost and other companies. DPD ranked second, selected by 15 respondents, who noted its fast and reliable deliveries and fairly friendly customer service. DHL followed with 9 votes; respondents praised its timely deliveries and friendly couriers. FedEx received 3 votes, UPS – 1, GLS – 1, and Poczta Polska – 1. Unfortunately, 15 people did not express an opinion on this matter.

The final item in the survey was an optional open-ended question asking what changes or improvements consumers would like to see in courier services. Most customers expressed a desire for easier contact with courier companies and the ability to schedule delivery times, especially with improved courier availability in the afternoon hours. Respondents also emphasised the need for enhanced parcel security – deliveries should arrive in a better condition, undamaged, and should not get lost. These responses show that managing the supply chain in courier services is far from simple and that the process must be continuously improved to raise service standards.

4. Discussion

Based on the survey results, it can be concluded that society is increasingly turning to online shopping and making use of various delivery methods. The most commonly used method of receiving orders is parcel lockers, as they offer the greatest level of convenience and minimal hassle for customers. Each customer can collect their parcel at a convenient time, without the need to arrange a meeting or make contact with the courier. Additionally, issues such as difficulty reaching couriers and the inability to receive the package at a specific time of day have led consumers to prefer contactless delivery options.

The study shows that the most recognised and favoured company among consumers is InPost, due to its fast and reliable service. InPost also has a well-developed network of parcel lockers. Despite having clear preferences, consumers still consider the cost of delivery when making purchasing decisions, and price remains an important factor in choosing the delivery method. Overall, it can be said that consumers are satisfied with courier services, with most respondents using them at least a few times per year. While there are instances of delayed deliveries, the majority of such cases occur only once or twice a year, which is not a concerning rate. However, a significant issue that courier companies must address is the practice of delivering parcels without making contact with the recipient, such as leaving packages at the door. These practices require urgent improvement, as they may lead to negative consequences such as theft and, ultimately, loss of customer trust.

Another important aspect is that the rising volume of parcels has contributed to an increase in complaints, particularly regarding delays, loss, and damaged parcels. As a result, customers expect these issues to be resolved quickly and efficiently. According to the respondents, complaints are generally resolved in a positive manner, although the process is often too slow.

The survey made it possible to identify the issues consumers face on a daily basis, what they appreciate in a given company or service, and what areas need improvement. One particularly interesting solution proposed by respondents involves the implementation of a real-time parcel tracking system based on the GPS technology.

Currently, courier apps display only basic statuses such as "parcel dispatched" or "in transit," without offering precise location information. With the introduction of GPS tracking, customers would be able to follow their parcel on a live map via the app. Miniature GPS transmitters would be installed on parcel labels and in courier vehicles, enabling parcel tracking throughout the entire delivery process. This would also improve parcel security and help resolve the issue of lost shipments, as lost parcels could be easily located. Additionally, it would streamline warehouse operations: parcels could be automatically scanned and sorted, which would significantly improve the loading and transshipment processes.

For customers, GPS tracking would provide real-time location updates, estimated arrival times, and information on how many deliveries remain before theirs. This would allow them to predict the courier's arrival and adjust their schedule accordingly, instead of waiting all day. Moreover, smart notifications could be implemented – for example, "the courier will arrive within 15 minutes". This would not only facilitate parcel deliveries but also ease the workload of couriers, who would no longer need to contact customers directly. All the necessary information would be available in the application. An additional feature could be the option to set preferred delivery dates and times. The system would then analyse all requests and attempt to create a delivery schedule aligned with customer preferences.

Another benefit of installing GPS systems on parcels would be the optimisation of courier routes. Based on delivery locations, the system could calculate the most efficient route, thereby reducing delivery times and fuel consumption, which in turn would lower courier companies' operating costs.

Such a solution could also support the introduction of autonomous drones for express deliveries. This would increase delivery efficiency, reduce costs, and contribute to environmental protection. With GPS tracking, parcels would be secure and locatable at any time.

5. Summary

Quality management in the logistics processes of courier companies plays a crucial role in ensuring a high level of service and is also an essential aspect of consumers' daily lives. Process optimisation, delivery timeliness, and error minimisation form the foundation that determines success in the logistics sector. Increasing competition in the market motivates companies to introduce more conveniences and service options for customers. The evolution of postal companies is largely dependent on customer satisfaction, which is one of the most important factors determining the success of service providers. Customer satisfaction primarily depends on the flexibility of services offered, quick responses to inquiries, and effective problem resolution. For consumers, effective quality management is a key priority. The years 2019-2023 were a period of intense e-commerce growth, which increased the demand for postal and courier services. This period required postal operators to implement a range of digital innovations – such as parcel tracking – which improved both customer satisfaction and service efficiency. The COVID-19 pandemic also contributed to this development to a significant degree, as it forced operators to rapidly adapt to the new circumstances and compelled consumers to rely on postal and courier services for ordering goods and services. This study addressed the changing standards of customer service provided by postal companies and presented an analysis of how parcel volumes and courier service revenues have evolved. The conducted analysis showed that between 2019 and 2023, parcel volumes increased by 7.95%. However, the rise in parcel volumes and the growing diversity of delivery methods have also led to unexpected challenges. A particularly concerning issue is the persistent volume of customer complaints, which continues to affect delivery providers. The most common complaints involve lost or damaged parcels and missed delivery deadlines. These are issues that can be eliminated but require strong commitment from courier companies. In addition, effective management of the return process has a significant impact on customer satisfaction and company reputation.

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Appendix

Table 1.
Analysis of postal service volumes in the years 2019-2023

Year	Total (million items)
2019	1886,2
2020	1876,7
2021	1935,1
2022	1956,7
2023	2036,2

Source: author's own elaboration based on UKE (Office of Electronic Communications) reports.

Table 2.
Presentation of the number of courier service providers in the years 2020-2023

Year	Quantity
2020	89
2021	85
2022	75
2023	71

Source: author's own elaboration based on UKE (Office of Electronic Communications) reports.

Table 3.
A total of postal service revenues in the years 2019-2023

Year	Total (million PLN)
2019	10242,3
2020	11686,4
2021	12890,9
2022	14363,9
2023	16514,4

Source: author's own elaboration based on UKE (Office of Electronic Communications) reports.

Table 4.
Analysis of complaints regarding universal services filed in the years 2020-2023

Year	2020	2021	2022	2023
Loss of shipment	101068	89484	98764	78169
Loss of contents	810	892	854	824
Damage to shipment	2197	2144	1717	1476
Delayed delivery	11595	7886	22848	4160
Incorrect completion of proof of delivery for registered items	8670	8162	16800	13854
Other	57384	52650	58102	63811
TOTAL	181724	161218	199085	162294

Source: author's own elaboration based on UKE (Office of Electronic Communications) reports.

Table 5.
Companies providing the best quality

Company	Quantity
DPD	15
InPost	55
DHL	9
UPS	1
FedEx	3
GLS	1

Poczta Polska	1
Difficult to say	18

Source: author's own elaboration based on UKE (Office of Electronic Communications) reports.

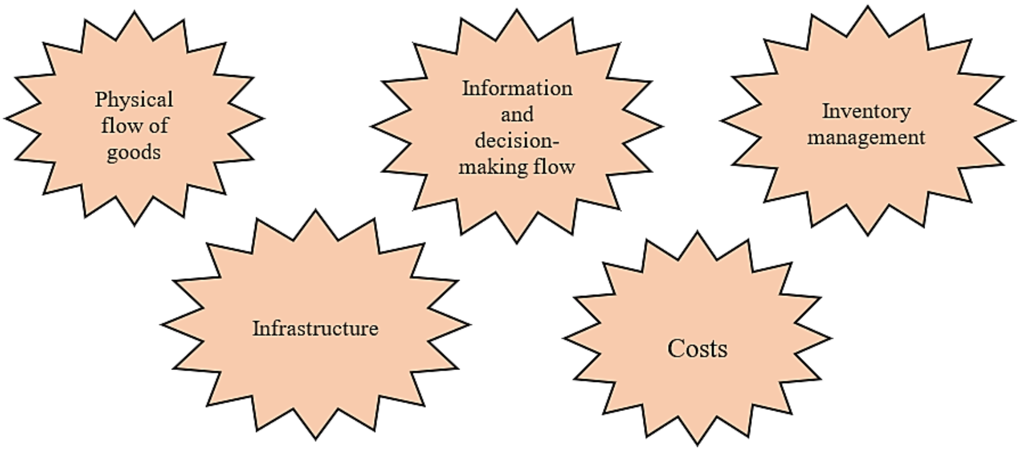

Figure 1. Logistics process factors.

Source: author's own elaboration based on: Skowronek, Sarjusz-Wolski, 2003, pp. 21-22.

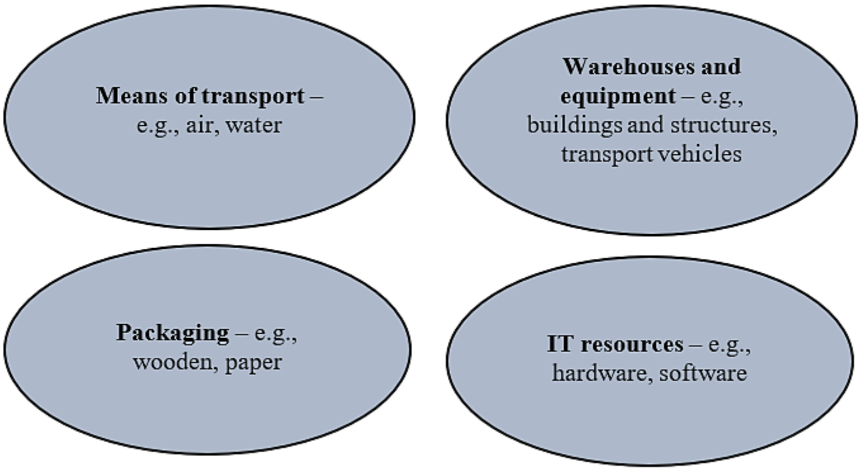

Figure 2. Components of logistics process resources.

Source: author's own elaboration based on: Skowronek, Sarjusz-Wolski, 2003, pp. 82-85.

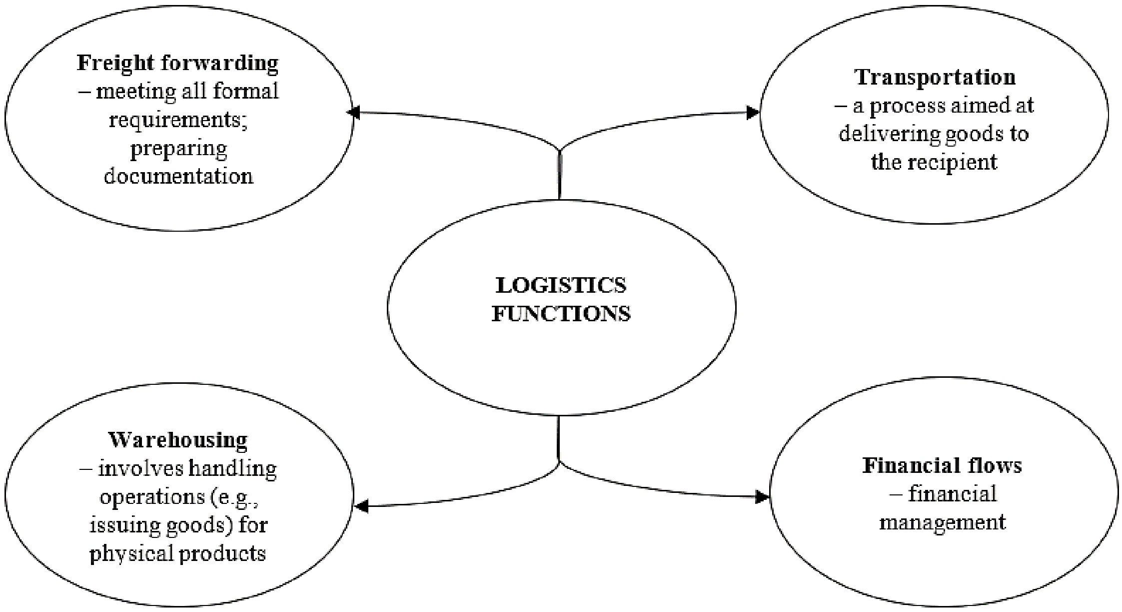

Figure 3. Classification of the functions of logistics services.

Source: author's own elaboration based on: Łunarski, 2012, p. 10.