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# FULFILLMENT IN LOGISTIC INFRASTRUCTURE OF INTERNET-TRADE OF UKRAINE

# ФУЛФІЛМЕНТ У ЛОГІСТИЧНІЙ ІНФРАСТРУКТУРІ ІНТЕРНЕТ-ТОРГІВЛІ УКРАЇНИ

# **ANNOTATION**

The article describes the concept of fulfillment, its essence and role for ensuring effective trade on the Internet. The structure and complex of basic and additional services of fulfillment are considered. Features of fulfillment that define this type of activity as specific are given. The advantages and disadvantages of fulfillment outsourcing are determined, the expediency of transferring this activity to a fulfillment operator is justified. The structure and state of services of the main players of the domestic market of fulfillment services, including "NP Logistic", are analyzed.

**Keywords:** logistics, fulfillment, outsourcing, logistics companies, fulfillment-operator, e-commerce.

#### **АНОТАЦІЯ**

У статті охарактеризовано поняття фулфілменту, його сутність та роль для забезпечення ефективної торгівлі в Інтернеті. Розглянуто структуру та комплекс основних і додаткових послуг фулфілменту. Наведено риси фулфілменту, які визначають цей вид діяльності як специфічний. Визначені переваги і недоліки аутсорсингу фулфілменту, обґрунтовано доцільність передачі цієї діяльності фулфілмент-оператору. Проаналізовано структуру і стан послуг основних гравців вітчизняного ринку фулфілмент-послуг, зокрема «НП Логістик».

**Ключові слова:** логістика, фулфілмент, аутсорсинг, логістичні компанії, фулфілмент-оператор, електронна торгівля.

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В статье охарактеризовано понятие фулфилмента, его сущность и роль для обеспечения эффективной торговли в Интернете. Рассмотрена структура и комплекс основных и дополнительных услуг фулфилмента. Приведены особенности фулфилмента, которые определяют этот вид деятельности как специфический. Определены преимущества и недостатки аутсорсинга фулфилмента, обоснована целесообразность передачи этой деятельности фулфилмент-оператору. Проанализирована структура и состояние услуг основных игроков отечественного рынка фулфилмент-услуг, в том числе «ЧП Логистик».

**Ключевые слова:** логистика, фулфилмент, аутсорсинг, логистические компании, фулфилмент-оператор, электронная торговля.

Articulation of issue. Today more and more customers prefer online shopping instead of traditional merchandise, with consumers becoming increasingly demanding in terms of delivery method and delivery time, type of payment and service level.

Despite the crisis, the Internet commerce market in Ukraine is growing rapidly, and products are increasingly being posted on the Internet. Thus, the report of the European E-Commerce Association Ecommerce Europe says that the e-commerce market in Ukraine is growing the

fastest in Europe, the growth rate of online sales in Ukraine remains at 35%. This is contributing to the fact that in the e-commerce market there are more and more new members who are faced with the problem of performing all business processes on their own or transfer these tasks to outsourcing. Therefore, it is expected that in the near future, most players in the e-commerce market will consciously switch to outsourcing, which will lead to an increase in demand for special logistics services for individual distance trading – fulfillment.

Analysis of recent research and publications. Analysis of the development of such a phenomenon as fulfillment has recently been given a lot of attention. The following questions were handled by the following scientists: O. Zhukov, V. Klimov, V. Baranovsky, V. Leonov, A. Upatov, who analyzed the participants of the fulfillment market, and also covered practical experience in the field of fulfillment.

However, in our opinion, the disclosure of the characteristics of fulfillment as a direct line of activity of the logistics company or as an outsourcing service is not enough.

The purpose of the article is to identify the nature, characterization and research of the technology of the fulfillment process as a new business service in the e-commerce market. Determine the advantages and disadvantages of outsourcing fulfillment. To substantiate the expediency of transferring this area of activity to the fulfillment operator, as well as to analyze the current state of the fulfillment market in Ukraine.

Presentation of the main research material. The world's online companies have focused on the development of logistics, giving impetus to the emergence of a new service – fulfillment. Fulfillment it is a complex of logistic operations from the moment the order is completed by the buyer and before the purchase of the purchase. Delivering its effectiveness, the service began to gain popularity not only in the US market, but also in all countries with the rapid development of the e-commerce segment.

Fulfillment (from English Fulfillment – execution) – is a complex of logistic operations from the moment the order is completed by the buyer and before he gets the purchase.

Often Ukrainian online stores give for outsourcing some part of the logistics process, but today in Ukraine is possible to outsource the whole logistics process entirely – from warehousing to packaging and transfer to the final buyer.

As a business service, fulfillment is most demanded by online retailers and is often transmitted to outsourced fulfillment-centers. Timeliness and quality delivery of the order are two key criteria for the consumer to get the impression of online stores. Today in Ukraine the service is offered mainly by logistics companies and postal services [1].

Entrepreneurs-beginners and those who have already come to profit are not yet ready to set up their own logistics. It often turns out to be ineffective because of seasonal sales fluctuations and unforeseen depreciation costs, while fulfillment prevents these risks. Therefore, entrepreneurs choose another way: they sell, work with assortment, negotiate with manufacturers and suppliers, and deliver the warehouse and delivery to qualified contractors [2; 3].

Fulfillment for online stores is a comprehensive system approach to outsourcing logistics that provides the full range of warehouse and transport processing customer orders. Fulfillment services, depending on the wishes of the seller, may include full or partial unloading of the functional for the warehouse accounting of goods, the formation of orders and sending them to the place of receipt. The transition to fulfillment in Ukraine, the price of which is becoming more profitable for logistics, is an objective consequence of the growth of sales of online stores [2].

The complete logistics cycle of fulfillment services can be divided into several main stages.

1. Receiving the goods from the supplier. Not having its own warehouse space, online shops

often conduct business on the principle of dropshipping, purchasing goods from the supplier after the receipt of an application from the end user for its purchase. Therefore, when organizing the delivery of goods to a warehouse, for example, «Zammler» takes over the entire process of interaction with the supplier, offering two options: the product is stored on the fulfillment-warehouse, and after the receipt of the application online, the company's staff process orders and send courier services for delivery to the end customer; consolidated fence of goods from the supplier immediately for several online stores and its delivery to the warehouse [4].

- 2. Reception and storage in stock. After delivery to the warehouse, the goods are registered in the warehouse system and sent to storage. The WMS system used in «Zammler» allows you to take into account all the specific characteristics of the product, different format and dimension of the parties. Thanks to the WMS system, the product is optimally placed on shelves. If the received goods must be sent to the buyer on the same day, it is immediately sent to the processing area of orders.
- 3. Processing orders. For communicating with an online store, the company developed the CRM-system, which consolidates information about the status of customer orders. You can track everything: from the moment of sending the goods to the warehouse until the moment it is delivered to the consumer or return to the warehouse. The period from the receipt of the order from the client to the transfer of the order for delivery takes 2 hours. Each client receives access to his "personal cabinet" and can monitor online inventory and the state of processing and delivery of orders.
- 4. Package and packing order. Skilled warehouse staff performs packaging, packaging, marking, parceling, as well as completing accompanying documentation. Customers can also order packaging branding or supplement orders when completing any printed product.



Fig. 1. The components of fulfillment services (developed by the author by source [4])

- 5. Delivery. After completing the goods, the goods are delivered to the delivery department or carrier company. For example, «Zammler» can collaborate with various logistics contractors (postal, courier companies), which allows the online store to offer buyers various delivery options, cover the maximum geography of delivery at the best prices. For communication with the end-user, Zammler fulfillment operates a callcenter. Its function is to process calls to coordinate delivery times or to resolve situations when the ordered position has not yet arrived from the supplier.
- 6. Work with returns. If the buyer has decided to return the goods, then the return is taken by the staff of the composition with the photo fixation (in agreement with the client) and additional quality check. After that the goods are sent for further storage or returned to the supplier [4].

By developing a new direction for the market as a fulfillment for online stores, Ukraine is getting a fairly effective tool for maximizing profits and flexible spending management. UVK-Ukraine, a professional logistics operator and full-fledged center, offers its customers the following orders management services [2; 4].

There are three key consumer groups of fulfillment services:

- 1. Online stores. At the start of the online store there are no built-in processes. He needs a partner who will provide all kinds of services at a minimal cost.
- 2. Suppliers and retailers who want to go online. Retail and suppliers already have their warehouses, logistics, IT systems. Basically, they need a set of services associated with storing and drawing up some orders.

3. Foreign companies without presence in Ukraine [5].

According to statistics, in the year the number of online stores in Ukraine doubled [5,6]. The rapid dynamics of the online trading market and the growth of demand for address services continue to be reflected in the company's performance [6, 10].

In Ukraine, the fulfillment market is only forming, it is very young, and there are only 5-6 players [5]. Fulfillment deals with "Nova Poshta". This direction in the group "Nova Poshta" is engaged in the company "NP Logistik", the only one on the Ukrainian market, a player working under the formula "fulfillment + delivery". Today it is the only company in the Ukrainian market that provides services for receiving, storing, packing, packaging and delivering goods to the end user. It is possible as a full range of services as a special set of operations, for example, without storage or delivery. The configuration may be different [6; 7].

During the first half of 2017, for the clients of the e-commerce segment, «Nova Poshta» delivered more than 14 million shipments – by 31% more than last year. During the first half of 2017, "NP Logistik" increased in volumes of shipments by 165% compared to the same period in 2016. During the first six months of 2017, "NP Logistik" increased the volume of warehouse space by 30% compared to the beginning of the year [8].

Despite the fact that among the clients of the country's largest online retailers, "NP Logistik" does not focus exclusively on big business. Today in "NP Logistik" more than 60 clients, among which are the famous companies and small online

Full or partial integration with client systems for accounting and order management, their reception and processing

Processing and storing of any goods, providing the equipped warehouse of the fulfillment center

The full fulfillment logistics - acceptance of goods, their repackaging and the formation of metro units, complete set of orders of any complexity and other operations

Marking and packaging of goods using standard or branded packaging

Work with returned orders

Delivery to any city that covers fulfillment for online stores with complete document circulation and insurance

The possibility of consignment trade, organized through the customs warehouse

Fig. 2. Types of order management services (developed by the author by source [2; 4])

stores. Over the past year, the company managed to double its customer base at the expense of the distributor of the Milavitsa brand in Ukraine, the fashion-retailer MD Group, the publishing house A-ba-ga-la-ma-ha and more than twenty other companies [8].

This trend is due to the fact that online stores that make more than 100 shipments a day are very profitable to shift logistics to outsourcing: business owners have the opportunity to devote more time to business development than to think about delivery. Also, fulfillment helps to cope with seasonal sales spikes [6].

Own warehouse logistics in most major online stores is extremely inefficient: it is difficult and costly to build logistics itself. There are two main cost items. First, investments in the warehouse: the arrangement of workplaces and the environment for employees, warehouse equipment, trucks, rent space. Renting a good class A is worth hundreds of thousands of hryvnias a year. Given the seasonality of business, it should accommodate all goods in peak periods. But when in the periods of decline the area will be empty, all the same will have to pay for them, which will affect the cost of shipping.

The second item of expenditure is IT. Without good software and automation of the warehouse system it is impossible to logistics on a large scale. Installing good software takes a lot of time and is very costly. The total cost of space, technology, equipment and people is measured in millions [7; 9].

"NP Logistik" gives online stores a finished product, minimizing risks. At the same time, their operating costs are immediately reduced by 30-40%, and processes are significantly accelerated. In December 2015, the number of orders that "NP Logistik" handled and delivered to the Rosetka, was 6000 per day, and by January 2017 this figure exceeded 15,000 per day.

However, the main disadvantage of fulfillment should be called the loss of control. By giving all the logistics processes to the outsourcing, the retailer falls into dependence on this company. In order not to be in such a situation, for example, Rosetka partially carries out logistics on its own, and partly gives outsourcing, and thus the dependence on the operator is offset [9; 10].

Today in the regions there are no specialized warehouses and companies that are ready to serve Internet trade outside of Kyiv. the Ukrainian fulfillment market is still so young, therefore, first of all, efforts should be made to develop the infrastructure, to establish technical processes, to structure the market. Thus "NP Logistik" plans to develop branches in the cities-millionaires.

However, the biggest problem for the development of fulfillment in Ukraine is the lack of awareness of entrepreneurs: potential customers have to explain what this is and why it is needed.

Many entrepreneurs have only heard about such a service, but most do not imagine how it can ease life and give a boost to business development [9].

In addition to the rapid growth of the e-commerce segment, the fulfillment market driver will continue to be a growing trend — cost optimization. Previously, companies took a decision in favor of controlling their logistics, but nowadays a priority for big players is to view costs. Yes, those companies that recently worked on their logistics, now storing, processing and mailing PSM-materials are outsourced. This will enable Ukrainian players in the fulfillment market to develop good experience and the basis for its development [3; 10].

After passing the whole process of product work on outsourcing, the client can focus on their internal business processes and not worry about delivering the product exactly at the address and in the required timeframe [11].

Thus, when fulfillment is well-organized Internet store gets reduced operating costs and lack of significant investment; flexibility in the logistics service, which is expressed in the scalability of logistics services; concentration on key processes for business development [4; 8].

In the coming years, the fulfillment market will evolve at the expense of two factors — the positive dynamics of e-commerce and the diversification of sales channels. In Ukraine, outsourcing logistics is important to make it convenient not only for large customers who store goods with hundreds of pallets, especially for small ones, which are becoming more and more [11].

Conclusions and suggestions. After analyzing the research material, it can be noted that perfection of the fulfillment business will be a decisive step for the growth of the e-commerce market, and therefore the relationship of fulfillment operators with online stores is a promising direction for the development of their activities.

World practice shows that the formation of a partnership between the fulfillment operator and its client is beneficial to both parties, and their presence serves as a driver for the growth of the entire e-commerce market.

Fulfillment allows companies to reduce the cost of warehouses, communications, staff, as well as significantly reduces the percentage of errors when completing the order, allow to track the performance of the warehouse and offer the best way for delivery and payment for customers.

Although the fulfillment is different from traditional logistics, it is effective due to the existing advanced logistics infrastructure, modern information technology and the high level of organization of technological processes. The Ukrainian fulfillment market is in the making, that is why there are prospects for its expansion, which will require further research.

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