

# Współczesna Gospodarka



Contemporary Economy  
Electronic Scientific Journal  
<http://en.wspolczesnagospodarka.pl/>

Vol. 9 Issue 3 (2018) 25-34  
ISSN2082-677X  
DOI [10.26881/wg.2018.3.03](https://doi.org/10.26881/wg.2018.3.03)

## AN ANALYSIS OF LOGISTIC PROCESSES RELATED TO CUSTOMER SERVICE IN WÜRTH POLSKA SP. Z O.O. – A CASE STUDY

**Michał Igielski**

### Summary

Changes in the market place new requirements for creating and delivering satisfaction to customers. Customers' expectations about the quality of the delivered products are also changing. That is why the purpose of this article is to analyze logistic processes for customer service at Würth Polska. This will be preceded by a review of modern definitions of logistics and logistic processes. The paper also describes the results of the present author's research focusing on the operation of the enterprise in questions and the opinions of customers relating to service quality. The internal materials of the investigated enterprise and the results of the research have shown the need to introduce improvements in the process of delivery of the ordered goods. This is necessary even despite the company's extensive experience and brand recognition on the market. Therefore, it is also an interesting research question whether similar problems also occur in other companies of this type operating on the Polish market.

**Słowa kluczowe:** logistics, customer service, logistics processes

### Introduction

The changing market places new demands on companies in terms of creating and delivering customer satisfaction. The problems related to the quality of customer service directly concern logistic systems whose efficiency and effectiveness contribute to the improvement of the competitive position on the market.

Logistics is one of the fastest growing areas of business activity in Poland. In developed countries, it is a basic prerequisite for the achievement of high financial results, as well as a guarantee of significant development of the company. We can recognise that activities in

logistics directly affect customer satisfaction and generate added value. As a result, the interest in integrated logistic chains, which are considered to determine whether an enterprise can achieve its strategic goals, has increased recently. The chains also strengthen a company's competitive advantage over rivals. More and more companies have come to the conclusion that an integrated approach to the movement of goods results in a significant reduction in cash and resources.

In addition, as the market is becoming more attractive, the importance of logistics and its processes is growing. In the 21<sup>st</sup> century, logistics has become a field of business activity, whose task is to combine all functions in order to ensure formation of optimum supply chains – from the moment of obtaining raw materials, through the processing of these materials and distribution in various links, up to the final purchaser.

Therefore, the purpose of this article, based on the case study of Würth Polska and the customer survey of Würth Polska, is to analyse the logistic processes at the audited company and to indicate directions for improvement in this area of activity.

## 1. Beginning and essence of logistics

The origins of the word 'logistics' can be found in the Greek language. The term derives from *logo* – think, *logos* – science, knowledge, *logics* – calculation, evaluation, *logistics* – logical thinking, *logismos* – bill, plan (Szpon, 2006, p. 14). In economic terms, logistics was defined in the early 1970s by D. J. Bowersox, who described logistics as the process of managing the efficient and effective flow of raw materials, materials, finished products and relevant information from the point of origin to the point of consumption in order to meet customer requirements (Bowersox, 1978, p. 4).

Interestingly, there is no commonly accepted definition of logistics in the primary literature, nor in business practice. For example, according to F.J. Beier and K. Rutkowski, the term is used to describe the management of movement and storage operations in order to facilitate the movement of products from the place of origin to the place of final consumption. It is also linked to information which allows offering an appropriate level of service to the customer at a reasonable cost. Analyzing the above definition, we can notice three basic tasks facing logistics: minimization of costs, coordination of all flows of commodities/raw materials and responding to customer expectations (Beier, Rutkowski, 1995, p. 16).

Another definition of logistics for the purposes of this report is: knowledge of logistic processes in the economy and the art of effective management of these processes (Sołtysik, 1999, p. 145).

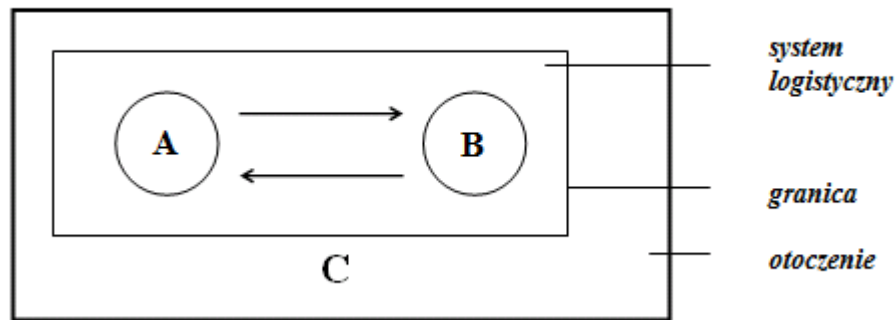
It is worth noting here that many authors who define the concept of logistics do not distinguish between the sphere of economic activity and the field of economic knowledge. This type of classification provides the basis for a more precise definition of the concept, distinguishing three basic propositions (Sarjusz - Wolski, Skowronek, 2012, p. 17):

1. Logistics includes processes of physical flow of material goods – raw materials, materials, semi-finished products, finished products in a company and also between companies. They are also information streams that show and control the processes.
2. Logistics is a certain concept within actual process management, based on integrated and systemic approach to these processes.
3. Logistics is an area of economic knowledge that examines the regularities and phenomena of the flow of goods and information in the economy and its elements.

To sum up, according to the author, logistics is best illustrated by a comprehensive system approach, i.e. the transfer of all materials from the source of supply to the final consumption – taking into account the whole spectrum of interactions that take place between all participants in the process. This means that logistics covers not only the material flow itself, but also the

storage, information and communication activities, the organisation of distribution and the creation and management of the resulting structures. We can say that it also has an impact on production processes and on sales and customer service issues.

An accurate presentation of this relation is seen in the model in Fig 1. The model proposes that the main interrelated elements of the logistic system are the property of the examined whole, and that their features shape the system influencing the environment. The only barrier to the relationship between this logistic system and the environment is the so-called Logistics Manager, through whom a certain interaction can take place (Schary, 1994, pp. 7 – 8).



**Figure 1.** The system approach model for logistics

Source: P. B. Schary P. B., *Logistics Decisions. Text and Cases*, The Dryden Press, Chicago 1994, s. 7 - 8.

Summarizing the above considerations, it is not possible to refer to the link between logistics and the field of science. It is undoubtedly a field of knowledge about processes taking place in the economy, connected with techniques of effective management of them.

## 2. Logistics processes in companies

Without going into the definition of logistics, one can agree with the following perspective on the problem: systems involved in the spatial and temporal transformation of goods are logistic systems, while the processes taking place in them are logistic processes. These processes are mainly carried out by companies specialising in logistic services. The aim of logistic companies that provide services is to overcome the spatial and temporal barriers. Logistic processes are understood as the processes of flow of goods consisting in the physical movement and storage of raw materials, materials and products and the flow of information connected with this movement through the successive phases of various types of economic processes. It must be organised in such a way that the implementation of these processes is efficient and economically sensible (Abt, 1998, s. 30 – 33).

Enterprises carry out a large number of synchronized processes whose implementation requires control of resource allocation and broad communication between units and managers. Appropriate transformations of work objects (materials) occur within the framework of technological processes. As a result of their implementation, they become useful. It can therefore be concluded that logistic processes include not only those related to the movement of all tangible goods, but also those which enable, for example, a proper flow of information.

The logistic process itself comprises the main process, which consists of transport, storage, handling and material management operations. In addition, it includes an auxiliary process consisting of packaging, marking, labelling, order processing, preparation of transport documentation, etc. It is important to stress that a process is logistical when there is a need to

coordinate it with other processes (Krawczyk, 2001, p. 16). It is clear that certain types of transformation of tangible goods are subject to storage, transport and handling processes. The packaging, on the other hand, makes transport, handling and storage easier or at all possible for many goods. The labelling of the packaging can provide relevant information and guidance on the type of transport, handling and storage to facilitate these processes. The transfer and processing of commercial orders transforms material goods from unspecified logistical goods into logically defined goods. These processes are tasks whose performance determines the flow of material goods and information in space and time. Logistics also includes planning and controlling the flow of goods and information. They are necessary for the operation of the logistic system (Abt, Woźniak, 1993, p. 15 – 16).

The logistic department of a company is also responsible for the identification of its logistic needs. For logistic purposes, we may include: transportation and movement of goods; storage and storage; packaging; material handling; inventory control; order fulfillment; demand forecasting; production planning; purchasing; appropriate customer service; placement of warehouses and facilities; return of goods; delivery of spare parts; or waste collection and disposal (Coyle, Bardi, Langley, 2002).

All the above elements assigned to particular areas of logistic tasks demonstrate the complexity and diversity of logistic decisions that have to be made in a company. Organisational management is also a set of interrelated processes, focused on achieving objectives derived from the needs and expectations of customers and measured by the ability to achieve the planned objectives. In terms of company performance, process is a keyword. It is defined as a set of interrelated factors (resources and activities) that transform an input state into an output state with a certain value for the customer. The process approach in the company indicates that logistics should be focused on the course of specific events and not on workstations, functions or cells.

This integrated process encompasses the logistic chain with its structure of different sub-processes, such as order fulfillment, customer service, inventory management and warehousing, product preparation, goal-setting and flow system shaping. Logistic processes are dynamic and constitute components of the structure of the entire logistics system.

### **3. Characteristics of the activity and structure of the audited entity \***

Würth is a brand known all over the world as a market leader in fasteners, tools and technical chemistry. Its potential and market power can be proved by data: more than 400 independent companies, in 80 countries, on all continents, more than 3 million loyal customers, more than 11 billion euros in sales in the fiscal year of 2015. The company has more than 125,000 products in its core business, including screws, bolts, tools, chemical products and personal protection equipment. In addition, the related companies expand their core business with do-it-yourself shops, electrical installation materials, electronic components and financial services.

The company philosophy is people-centred. It is the employees who are the greatest driving force behind all the company's successes. Würth is a family business which was founded by Adolf Würth in 1945 and then developed by his son Reinhold Würth. Reinhold Würth is currently Chairman of the Supervisory Board of the Würth Group which is systematically expanding into emerging markets. The Würth Group has clear business objectives. The most important attributes of the Würth Group strategy are brand strength,

---

\* All materials shown below come from the company's website: [https://www.wurth.pl/pl/wuerth\\_pl/firma\\_1/rys\\_historyczny/rys\\_historyczny.php](https://www.wurth.pl/pl/wuerth_pl/firma_1/rys_historyczny/rys_historyczny.php) (the date of download: 01.03.2018).

future-oriented products, proximity to customers, high quality products and a vision of a strong corporate culture.

The organisational structure of the Polish branch of Würth consists of the Managing Director, who is responsible for each division of the company (sales, finance, human resources management, marketing, customer service and logistics). Each of these divisions has a director, who is responsible for the employees of each department. It is only worth mentioning that in the logistics department, we can differentiate between the purchasing department and the logistics department. The purchasing department analyzes the stock levels and maintains them at the necessary level to meet the expectations and needs of customers. The logistics department ensures that orders are fulfilled in the shortest possible time.

#### **4. Description of selected logistic processes related to customer service in the researched enterprise**

As we can guess, the most important processes related to logistics are carried out in the logistics department. The purchasing department currently employs 7 people. The logistics department currently employs 28 people, including managers and warehousemen who play a strategic role in the execution of orders – from packaging to shipment to the customer. The logistics department ensures the quality of service through the availability of goods. Deliveries are completed within 24 hours from the order being placed with the warehouse (within 48 hours of the order being collected by a sales representative). For an additional fee, the logistics department provides a 24-hour service, which is characterized by the fastest possible delivery of goods to the customer and delivery on Saturdays up till noon. If the goods ordered by the customer are not available in the central warehouse in Warsaw, it is possible to deliver the entire assortment of the company at no additional charge directly from warehouses located in Germany. This usually takes up to 72 hours from the time the order is collected at the customer's premises.

The central warehouse in Warsaw handles about 23,000 orders per month, packs about 80,000 items and sends about 33,000 parcels. Such a large scale of orders is connected with the necessity of proper packing of shipments, which should amount to 99.8%.

Deliveries of shipments are made by forwarding companies with which Würth has signed contracts. The main partners are:

- DPD forwarding company, which delivers mainly groupage shipments (parcels);
- Schenker shipping company, which transports groupage shipments (parcels), as well as very large shipments, packed on pallets and ADR shipments.

Cooperation with these companies consists in full integration with IT support, which involves automatic printing of transport labels and exchange of data so that shipments are delivered in the shortest possible time. Würth Polska is a strategic customer for these forwarders with comes with priority service in the filling of orders. Deliveries of parcels are made directly to the customer's hands, pallets are delivered for unloading from the car. Deliveries take place between 8:00 a.m. and 4:00 p.m.. If the supplier does not find the recipient, he leaves a print, which informs about this situation, and the parcel returns to the branch of the carrier. A notice is then sent electronically to Würth headquarters to decide the time of re-delivery (up to a maximum of 5 working days). If the courier company does not find the consignee, the parcel is returned to Würth Polska headquarters.

Würth will charge part of the order-filling costs to the customer. If the value of the order is up to 150 PLN, the customer pays for a share in the cost of transport, which is 25 PLN. In case of an order above 150 PLN, the customer pays 12 PLN. Additional services – i.e. Saturday delivery and 24-hour service – cost 25 PLN. We must remember, however, that the

customer pays only one of the costs of transport – regardless of the type and type of transport. It can be described as follows:

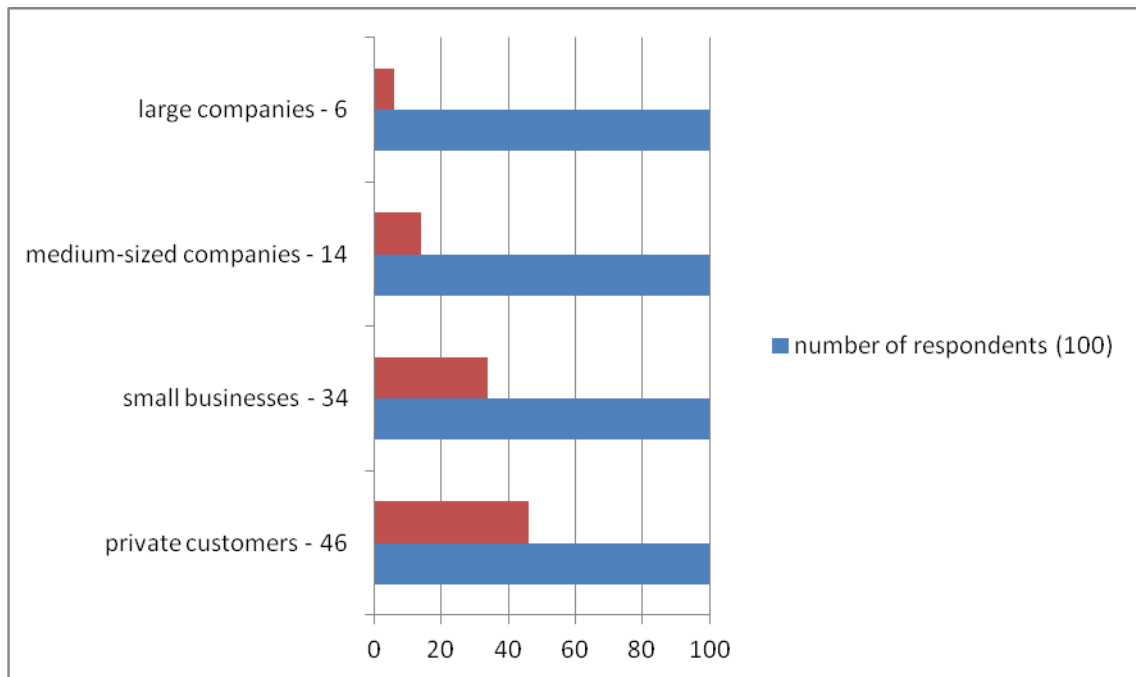
1. Stage 1: Example customer X places an order worth 200 PLN with a sales representative for 2 items. One article, one of which is available in the central warehouse in Warsaw and the other is available only in Germany.
2. Stage 2: The order is delivered in two shipments, one from the central warehouse and the other from the warehouse in Germany.
3. Stage 3: the customer bears one cost of PLN 12 per share in the cost of transport.

## **5. Presentation of research results**

Apart from the analysis of the internal materials of the surveyed entity and market observation, as another research method, the author of the study chose the method of individual interview. The research technique was a questionnaire interview, in which, as a research tool, an extensive questionnaire was used, which included the following types of questions:

- a closed alternative question;
- closed filtering questions;
- closed-ended questions, which use a nominal and order scale;
- questions determining the importance of the subjects to be considered;
- semi-open questions in the form of equestrianism;
- a control question to check the honesty of respondents' answers;
- Stein's Self-Portrait test, which is used to identify the needs of respondents and to measure the level of expectations;
- questions to identify dehumanization factors – used to determine issues related to communication or role in the entire management process.

The main objective of the study was to analyze logistic processes taking place in the examined entity, with particular emphasis on those related to customer service. The study was conducted in 2016 and consisted of two stages. Stage I is an analysis of source materials made available by the surveyed entity and interviews with selected representatives of the logistics department (this topic will be discussed in a separate study). Stage II is a survey – 100 customers who currently cooperated with Würth Polska contractors – individuals and companies (further considerations will concern this item). The request to participate in the survey, of course with the approval of the main subject of the survey, was sent out by the author to over 300 clients. Unfortunately, more than half of them did not want to take part in the survey, and nearly 40 questionnaires did not contain full data. Therefore, the author decided to select 100 most optimally filled questionnaires for analysis. Detailed information on the entities participating in the study can be found in figure no. 2.

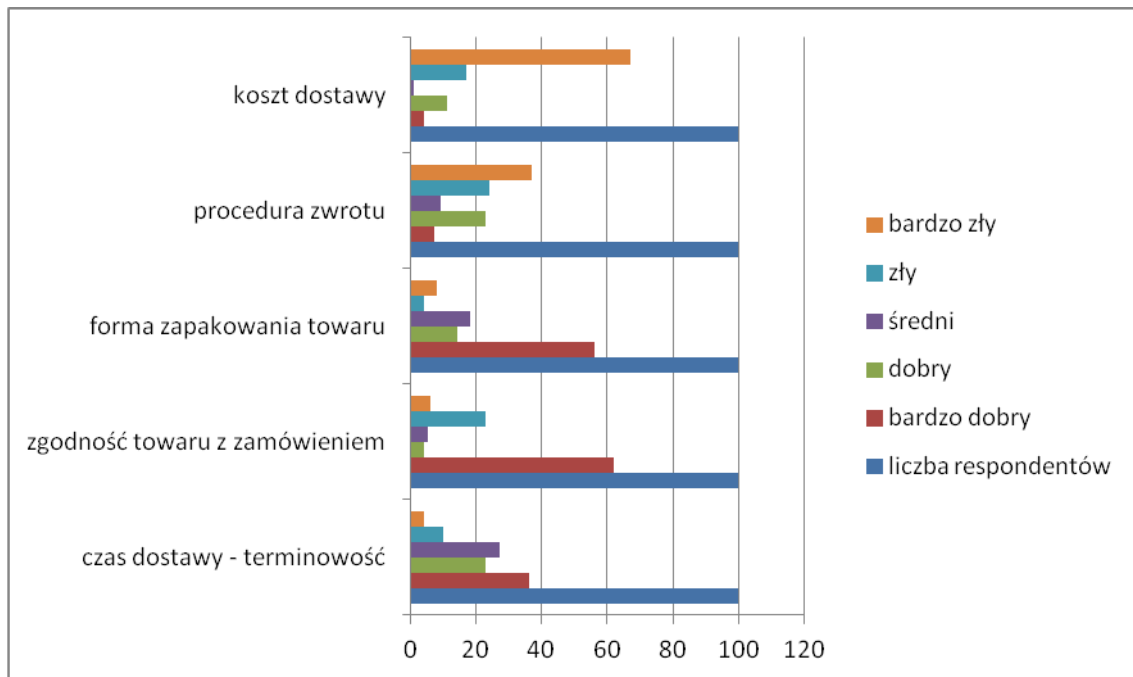


**Figure 2.** Structure of the surveyed entities.

Source: the author's own study.

It was not a random choice – it was a group that could indicate the problems arising during the cooperation and suggest the tools thanks to which the cooperation could be improved. The largest group, i.e. 60% of the total, included entrepreneurs associated with Würth for more than 5 years – the remaining 40% were customers cooperating with the surveyed company for less than 5 years. Such a division may prove at the outset that respondents are satisfied with the cooperation because they are not looking for other suppliers.

The most important issues for this study, which were raised with the respondents, concerned the areas related to ordering goods, their shipment and returns. In this case, there was no longer such unanimity as in the case of the opinion on the quality of the goods delivered. Respondents clearly indicated what is not fully functioning properly and where changes would be useful – the detailed distribution of answers is presented in Figure 2.



**Figure 3.** Identified dysfunctions in the process of delivering the ordered goods to customers.

Source: the author's own study.

Analyzing the above answers of the customers of the surveyed companies, we can state that their most serious reservations related to the price of delivery of the ordered goods and to the delivery service itself, which is provided by an external company. This is undoubtedly a result of the fact that the majority of individual customers took part in the survey, and not companies that order retail quantities.

After a thorough analysis of the above results, we can see that the satisfaction with the cooperation and the correctness of the logistic processes taking place in the surveyed company is not entirely uniform. From the answers given, it is necessary to introduce improvements with respect to the flows in the analysed logistic processes. Of course, much depends on the attitude of the contractor (carrier), and the decision to change or renegotiate the terms of the contract is the responsibility of the company's management and it will certainly not be easy. On the other hand, there is still the question of packing the ordered goods and their placement in the warehouses. In this case, without a precise examination and analysis of the functioning processes, it is impossible to make a rational decision, i.e. what to do with the identified problem. One thing is certain – this situation must be resolved as soon as possible, because in the 21<sup>st</sup>-century modern business management, this type of situation cannot happen.

## Conclusion

In the 21<sup>st</sup> century, optimally managed logistic processes can form the basis for building a lasting competitive advantage for every company in the market. More and more often, they may also determine the ability to function on such a changing market as the current one. A comprehensive approach to logistic processes in a company may significantly reduce the costs of its operations. This is particularly important in the course of customer service, which, in the opinion of the author of this article, is the best form of verification of all assumptions. This is confirmed by the analysis of the results of the survey, which showed that from a closer



perspective (customer's perspective) logistic processes in the company do not always work properly.

The main problem that occurs in the majority of this type of companies is undoubtedly the timeliness of deliveries. In order to resolve the fault, it is necessary to renegotiate with forwarding companies delivering goods ordered by customers of companies such as Würth Polska. On-time delivery is probably one of the most important criteria for every customer when assessing the quality of service. Moreover, due to the punctual fulfilment of the deadline, the stock of the products ordered is correct and does not cause production or service downtime. Therefore, delivery forwarding companies should have clear delivery conditions so that delivery errors and delays do not occur.

Another issue that accompanies the logistic processes in customer service is the correctness of picking the ordered products by the warehouse – customers are often burdened with the collection of many parcels, even if they have placed only one order – the goods arrive in batches. In most cases, this is connected with the division of assortment into different warehouses, often located, as in the case of the surveyed company, even in different parts of the world. There are absurd situations where one product is delivered from a warehouse located in Poland and the other from a German warehouse.

An additional issue that poses problems is the high cost of delivery. All the more so because some rival companies to Würth Polska do not charge any fees for order delivery. It can be said that the market is divided in this respect. According to the author, this problem is best solved by introducing the rule that for a small order, e.g. up to 1000 PLN, a symbolic fee is charged, and for an order above this amount, the customer no longer pays. Thanks to such a solution, Würth's turnover would probably rise very noticeably and, what is more, it would encourage customers to increase the assortment ordered.

To sum up, the logistic processes related to customer service are probably not perfect in any company, but they also do not deserve severe criticism. It can also be argued that with little effort a much better customer service can be achieved, as is the case with our western neighbours or in highly developed countries such as the USA, England and Finland.

## Reference

- Abt S., Woźniak H., *Podstawy logistyki*, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk 1993.
- Abt S., *Zarządzanie logistyczne w przedsiębiorstwie*, PWE, Warszawa 1998.
- Beier F. J., Rutkowski K., *Logistyka*, SGH, Warszawa 1995.
- Bowersox D. J., *Logistical Management, Systems Integration of Physical Distribution Management and Materials Management*, McMillan Publishing, New York 1978.
- Coyle J. J., Bardi E. J., Langley C. J., *Zarządzanie logistyczne*, PWE, Warszawa 2002.
- Krawczyk S., *Zarządzanie procesami logistycznymi*, PWE, Warszawa 2001.
- Sarjusz - Wolski P., Skowronek C., *Logistyka w przedsiębiorstwie*, PWE, Warszawa 2012.
- Schary P. B., *Logistics Decisions. Text and Cases*, The Dryden Press, Chicago 1994.
- Sołtysik M., *Istota i cechy zarządzania logistycznego. Gospodarka Materialowa i Logistyka*, PWE, Warszawa 1999.
- Szpon J., *Analiza logistyczna w przedsiębiorstwie*, WEiOGŻ, Szczecin 2006.

## **ANALIZA PROCESÓW LOGISTYCZNYCH ZWIĄZANYCH Z OBSŁUGĄ KLIENTA W FIRMIE WÜRTH POLSKA SP. Z O.O. - STUDIUM PRZYPADKU**

### **Streszczenie**

Permanentne zmiany na rynku, stawiają przed przedsiębiorstwami nowe wymagania w zakresie kreowania i dostarczania satysfakcji klientom. Zmieniają się również oczekiwania klientów nie tylko odnośnie jakości produktów, ale również w obszarze sposobu ich dostarczenia zainteresowanej stronie. Stąd też celem niniejszego opracowania jest analiza procesów logistycznych dotyczących obsługi klienta w firmie Würth Polska. W związku z tym zostały przytoczone współczesne definicje logistyki oraz procesów logistycznych. Zaprezentowano również opis prowadzonych, przez autora opracowania, badań własnych dotyczących funkcjonowania badanego podmiotu oraz opinii jego klientów na temat świadczonych usług. Dokonane analizy materiałów wewnętrznych badanego podmiotu oraz wyniki przeprowadzonych badań, ukazały konieczność wprowadzenia udoskonaleń, w procesie dostarczania zamówionego towaru, pomimo dużego doświadczenia i uznania marki firmy na rynku. Można zatem postawić pytanie, czy podobne problemy występują także u innych tego typu firm funkcjonujących na polskim rynku?

**Keywords:** logistyka, obsługa klienta, procesy logistyczne

Michał Igielski  
Akademia Morska w Gdyni  
ul. Morska 81-87, 81-225 Gdynia  
m.igielski@wpit.am.gdynia.pl