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LOGISTIC OUTSOURCING IN UKRAINE: STATUS AND FEATURES OF DEVELOPMENT

The article defines the concepts of «outsourcing» and «insourcing», identifies the main types of outsourcing. Outsourcing and insourcing are characterized by a comparative method. It has been determined that outsourcing of logistics services represents a particular trend in Ukraine. This is due to the presence of significant traffic flows and the complexity of production. Five levels of contract logistics are highlighted. The structure of the Ukrainian market of logistics intermediaries is determined. Characteristic for it is the presence of small companies that narrowly specialize in solving local problems. The Logistics Performance Index (LPI) of different countries is considered, which is used to analyze the state of the logistics service in the country. The types of logistics outsourcing for which there is the greatest demand in Ukraine are generalized. The positive consequences of using outsourcing and disadvantages are highlighted.

Keywords: outsourcing, insourcing, logistics, logistics outsourcing, LPI.

Fig. – 6, Tab. – 1, Ref. – 16.

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ЛОГІСТИЧНИЙ АУТСОРСИНГ В УКРАЇНІ: СТАН ТА СОБЛИВОСТІ РОЗВИТКУ

В статті визначені поняття «аутсорсинг» та «інсорсинг», виділені основні види аутсорсингу. Порівняльним методом охарактеризовані аутсорсинг та інсорсинг. Зазначено, що особливу тенденцію в Україні представляє аутсорсинг логістичних послуг. Це пов'язано з наявністю значних транспортних потоків та вантажоемністю виробництва. Освітлені п'ять рівнів контрактної логістики. Визначена структура українського ринку логістичних посередників. Для нього характерним є наявність невеликих компаній, які вузько спеціалізуються на вирішенні питань місцевого характеру. Розглянутий Індекс ефективності логістики (LPI) різних країн, який використовується для аналізу стану логістичного сервісу в країні. Узагальнені види логістичного аутсорсингу, на які в Україні існує найбільший попит. Виділені позитивні наслідки від використання аутсорсингу та недоліки.

Ключові слова: аутсорсинг, інсорсинг, логістика, логістичний аутсорсинг, LPI.

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ЛОГИСТИЧЕСКИЙ АУТСОРСИНГ В УКРАИНЕ: СОСТОЯНИЕ И ОСОБЕННОСТИ РАЗВИТИЯ

В статье определены понятия «аутсорсинга» и «инсорсинга», выделены основные виды аутсорсинга. Сравнительным методом охарактеризованы аутсорсинг и инсорсинг. Определено, что особенную тенденцию в Украине представляет аутсорсинг логистических услуг. Это связано с наличием значительных транспортных потоков и грузоемкостью производства. Высветлены пять уровней контрактной логистики. Определена структура украинского рынка логистических посредников. Для него характерным является наличие небольших компаний, которые узко специализируются

на решении проблем местного характера. Рассмотрен Индекс эффективности логистики (LPI) разных стран, который используется для анализа состояния логистического сервиса в стране. Обобщены виды логистического аутсорсинга, на которые в Украине существует наибольший спрос. Выделены положительные последствия при использовании аутсорсинга и недостатки.

Ключевые слова: аутсорсинг, инсорсинг, логистика, логистический аутсорсинг, LPI.

The relevance of research. Outsourcing is one of the innovative tools that enterprises nowadays use to improve their own production efficiency in the face of the dynamic development of global processes. Its application in enterprises can significantly increase their competitiveness. Businesses concentrate on conducting their core business, shifting their weaknesses to external providers. Defining the «core competence» of the enterprise helps to solve the problem of resources irrational allocation at the enterprises and helps to improve their competitiveness. At the same time, the enterprise first needs to analyze what is more economical for it - the use of outsourcing or insourcing.

The purpose of the article is to analyze the status and opportunities of logistics outsourcing development in Ukraine and to determine its place in the domestic enterprises activity.

Analysis of recent research. Outsourcing and outsourcing promotion in the business activities of enterprises have been investigated by such foreign and domestic scientists as Heywood J. Brian, Halvey J.K., Melby B.M., Zagorodnii A.G., Dergachova V.V., Ostroverha D.V. etc. Problems of logistics development and, in particular, logistics outsourcing, are devoted to the scientific works of Stanislavik O.V., Kovalenko O.M., Sharchuk T.V., Chukurnoy O.P., Hobty V.M., Pasichnik A.M. etc.

Basic material. Heywood J. states that outsourcing is «the transfer of separate organizational units or divisions of an organization with associated assets to a service provider, specifying the terms and cost of executing the agreement in the outsourcing agreement» [1].

The following types of outsourcing can be identified:

- IT outsourcing, covering software development and testing, service, software localization, network services, IT consulting;
- production outsourcing, which includes basic and auxiliary outsourcing;
- outsourcing of business processes: management of intellectual resources, provision of guarantee, financial and accounting services, creation of call-centers or call reception and service centers, personnel management, leasing and logistics operations, advertising activities;
- staff outsourcing (outstaffing) [2].

Insourcing is the creation of own autonomous structural units, providing specialized services to both enterprise units and external contractors.

Let us analyze the main criteria for choosing a delivery strategy (Table 1). Each of these means has its own advantages and disadvantages for the enterprise, so the enterprise must analyze its costs and profits in each of the options. In practice, a combination of outsourcing and insourcing is possible, since choosing one does not mean abandoning the other. An enterprise may delegate some of the functions to the intermediaries, leaving the rest.

When choosing outsourcing, the following factors must be considered:

- step costs;
- scheduled power interval when loading the internal unit;
- estimated values of standard and average cost rates, etc.

Table 1

Comparative characteristics of outsourcing and insourcing

Indicator	Outsourcing	Insourcing
The degree of dependence on the environment	high	low
Responsibility for the service/product	on logistics companies	on owners
Concentration on core business	high	low
Autonomy control by enterprises	low	high

Source: [3]

Outsourcing of logistics services is a particular trend in Ukraine. This is due to the presence of significant traffic flows and production capacity. In Fig. 1 and 2 show the developed transport networks of the country.



Figure 1 - Road Network of Ukraine

Source: <https://dlca.logcluster.org>

Ukraine is in the TOP10 countries of the world in terms of grain, corn, sugar beet, potato, mineral fertilizer, steel, trucking. This certainly confirms the possibility of developing logistics outsourcing. At present, it is extremely difficult for small and medium-sized enterprises in Ukraine to create their own logistics system, which would include transportation of raw materials, fuels and materials, and receipt of finished products by consumers. Consequently, such businesses are often forced to make management decisions to provide these services on their own or delegate them to a partner specializing in this field.



Figure 2 - Developed railways of Ukraine

Source: <https://uk.m.wikipedia.org>

The logistics approach is used to reduce logistics costs and has the following benefits for companies:

- 1) concentration of the enterprise on the main activity;
- 2) partial delegation of risks to another company;
- 3) improving the quality of services or goods received;
- 4) advantages in taxation in individual marketing segments;
- 5) cost savings when performing strategic tasks and the like.

The following phases are distinguished in the process of logistics outsourcing:

- planning (identification of target markets, determination of the range of transactions, evaluation of potential counterparties, formation of cooperation offers, forecasting of demand parameters and offers of outsourcing and outsourcing logistics services);
- agreeing the terms of contracts with counterparties (analysis of proposals, evaluation of opportunities and threats, selection of contractors, conducting business negotiations);
- conclusion of logistic outsourcing agreement (definition of principles of personnel management and quality management, coordination of price parameters, regulation of conditions of control over the effectiveness of counterparties activity);
- coordination actions after the conclusion of a contract for logistic outsourcing (monitoring the effectiveness of the execution of the powers entrusted, analysis of the level of satisfaction of customer needs, prompt response to manifestations of poor performance of logistics functions, making adjustments or termination of individual contracts) [4].

Logistics outsourcing involves the delegation of certain logistic powers to specialized logistics companies. Allocate logistics [5]:

1. The first level - 1PL.

Internal logistics, in which all the services of transportation, storage and more, are concentrated within the customer company. According to Georgia Institute of Technology

research, domestic logistics is 22% in the USA, 8% in the Asia Pacific, and 8% in the West Europe - 6%. In Ukraine, this figure is more than half the market;

2. Second level - 2PL.

External logistics in the context of the traditional range of services, including transportation and warehousing performed by one or more operators - covers the entire domestic market.

3. Third level - 3PL.

External logistics in the context of integration of all logistics services into a single complex. At the same time additional consulting services, intermediate storage of cargoes, attraction of modern information systems, use of numerous subcontractors are involved. There are only a few companies of this level operating in the Ukrainian market, but with significant limitations.

4. The fourth level - 4PL.

Combining internal and external logistics capabilities with ERP-systems. It is the desired level of logistics activities development. The Ukrainian logistics market already has a company with a 4PL operator, METRO Cash & Carry. It was the first who entered into the outsourcing agreement (purchase of logistics services from a third-party company) in the history of Ukrainian retail [6]. It can also include companies such as PANWAYLOGISTIC and Brevarix.

5. The Fifth Party Logistics (5PL) is the fifth logistics intermediary.

Such a logistics intermediary provides the whole range of services through the use of the global IT space as a «virtual» logistics partner, which has information on the logistic capabilities of market participants and high-tech IT products. In other words, it's online logistics. This type of logistics operator is inherent in the conditions of operation in the global economy [8].

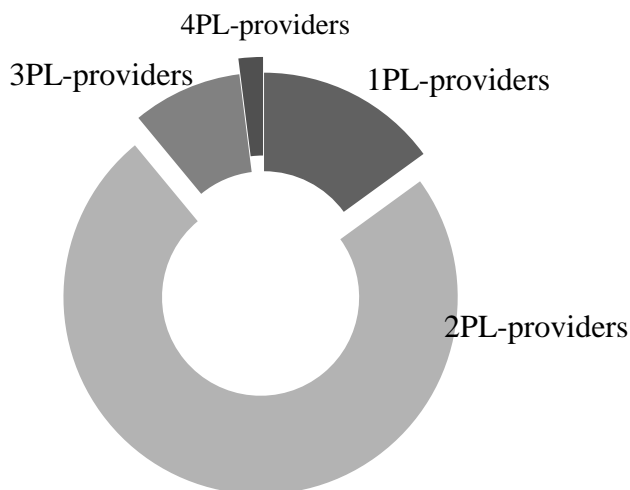


Figure 3 - Logistic providers structure of Ukraine

In general, the structure of the market for logistics intermediaries of Ukraine in 2017 is as follows: 1PL-providers occupy 15%, 2PL-providers - 74%, 3PL-providers - 9%, 4PL-providers - 2% (Fig. 3) [8]. It is characterized by the presence of small companies that specialize in addressing local issues, narrow specialization, lack of 5PL providers, etc. However, in the Ukrainian market there is a rather stiff competition between providers such as UVK, Raben, Schenker, Kuehne & Nagel, Fiege, FM Logistics, Lux Logistics, AsstrA, Komora-S, Fordon, Maxan, TNT, DHL, Euro-express, Autolux, Night Express, Bridge Express, Deliveri.

The range of outsourcing in the field of supply chain logistics can be narrow, limited to just a few functions, such as transport or warehousing, and broad, covering comprehensive supply chain management agreements [9].

Logistics Performance Index (LPI) is used to analyze the status of the logistics service. Its use improves the quality of logistics services and reform programs. It covers 160 countries and includes 6 indicators:

- the effectiveness of customs control and management at the border («The effectiveness of customs operations»);
- quality of trade and transport infrastructure («Infrastructure quality»);
- simplicity of supply organization at competitive prices («Simplicity of supply organization»);
- competence and quality of logistics services for delivery, forwarding and customs clearance («Quality of logistics services»);
- cargo tracking and control capability («Tracking and control capability»);
- timely delivery of goods to their destination within the planned or expected delivery time («Timeliness of deliveries») [10].

The Logistics Efficiency Index suggests that customs reforms, better border management and infrastructure improvements have a significant impact on logistics. LPI is considered by scientists to be a strong indicator of trade growth [11]. For each country, the index is calculated on the basis of surveys of international, national and regional logistics operators, freight forwarding companies that provide services for the organization of freight transportation by rail, road, sea, river or air, as well as warehouse operators [12].

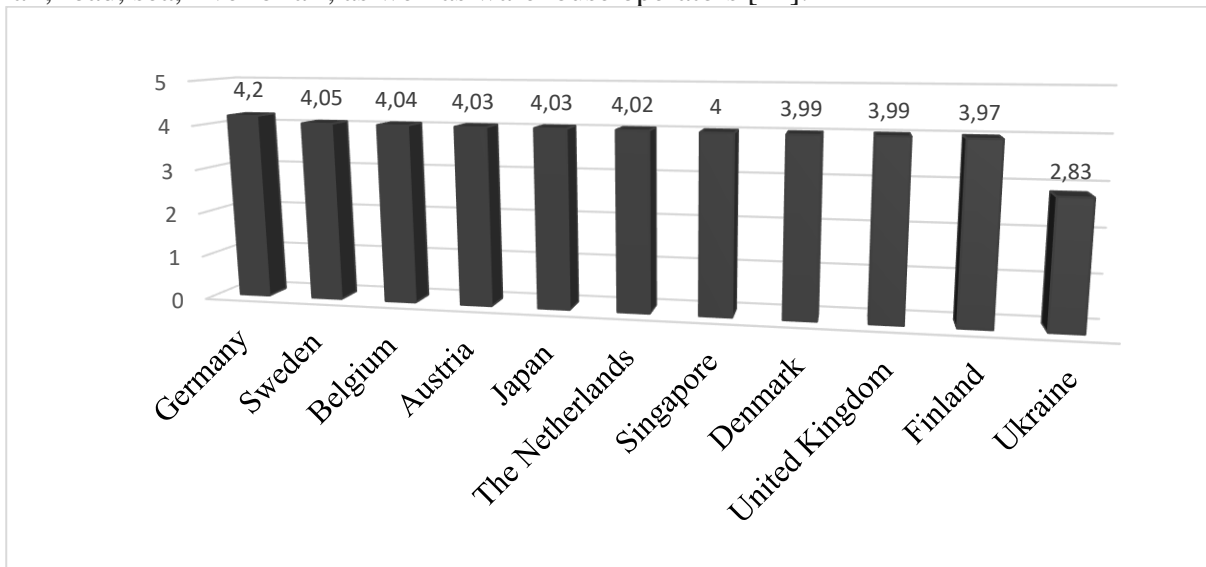


Figure 4 - World LPI rating 2016

Source: [14]

According to experts, the gap between high-income LPIs and low-income countries averages around 45%. Previously, experts have argued that the gap is narrowing due to the growth of low-income countries, in 2016 this trend has reversed, and the gap between countries with different income levels has widened [13]. According to the rating of countries to the LPI in 2016, the TOP10 were: Germany, Sweden, Belgium, Austria, Japan, Netherlands, Singapore, Denmark, United Kingdom, Finland. Ukraine ranked 66th compared to 80th in the previous rating, which indicates a positive trend in this sector in the country (fig. 4).

The LPI index allows to measure progress over a long period, and points to existing problems. Its use contributes to the creation of transit corridors and the establishment of links with the private sector.

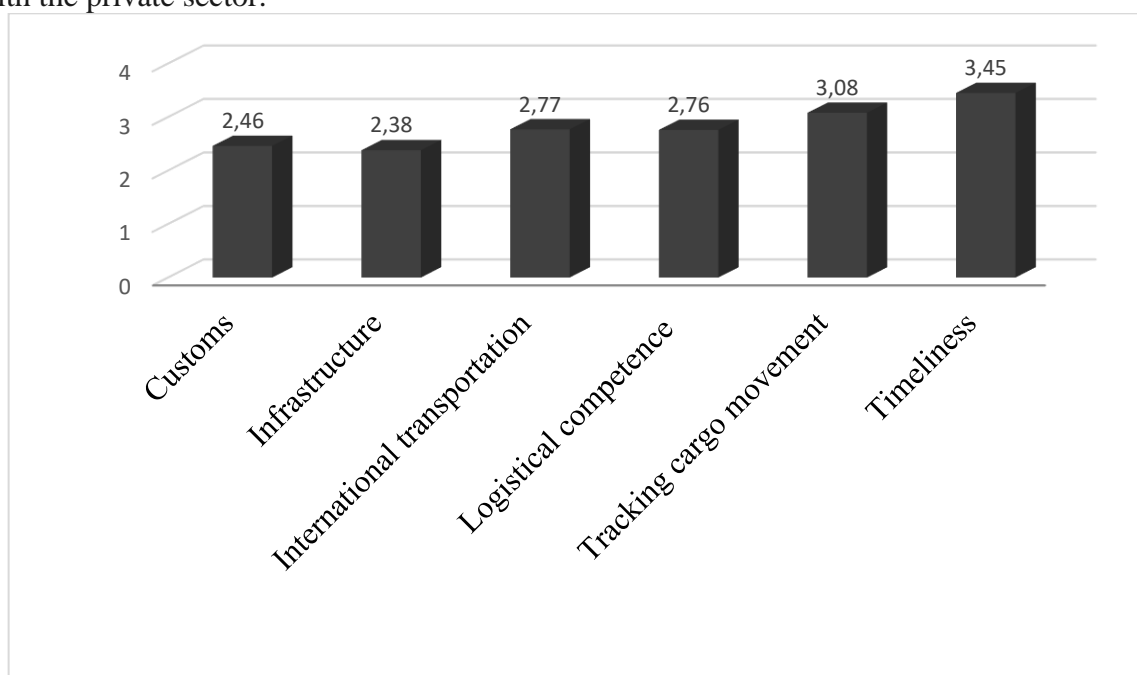


Figure 5 - Main composition indicators of LPI in Ukraine

In general, demand for the following types of logistical outsourcing is being demanded in Ukraine (Fig. 5):

1) freight forwarding services. Usually these companies are contacted by the companies where there is a forwarding department. The transport company only performs the transportation of goods, and the preparation of the documents is undertaken by the customer company itself. Most often, the freight forwarding service is more in demand in the Ukrainian market of logistics outsourcing, since it provides for coordination of freight transportation as a whole;

2) warehousing services. Organizing and providing warehousing on the basis of one's own business may prove to be too costly a measure, which entails considerable financial investment, both for the purchase or lease of premises, and for the purchase of warehouse equipment in accordance with the required standards. It is this driving force that drives companies to turn to operators who offer efficient warehousing methods and proven, high quality warehouses.

3) Integrated services (integrated outsourcing). Such a range of services is provided by 3PL and 4PL providers whose competencies can become demanded companies with a complex supply algorithm characterized by the presence of several intermediate stages.

4) Coordination of the procurement process, packaging / repackaging of goods, warehousing, etc. This type of service is most often used by companies with a fairly extensive trading network. In this case, the management of the processes of goods movement and its provision can be too complicated.

5) Customs clearance services are a specific area of logistics that requires functioning within a regulated legal field [14].

The main factors limiting the development of logistics outsourcing in Ukraine are:

- politicization of economic life;
- imperfection of the legislative framework;

- obsolete warehouse space;
- outdated fleet and approach to the formation of transport networks, etc. [15].

In the domestic market, logistics outsourcing is mainly used for transportation and warehousing services, road haulage, and agriculture is currently developing. However, there is a significant problem with the compliance of complex systems and specialized equipment to the relevant standards. In the logistics services market, namely in the field of warehousing, 70% are occupied by redeveloped warehouses and only 10% by highly professional logistics centers and new modern warehouse complexes that meet modern requirements [16]. Starting in 2016, the logistics services market tends to increase the use of autonomy and new management decisions.

Conclusions. Therefore, logistics outsourcing is one of the most effective tools in business processes for solving non-core tasks of enterprises, which gives the opportunity to get real competitive advantages in the market of goods and services. To address the issue of logistic outsourcing, a comparative analysis of costs is required when outsourcing is possible. Adaptation of logistics outsourcing in the domestic market will allow to obtain global competitive advantages in the integration processes in the world environment. We can distinguish the following positive effects of outsourcing and disadvantages (Fig. 6):

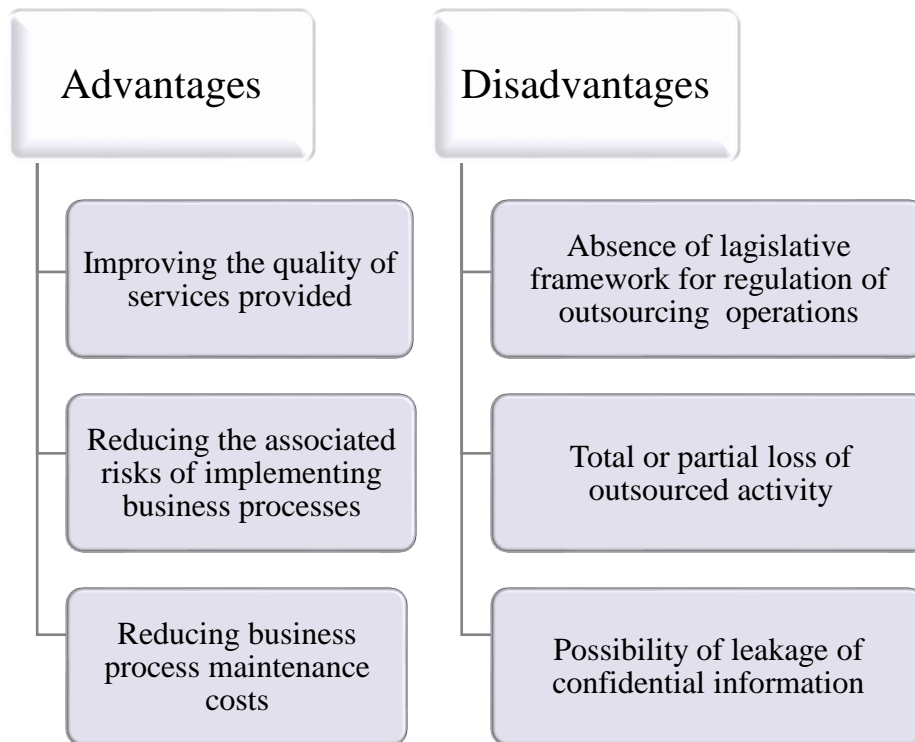


Figure 6 - Advantages and disadvantages of outsourcing

Source: build by author based on [8]

In Ukraine, the use of various types of outsourcing is rapidly developing, as its use substantially increases the competitive advantages of the enterprise due to the use of the latest technologies and optimization of production processes. In general, the Logistics Efficiency Index showed a positive trend in the development of the logistics market. Its further development is possible due to the emphasis on such indicators as «Timeliness» and «Ability to track the movement of goods». Consideration should also be given to expanding the use of 4PL systems in the domestic market and exploring new ways to improve logistics providers.

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