



FULFILLMENT SERVICE IN E-COMMERCE LOGISTICS

Arkadiusz Kawa

Poznan University of Economics and Business, Poznań, **Poland**

ABSTRACT. Background: The logistics service of e-commerce is usually limited in the literature to the issue of product delivery to customers. However, before goods are sent to the customer, the vendor has to order them from the supplier. Next, they are taken into the warehouse and stored, and after the order has been placed, they are packaged and sent to the customer. These processes are defined in e-commerce as fulfillment. Due to their complexity and time and cost pressure of e-customers, they are more and more often conducted by external operators. Despite the dynamic development of the fulfillment service in e-commerce practice, this still remains a relatively unknown issue in management theory.

The aim of this paper is to present and analyze the fulfillment service in e-commerce logistics. The author has made an attempt to indicate and define the main models of logistics processes connected with the fulfillment service in e-commerce logistics, their strengths and weaknesses. An additional aim of this paper was to recognize development directions of the market of fulfillment services.

Methods: For the needs of the paper research was conducted using the methods of direct observation and analysis of primary and secondary sources. The primary materials included data obtained from companies providing fulfillment services in Poland and abroad, and the secondary ones - reports, studies and Internet sources. In addition, in-depth interviews were performed with representatives of companies that offer fulfillment services or those which are potential bidders.

Results: The article characterizes the details of the fulfillment service, whose importance has been increasing in e-commerce logistics. The author has described the division and characteristics of the fulfillment service models and discussed the potential trends in the fulfillment service market.

Conclusions: The presented review and characteristics of various implementations of fulfillment services allows to evaluate to what extent logistic processes should and could be delegated to specialized companies in order to focus on the core competencies only. The usage of fulfillment service is useful especially at the phase of the rapid growth of the e-company. It involves, however, also some disadvantages, such as relatively high fees, a lack of physical contact with the goods, a partial loss of control over the process.

Key words: e-commerce, fulfillment, logistics services.

INTRODUCTION

Undoubtedly, e-commerce is now one of the most important megatrends in economy [Kawa, Zdrenka 2016]. It affects not only traders, but also the entire logistics industry [Żurek 2015]. According to eMarketer, global e-commerce sales in 2016 will grow by approx. 22% compared with 2015 and will amount to approx. \$2 trillion. By 2020,

the global sale via the Internet is even expected to reach \$4 trillion [eMarketer 2015].

This dynamic growth requires management tools suitably adapted to e-commerce. Internet sales is different from traditional channel sales in that a certain kind of promise to fulfill the order in the right place, time and cost is sold, apart from the products themselves. One of the key tools of online trade, then, is logistics [Colla, Lapoule 2012, Bask, Lipponen, Tinnilä 2012]. It allows not only to attract new

customers (by availability of goods, different forms of delivery and a low shipping cost), but also to retain those who have already placed an order (by timeliness, compliance of the goods with the order, no damages). A few years ago, efficient logistics in e-commerce was a source of competitive advantage, today it is a prerequisite. Those who win, in turn, are companies that implement new logistics solutions tailored to the needs of the market [Ramanathan, George, Ramanathan 2014]. One of these solutions is the fulfillment service related to the processes run in warehouses by external operators.

Despite the dynamic development of the fulfillment service in e-commerce practice, this is still a relatively unknown issue in management theory. For this reason, the aim of this paper is to present and analyze the fulfillment service in e-commerce logistics. The author has made an attempt to indicate and define the main models of logistics processes connected with the fulfillment service in e-commerce logistics, their strengths and weaknesses. An additional aim of this paper was to recognize development directions of the market of fulfillment services.

LOGISTICS ORGANIZATION FORMS IN E-COMMERCE

In e-commerce, there are four forms of organization of logistics, which indicate the scope of the processes performed by the e-retailer [Kawa 2014]:

1. Insourcing logistics.
2. Dropshipping.
3. Fulfillment service.
4. One stop e-commerce.

Insourcing logistics in e-commerce is most popular, especially on the Polish market. In this model, stores conduct most of the logistics processes on their own. This proves effective for micro and small enterprises, whose scale of activity is still too small for the use of external logistics companies to be profitable. This approach allows for better control of their business and independence from subcontractors. In this model, it is crucial to prepare for sudden development of the company. As the number of orders increases,

one needs to consider hiring more people and buying or renting warehouse space. Handling the so-called seasonal peaks becomes a problem [Żuchowski 2016]. The only logistics process outsourced to external companies is the delivery of the product to the end customer. For this purpose, courier, express and postal services operators (CEP) are engaged [Dabidian, Clausen, Denecke 2016].

In turn, dropshipping involves shipment of goods directly from the warehouse of an external entity (the manufacturer, the distributor) to the client without the need to use the vendor's warehouse [Zajac, 2014]. This service consists in storage of products, taking orders and completing them, issuing sales documents and shipping packages to customers. Medium-sized companies that do not want to take the risk of freezing their assets in inventory, particularly when they increase the number of their product items, are usually interested in this type of services. This model allows stores to focus on acquiring customers.

In e-commerce, there are two approaches adopted by e-retailers in the field of dropshipping [Ayanso et al. 2006]:

- pure dropshipping, in which the online store does not have a warehouse and is based on external firms implementing order fulfillment processes.
- partial dropshipping, in which only selected products are stored in an outside company's warehouse.

Pure dropshipping works well if the offered products come from a single supplier that has a wide range of them. The problem, however, lies in the realization of orders in which the goods originate from multiple suppliers. This results in higher costs and can cause communication problems. Product returns by customers are also troublesome. The use of dropshipping, therefore, requires developing appropriate procedures for the flow of information, packaging, payments, returns [Khouja 2011].

In turn, the fulfillment service involves delegating part of the logistic processes to an external provider. Due to the fact that the main focus of this article is fulfillment, it is described in detail in the following chapters.

In contrast, one-stop e-commerce is an extension of fulfillment by additional services. This concept implies support not only in the field of logistics (as fulfillment does), but also in the area of customer service, marketing, IT solutions and finance and accounting by one company [Ciechomski 2014]. For example, call centers, which deal with inquiries, complaints, etc., may be run on behalf of the client in many languages. Cooperation with one partner in accordance with the principle of one-stop e-commerce allows for better task coordination and communication between the parties thanks to integrating processes in one place. In this model financial settlement is simpler, too. However, there is a risk that all processes are entrusted to one partner. For now, such services are mainly used by the largest companies, for which e-commerce is an additional sales channel [Agatz, Fleischmann, Van Nunen 2008].

CHARACTERISTICS OF FULFILLMENT SERVICE

Generally, the fulfillment service consists in taking over part of the seller's logistics processes, such as: reception, storage, picking, packaging, sending the products by an external operator.

Goods ordered by the online shop from suppliers are sent to such an operator's warehouse, and are then unloaded, inspected, stored, picked and shipped [Isac, 2014]. On behalf of the client, the operators manage the warehouse, check the inventory, take orders from final customers, package shipments, prepare sales documents (e.g. invoices, receipts) and shipping ones (e.g. waybills), attach manuals, help in customs clearance, handle returned goods, co-operate with transport companies. This solution is very flexible because a specialist fulfillment operator is able to adapt to the variability of the demand of their client depending on his/her needs, e.g. by increasing or decreasing the storage area or the number of employees. The operator prepares reports on their activities for the client regarding the sales volume, number of returns, complaints. Some companies even undertake repairs, refreshing and disposal of returned products. The needs in e-commerce

and the specifics of individual stores vary significantly. This solution will not suit the requirements of every e-retailer. In a small scale business the owner's knowledge about where the product is located, in particular if it is not marked with a bar code, may often prove to be important.

The entities of e-commerce are quite a specific group of customers for fulfillment operators. As a rule, these are small companies that offer a fairly wide range of products but in very small quantities. Their customers order single items, and their geographical location is very diverse. For this reason, the fulfillment operators do not perform the distribution services themselves, but use the services of CEP operators and, to some extent, logistics companies (in particular with deliveries of goods on pallets). E-customers want to be offered a wide range of delivery services – from the more economical and slower postal service through more reliable courier services to the transitional forms, that is the possibility to collect shipments from parcel lockers or PUDO (pick up drop off) points [Del Ser, Bilbao, Perfecto, Salcedo-Sanz 2016].

The key activity of the fulfillment operators are services related to storage. Despite the large potential for automation of warehouse processes, there are still many companies (even the largest ones) which mostly rely on the work of people in their activities. This is mainly due to economic calculations and high flexibility of this approach. During peak seasons additional staff is simply employed. It is, therefore, important to have appropriate and scalable infrastructure that adapts to the increasing needs of customers.

The basic method of storage of goods in a warehouse by fulfillment operators is placing them in "the first free position", in the so-called chaotic system. The goods are not arranged by any logical rules, i.e. by type, value, rotation, etc. After the goods are received from the sender, they are located in the place that offers enough space. Each location (pallet place, shelf) is described, so the stored goods are assigned to their places. Such a method of inventory management would not be possible but for an effective IT system, which is integrated with the mobile

devices in the warehouse. This makes it possible to quickly find the product and use the warehouse labor and storage space better. In addition, the system should support additional services, such as document, payment and debt management. The ability to integrate the system with other tools of suppliers is also necessary.

Working with customers, the fulfillment operator must be prepared for many contingencies that may arise at any stage of the service realization. For instance, the company should be able to serve customers from many industries that differ in their specifics, e.g. electronic products are often high market value commodities that require additional safety procedures for their logistic handling.

FULFILLMENT MODELS

The aforementioned processes related to fulfillment are quite similar to each other at most of the operators. The character of the products handled and the customer expectations may vary. Special conditions and know-how of the organization and coordination of processes, adequate storage space, technologies and people operating them are required to provide such services.

Differentiation of companies that provide the fulfillment services is relatively large. On the basis of an analysis of their activity they can be classified as follows:

- Fulfillment offered as a key service.
- Fulfillment offered by sales platforms.
- Fulfillment offered by logistics service providers.
- Fulfillment offered by other market players.

Fulfillment offered as a key service

The fulfillment services are mainly provided by companies for which the key activity is the logistics service of e-commerce. Several major operators and many small ones can be distinguished. For example, in Poland, the most popular ones are: DocData, Traffic, Point of View, Customeritum, Logistics

Distribution Partners, Cloudpack, Logistiko, Shoplo.

The fulfillment services provided by smaller companies are intended for shops that realize from tens to hundreds of orders a month. In the case of medium-sized companies, it is approx. 1,000 orders. Companies in this model are characterized by high flexibility and an ability to adapt to the specific store, its products and the industry in which they operate. The operators provide fulfillment services including: reception, storage, picking and packing, as well as a number of additional tasks, i.e. support in inventory management, legal advice, tax and customs services. All the services are mostly available both at a national and international (mainly EU countries) level. Many of the businesses also offer a possibility to view the inventory and prepare customer orders. Some companies in this group of operators do not have their own warehouses and rent them from larger suppliers of storage space. An example is the Cloudpack company.

Fulfillment offered by sales platforms

The second group of fulfillment service providers are sales platforms. One of the leading sales platforms and, at the same time, the largest company that provides fulfillment services in the world is Amazon. Although the main activity of the company is selling products over the Internet, in recent years it has dynamically been developing the fulfillment services, e.g. by the Fulfillment by Amazon (FBA) program [FBA 2017]. It is headquartered in the US, and branches and distribution centers are located in, among others, Canada, the UK, Germany, France, China, Japan, Italy, Spain, Brazil and Poland. For example, Amazon has 29 logistics centers in 7 countries in Europe. With the FBA service sellers can deliver their products to any of these centers, and Amazon does the rest of the logistics processes. Moreover, when sellers use the FBA service, their products can be made available under the Prime service.

For many retailers the Amazon platform is a key place to sell products. A given seller is not obliged to transfer their goods to the warehouse of Amazon, but they must then be

aware of worse time positioning of their offer in the search engine. As part of the fulfillment services, the biggest sellers using the services of Amazon, however, receive support from a consultant who does a number of activities, e.g. translation of descriptions into other languages.

The Amazon's model, and consequently FBA, consists of several elements [FBA 2017]:

- Create great customer experience – a customer dissatisfied with a purchase at a given online store is not going to return to it. It is therefore necessary to offer the best possible service, delivery, information standards, not to be limited to the minimum services.
- FreeShipping – for the customer, a cheap and convenient form of delivery is the basis. Sending parcels by sellers on their own is not beneficial for the client.
- Amazon Delivery Promise – with its reputation and organization of all warehouse processes Amazon guarantees that if an item is shown on the website as available, it will be sent in the guaranteed time and will definitely be of good quality.

Many companies in Poland, but also in the world, copy the proven business model of Amazon and are based on it. An example is Allegro, which is changing from the auction platform into a shopping gallery. It offers brokerage services (sendit.pl) in the field of courier services. With time, it will probably also begin to provide fulfillment services to its customers.

Fulfillment offered by logistics service providers

A few years ago e-commerce in Poland was treated marginally by representatives of the logistics industry. Service of e-retailers (but only in the field of distribution) was dealt with by the CEP operators, but their adaptation to the specifics of e-commerce took a long time. Large logistics operators were not at all interested in handling online stores because of fragmentation, small amounts of inventory to be stored and distribution that could be prepared only by the CEP operators. Therefore,

only a few logistics operators can now be indicated that followed trends and enriched their offer with solutions dedicated to online merchants. In most cases this experience was gathered at projects completed for a lot of customers, often as a complement to other services already rendered to the given company. Accordingly, logistics providers are unlikely to support small and medium-sized e-retailers.

It is worth noting that the fulfillment for logistics companies is synergistic with the existing logistics (e.g. the same storage system, use of space in the lower racking composition). Specific instrumentation is only required (e.g. handheld scanners, mezzanines), as well as training for employees on knowledge of customer goods.

In the first place, logistics service providers are responsible for receipt of goods from suppliers – usually from manufacturers or intermediary distributors. Then, processes are implemented which include control of the delivery, introduction of all collected products to the system and their placement at the storage location. The next process is acceptance of an order for a particular product in the online store. Then the employees of the logistics service operator obtain information about the order, receive a complete package, pack it and ship it (in Poland mainly via couriers, parcel lockers of InPost and services of the Polish Post Office). After-sales service is equally important – in online stores primarily associated with the service of returns, taking complaints. More and more operators offer additional services, including: completing sets, gift packaging, refreshing products, maintenance, management of the e-shop archive, sending sales reports, sales and inventory planning.

Among the major logistics service providers in e-commerce the following can be distinguished: Rhenus Logistics, Raben and Fiege. There are also CEP operators, such as: DHL, GLS, DPD and the Polish Post Office. However, interviews with representatives of these companies show that they do not provide this type of services. It seems, though, that it is only a matter of time and these companies will start to offer fulfillment services in Poland.

It will be a natural supplement to the distribution services which are used by all fulfillment companies anyway. The CEP operators will gain even more, because the broker that imposes a margin on their services will be eliminated.

Fulfillment offered by other market players

The fulfillment services are also provided by companies which were initially preoccupied with activities other than logistics for e-commerce. As a result of development, emergence of new Internet projects, increasing customer needs, etc., these companies have begun to expand their services with fulfillment. In Poland, two largest operators can be distinguished: Azymut and Arvato.

Arvato [2017] has approx. 20 years of experience in operational processes and expertise on B2C and B2B shipping. In terms of fulfillment the company provides a comprehensive service in the field of one-stop e-commerce, within which it offers logistics services, customer service, IT solutions and financial services. The company owns three logistics centers (in Plewiska, Błonie and Żerniki). Its e-commerce offer is directed to the textile, cosmetics and toy industries, and its clients mainly include the largest companies, such as 5-10-15, Douglas, Microsoft, Gerry Weber, Weltbild. Currently, the company serves hundreds of thousands of orders per month. Arvato also has a courier broker - www.portalkurierski.pl [Arvato 2017].

Another example is OSDW Azymut, which is owned by a leading Polish publishing house - the PWN Group. The company is a wholesaler of books, but also provides distribution and logistics services, with headquarters in Stryków in Poland. Thanks to an extended distribution network and experience in online sales through B2B and B2C channels as well as modification of the warehouse equipment, Azymut has started to co-operate with companies that offer a variety of products. As part of fulfillment, Azymut provides such services as delivery service, storage of goods, preparing them, picking and shipping, as well as after-sales service of returns. In addition, Azymut also offers the following: distribution under the agreements

which it entered into with courier companies, the Polish Post Office, InPost, monitoring of the incoming COD (cash on delivery) and quick returns of cash on delivery. An added value is also the fact that it is possible to include a ready base of goods being in OSDW Azymut's distribution in the offer of a given online store [Azymut 2017].

DIRECTIONS OF FULFILLMENT MARKET DEVELOPMENT

The fulfillment service is a relatively new area of activity of logistics service providers, and therefore it is constantly subjected to change. New concepts and trends keep appearing.

A certain direction of development of fulfillment operators is expanding services for their customers, e.g. repairing or renewing returned products, financial and accounting services, contact centers, loyalty programs, coupons, so transition to the previously described strategy of one-stop e-commerce. An additional range of activity may also be adjusting the products offered to the preferences of specific customers in local markets; an example here is attaching instruction manuals, leaflets in a selected language.

Industry experts also draw attention to advice on choosing the right business model, and in particular on pointing to the areas of activity that can be optimized. This is possible thanks to great experience of fulfillment operators, their suitable resources and know-how backed by long activity in shaping trends in e-commerce.

A trend developing in e-commerce, and thus also in fulfillment, is cross border [Cho, Lee 2017]. Buying goods abroad or selling products to foreign contractors over the Internet is becoming increasingly popular. According to Accenture and AliResearch [2016], cross-border trade will reach up to \$1 trillion in 2020 from \$0.5 trillion in 2017. However, one of the biggest barriers to foreign trade conducted via the Internet is the cost of shipping, which, depending on the country,

is even several times greater than within Poland. Often, the high cost of shipping exceeds the savings from lower product prices. However, as indicated by the European Commission [2015], cross-border services are future-oriented services in e-commerce and should be more and more common. Online stores, CEP and fulfillment operators should consider preparing offers for those customers. If availability of goods, fast shipping and a relatively low price are ensured, everyone can benefit from it [European Commission 2015]. Some steps in this direction have already been made by InPost that introduced the cross border service through which goods are delivered to a specified address or a parcel locker in 4 European countries [InPost 2017]. This may encourage e-shops and fulfillment operators to offer shipping goods abroad.

Another trend is the same day delivery service. If purchases via mobile devices develop, the need for delivery on the same day may increase. For now, these services are quite expensive because they involve direct delivery from the source to the destination without any intermediate stops. Dedicated transport by the fulfillment operator that serves the given region is used here most frequently. In the offer of fulfillment operators, however, same day services offered by CEP companies appear more and more often. They are available only in selected cities, though. For full coverage of the country with the same day services local warehouses or a very large scale of operations are needed [Kawa 2014].

It is also worth to remember about intensive development of the omnichannel strategy, which consists in adding possibilities to sell via the Internet with the use of various devices, i.e. a computer, tablet or smartphone, to the traditional sales channel. This leads to product sale based on several distribution channels and thus to a number of logistic models. Traditional retailers do not always want to offer logistics services of the Internet channel and outsource them to the fulfillment operators.

SUMMARY

The fulfillment service is a very forward-looking and promising trend in e-commerce. An online store using the fulfillment service usually minimizes the costs associated with the entire logistics and can dedicate more time to marketing, branding, etc. Nevertheless, this is not a solution free of defects. A company which uses fulfillment transfers all logistics processes to the outside, and thus loses control over them. It does not have a direct influence on outgoing orders or good contact with customers, suppliers, etc. In addition, there is no contact with the goods, either, and some prefer to know in what state the products are sold, how they are packaged, stored. For this reason, self-logistics may be the best solution for some e-retailers. One should be aware of that and properly educate customers. An external operator usually brings in their know-how, including modern technologies for warehouse management, which, especially at a larger scale, give benefits in each area: quality, time, cost.

Fulfillment services should be constantly developed according to the needs of the market. A decisive factor building a competitive advantage in the near future will be value-added services such as the delivery of parcels on the same day, cheap and fast shipping to foreign countries etc.

The geographical location of Poland and easy access to distribution centers of courier operators makes Poland a very interesting place to locate big e-commerce projects spanning markets in Western Europe. In the last years a tendency to transfer the logistics of large online stores to Poland has been observed, from where efficient distribution to individual customers in Europe is run. Both the location of a distribution center and the technologies applied in it should be closely adjusted to the needs and nature of the sales activity of the online store. In the near future increased competition should be expected from Amazon, Allegro Group, Alibaba and a number of other entities specializing in fulfillment, as well as logistics service providers.

Expansion of logistics companies, in particular CEP operators, should also be expected in this market. Until now, these companies have not provided this type of service. It seems, however, that it is a matter of time and they will start to offer fulfillment services. For example, two years ago the Polish Post Office announced that it will launch a full warehouse - logistics service for e-retailers. It will be a natural supplement to the distribution services which are used by all fulfillment companies anyway. The CEP operators will gain even more, because a broker that adds a margin for their services will be eliminated.

ACKNOWLEDGEMENTS

This paper has been written with financial support of the National Center of Science [Narodowe Centrum Nauki] – grant number DEC-2015/19/B/HS4/02287.

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USŁUGA FULFILLMENT W LOGISTYCE E-HANDLU

STRESZCZENIE. Wstęp: Opisywana w literaturze logistyczna obsługa handlu elektronicznego sprowadza się najczęściej do problematyki dostaw produktów do klientów. Zanim jednak towar trafi do klienta, to wcześniej sprzedawca musi go zamówić u swojego dostawcy. Następnie jest on przyjmowany do magazynu i składowany, a po złożeniu zamówienia – kompletowany, pakowany i wysyłany do klienta. Te procesy określa się w e-handlu jako fulfillment. Z uwagi na ich złożoność i presję czasową oraz kosztową e-klientów są one coraz częściej wykonywane przez zewnętrznych operatorów. Mimo dynamicznego rozwoju usługi fulfillment w praktyce e-handlu jest to jeszcze stosunkowo mało rozpoznane zagadnienie w teorii zarządzania.

Celem pracy było zaprezentowanie oraz przeanalizowanie usługi fulfillment w obszarze e-logistyki. Autor podjął próbę wskazania i zdefiniowania głównych modeli procesów logistycznych związanych z usługą fulfillment w tym obszarze, ich słabe i mocne strony. Dodatkowym celem pracy było określenie kierunków rozwojowych rynku usług typu fulfillment.

Metody: Na potrzeby opracowania przeprowadzono badania metodami obserwacji bezpośredniej i analizy źródeł pierwotnych oraz wtórnych. Do materiałów pierwotnych należały dane uzyskane od firm zajmujących się usługami fulfillment w Polsce i zagranicą, a do wtórnych - raporty, opracowania i źródła internetowe. Dodatkowo wykonano pogłębione wywiady z przedstawicielami firm, które oferują usługi fulfillment lub, które są potencjalnymi oferentami.

Wyniki: W artykule szczegółowo opisano usługę fulfillment, która ma coraz większe znaczenie w logistyce e-handlu. Przedstawiono autorski podział i charakterystykę modeli usług fulfillment oraz omówiono potencjalne trendy na rynku usług fulfillment.

Wnioski: Przedstawiona prezentacja oraz charakterystyka modeli usług typu fulfillment umożliwia ocenę zakresu oddelegowania procesów logistycznych do specjalistycznych firm zewnętrznych w celu większego skupienia się na działalności podstawowej e-przedsiębiorstwa. Takie podejście, związane z oddelegowaniem części procesów logistycznych na zewnątrz jest szczególnie korzystne w przypadku dynamicznego rozwoju e-przedsiębiorstwa. Wiąże się to jednak z pewnymi wadami, takimi jak: stosunkowo duże opłaty, brak fizycznego kontaktu z towarem, częściowa utrata kontroli na realizowanym procesem.

Słowa kluczowe: e-handel, fulfillment, usługi logistyczne

DIE FULFILLMENT-DIENSTLEISTUNG IN DER LOGISTIK DES E-HANDELS

ZUSAMMENFASSUNG. Einleitung: Der in der Fachliteratur beschriebene Logistik-Service des E-Handels geht am meisten auf die Problematik der Belieferung von Kunden zurück. Bevor aber die Ware den Kunden erreicht, muss der Verkäufer sie früher bei seinem Lieferanten bestellen. Dann wird sie eingelagert und im Lager aufbewahrt, um nach deren Bestellung kommissioniert, verpackt und zum Kunden geschickt zu werden. Solche Prozesse werden im E-Handel als Fulfillment bezeichnet. Angesichts deren Komplexität und des Zeitdrucks seitens von E-Kunden werden sie öfters von Fremd-Dienstleistern übernommen und ausgeführt. Trotz der dynamischen Entwicklung der Fulfillment-Dienstleistungen in der Praxis des E-Handels ist diese Problematik innerhalb der Management-Theorie relativ wenig erkundet.

Das Ziel der Arbeit war es, die Fulfillment-Dienstleistung im Bereich der E-Logistik zu projizieren und zu analysieren. Der Autor hat versucht, die Hauptmodelle der mit der Fulfillment-Dienstleistung verbundenen Logistikprozesse und deren schwache und starke Seiten zu erfassen und zu definieren. Ein zusätzliches Ziel stellte die Feststellung von Entwicklungsrichtungen im Bereich der Fulfillment-Dienstleistungen dar.

Methoden: Zum Zwecke der betreffenden Ausarbeitung wurden Forschungen anhand von Methoden der direkten Prozess-Verfolgung und der Analyse von Primär- und Sekundärquellen durchgeführt. Zu den Primärmaterialien gehörten die Daten, die von den Firmen, die sich mit Fulfillment-Dienstleistungen in Polen und im Ausland beschäftigen, gewonnen wurden, zu den Sekundärquellen dagegen Berichterstattungen, Sachbearbeitungen und Internet-Quellen. Zusätzlich wurden vertiefte Interviews mit Vertretern der Firmen, die die Fulfillment-Services anbieten oder die potenzielle Anbieter sind, durchgeführt.

Ergebnisse: Im Artikel stellte man detailliert den Fulfillment-Service, der immer wieder in der Logistik des E-Handels an Bedeutung gewinnt, dar. Ferner wurde seitens des Autors seine eigene Aufteilung und Charakteristik von Modellen der Fulfillment-Dienstleistungen projiziert und die potenziellen Trends auf dem Markt der betreffenden Services besprochen.

Fazit: Die betreffende Darstellung und die Charakteristik der Modelle von Fulfillment-Services ermöglichen die Beurteilung des Ausmaßes der Ausführung von Logistikprozessen aus den Ursprungsfirmen und deren Platzierung in darauf spezialisierten Fremdfirmen zwecks einer besseren Fokussierung auf die grundlegende Betätigung durch ein E-Unternehmen. Solch eine mit der Delegation eines Teiles von Logistikprozessen nach draußen verbundene Vorgehensweise ist besonders im Falle einer dynamischen Entwicklung des E-Unternehmens nützlich. Das ist jedoch mit folgenden Nachteilen wie: relativ hohe Gebühren, Mangel an physischem Kontakt mit der Ware, teilweiser Verlust der Kontrolle über den realisierten Prozess, verbunden.

Codewörter: E-Handel, Fulfillment, Logistik-Dienstleistungen

Arkadiusz Kawa
Poznan University of Economics and Business,
Al.Niepodległości 10
61-875 Poznań, **Poland**
e-mail: Arkadiusz.Kawa@ue.poznan.pl