

## **IMPORTANCE OF LOGISTICS OPERATORS IN INTERNATIONAL MARKET**

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**Abstract:** The aim of the article is to present role and importance of logistics operations in international arena. The article focuses on forms of outsourcing in logistics and their evolution over the years. The article discusses in detail the scope of logistics operators' activities on global scale over several years. Article also presents results of research, their analysis according to the sector of activities, their percentage share and financial benefits of using 3PL service providers. The progress in development of contract logistics in terms of range of services and technological base was also illustrated.

**Keywords:** logistics operator, 3PL, 4PL

### **1. Introduction**

The term outsourcing is a word that we get to hear a lot nowadays especially in business discussions. In year 1923 Henry Ford most famous American baron of industry said that "If there is something we are not able to do more efficiently, cheaper and better than the competition it does not make sense to do it and we should hire somebody who will be better in doing the job than we are" [1].

The rapid growth of interest in outsourcing was noticed in 2004, when they began to indicate important role of relocation of enterprises' activities abroad in global economy (offshore outsourcing or offshoring) and analyze the effect of using this strategy on increase in unemployment and economic stagnation in developed countries [2].

Due to globalization and rapid development of IT sector companies have reached new opportunities. Technical and technological developments in last thirty years have developed continuously and dynamically. It gives companies many new ways of acquiring additional customers, as well as implementing innovative services [3]. It presents us with new challenges. The first one is to adjust one's technology and management strategies to computerization and new mechanized reality. The second challenge is the pressure of time. Customers want to reap benefits of services or products offered by manufacturers immediately.

3PL logistic operator becomes helpful. At the beginning the 3PL was begin defined as "an organization which carries out activities on behalf of the ordering party, which at least include storage and transport [4]. This operator is a specialized external supplier

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undertaking organization and/or realization of the whole or part of logistics function of company for which they are secondary market activity [5].

## 2. Evolution of forms of outsourcing in logistics services

As a result of economic development over decades the way, in which basic activities in company activity was performed, has changed dramatically. In the initial phase before year 1960, companies performed all activities in-house. Later, in a narrow range, they began to use services of transportation companies. Further development is connected with wider aspects of logistics services.

The term **1PL (in-house logistics)** refers to logistics services performed on its own and it concerns mainly transshipment, transportation and storage activities. The next level of outsourcing is an activity referred to as **2PL (second-party logistics, logistics service provider - LSP)** and applies to management of traditional logistics function: transportation and warehousing, which are already provided by external suppliers. The purpose of their use is a reduction of operating costs and avoid expensive capital investment.

With growing demand for comprehensive services many companies providing services in **2PL** evolved to **3PL** level. They made it by adding new logistics services and integrating their activities. **3PL (third-party logistics)** occurs as a "third party between" producer and final customer. This operator offers services that require use of his own equipment, transport and other resources. It has more personalized offer, which includes wider number of functions/services. In this case cooperation with the selected operator has a long-term nature.

**4PL (fourth-party logistics)** is another level derived from **3PL** logistics operators. This concept provides better quality of logistics services, adaptability to specific requirements of customers and greater flexibility. **4PL** operator combines competence of management consultant, IT, companies providing hardware and software and e-commerce [6]. Company included in the category of **4PL** manages and carries out complex logistics operations, which include entire supply chain without missing any link. Factor contributing to the development of **4PL** was a need to manage information on supply chain. Service provider type **4PL** is essentially the coordinator of logistics services. He is responsible for concluding contracts with all suppliers of **2PL** and **3PL** type. The company, which uses **4PL** services, is in contact only with the single operator and he manages and integrates all kinds of resources and oversees all functions in the supply chain [7, 8].

Outsourcing model **5PL (fifth-party logistics)** is next step in evolution of total integration of logistics. It is able to develop and implement flexible supply chains network to meet needs of all partners, including manufacturers, suppliers, carriers and buyers. **5PL** service providers manage supply chain at strategic level and focus on providing logistics solutions in all of its links [9, 10]. Organizations **5PL** are almost entirely virtual, because they have no typical assets. Main tasks of **5PL** operator are mapping, reengineering of supply chain, integration and control of transport, loading, storage and other. It also includes all features of **4PL** provider and provides integrated information systems to ensure full monitoring and hence control of supply chain in real time [11].

### 3. Detailed analysis of 3PL provider

Cooperation with logistic operators is ubiquitous throughout the world. Its rapid development is already observed over more than a dozen years. It should be mentioned that its appearance on the market did not take place at the same time in different regions. Geographical location determined diversity in the context of time when companies started to use services of 3PL provider, so the evolution of this system did not look the same everywhere. Figure 1. presents appearance of 3PL providers on the market in a reliable way.

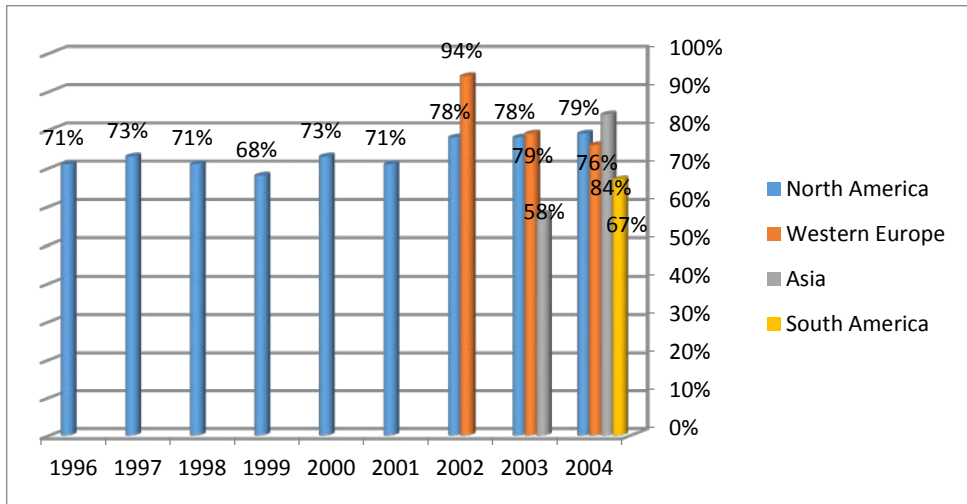


Figure 1. The use of 3PL provider's services in years 1996-2004 on global scale

It is clearly noticeable that until year 2001 external services were used only in North America. Their level was similar (around 70%) all the time. In year 2002 third-party logistics services began to be used also by companies in Eastern Europe. The level of use of this system was very high - 94%. In subsequent years other regions began to use these possibilities: Asia in year 2003 (58%) and South America in year 2004 (67%).

It is also necessary to specify sectors in which 3PL operators act. Figure 2. presents areas which functions are outsourced in a simple way. Proportions are shown in percentage ranking. These data concern global scale.

Production is strictly categorical sector, whose activities are most often outsourced. 13% of surveyed enterprises outsource functions in this sector. Next activities which are often outsourced are those related to advanced technology and electronics. Every tenth respondent uses capabilities and infrastructure of companies offering a wide range of activities in the field of logistics. The third major area of such activities is transport orders.

Another comparison, based on the study, reflects a detailed division of use of external companies in specific sectors on each continent. Changes in frequency of outsourced functions can be seen by comparing data for years 2004 and 2013. Significant percentage differences can be observed in several selected areas. Table I. presents data for year 2004.

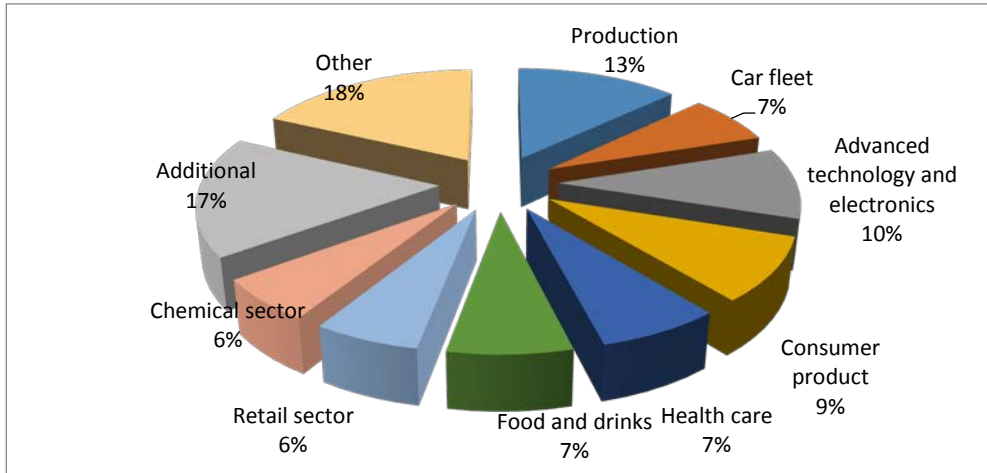


Figure 2. Areas of cooperation with 3PL providers

Table I.  
Percentage summary of services outsourced to external companies in year 2004

SECTOR	NORTH AMERICA	WESTERN EUROPE	ASIA	LATIN AMERICA
<b>Storage</b>	72%	70%	88%	51%
<b>Shipping</b>	47%	40%	84%	35%
<b>Cross-docking</b>	55%	49%	40%	22%
<b>Resource management</b>	16%	27%	40%	22%
<b>Information technology</b>	19%	24%	16%	27%
<b>Labeling, packaging etc.</b>	16%	16%	12%	5%

Most often outsourced function was storage - 70% (Latin America was an exception was). Another activity that was often outsourced was forwarding trade. The next one which has a high level of use of external companies was cross-docking. Companies in Latin America outsource this function the most (over half of surveyed companies). In case of resource management it is most often outsourced in Asia (40%). Information technology sector was ranked as the next area, which was very frequently transferred to supervise and perform by external provider. Its lower percentage share refers to North America and it is less than twenty percent. Last activities of these sectors are tagging, packing and related activities, which were almost completely done in-house in Latin America, because only five percent of companies have decided to assign this tasks to specialized units. About 16% of companies outsource these functions in North America and Western Europe, and 12% in

Asia. Table II. presents results of the same research adequately to previous table but for year 2013.

*Table II.*  
*Percentage summary of services outsourced to external companies in year 2013*

SECTOR	NORTH AMERICA	WESTERN EUROPE	ASIA	LATIN AMERICA
<b>Storage</b>	61%	72%	59%	51%
<b>Shipping</b>	54%	60%	46%	47%
<b>Cross-docking</b>	29%	31%	18%	19%
<b>Resource management</b>	25%	31%	21%	20%
<b>Information technology</b>	16%	15%	21%	17%
<b>Labeling, packaging etc.</b>	16%	16%	14%	9%

Comparing data from above tables it can be well noted that the largest growth in use of logistics operator occurred in Latin America, which as last of mentioned areas has started to use services of specialized external companies. In other regions, in a large extend, there were decrease in interest and engagement in cooperation of companies providing their services.

In case of reflection of financial aspects we can talk about costs at the level of trillions of dollars. Table III. provides data concerning growth of external companies' profits.

*Table III.*  
*Statement of 3PL providers' revenues obtained in years 2011-2012*

REGION	2011 Global revenues 3PL [Bilion US\$]	2012 Global revenues 3PL [Bilion US\$]	Percentage difference between 2011 and 2012	Percentage difference between 2010 and 2011
<b>North America</b>	159,9	170,6	+6.7%	+7.2%
<b>Europe</b>	160,4	156,2	-2.6%	-2,8%
<b>Asia</b>	191,1	236,2	+23.6%	+21,2%
<b>Latin America</b>	39,5	44,4	+12.4%	+43,6%
<b>Other areas</b>	65,2	69,4	+6.4%	+54%
<b>Total</b>	<b>616,1\$</b>	<b>676,9\$</b>	<b>+9.9%</b>	<b>+13,7%</b>

Data presented in table above reflect the increase in revenue of logistics providers in year 2012 relative to year 2011. Similar situation was in Europe in years 2011 and 2012. There in year 2012 companies earned 4,2 billion \$ less than in previous year. The largest increase in profits was in Asia and it was about 45 billion dollars. In total, all over the world, outsourcing companies' profits increase by almost 10% (60 billion dollars).

### 3. Summary

Positive aspects resulting from use of logistics providers have been observed for both companies, who outsource and for specialized companies, which perform these activities.

Companies which outsource tasks such as storage, shipping and other, can focus their attention on their core activities. If cooperation goes without any interferences it increases the quality of products and services offered, shortens duration of production process before goods will go to final consumer. It increases effectiveness of applied solutions, maximizing customers' satisfaction at acceptable costs.

In turn, this long-term agreement brings high incomes for operators. Due to it these companies can dynamically develop and expand both range of activity and its extend. At present use of external companies is very common solution which brings high profits. This area develops and will continue its development improving speed of operation and level of satisfaction with quality of outsourced services.

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