ANALYSIS OF THE MODERN MARKET OF 3PL SERVICES

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Abstract:
3PL service in the world develop not the first decade, in Russia such service became actual only after crisis of 2008. In paper the content of 3PL services concept is investigated, the current state of the 3PL services market is analysed, prospects of development of the 3PL services market in Russia are revealed. It is proved that main objectives of cooperation of trading and production companies with logistic intermediaries is obtaining competitive advantages for the account: reductions of operational logistic expenses, the general increase of efficiency of functioning of logistic system and, as a result, decrease in product cost, increase of flexibility of firm and ability to adapt for continuous changes of conditions of business, reduction of risks, reductions of duration of operational and logistic cycles.

Introduction

3PL service in the world develop not the first decade, in Russia such service became actual only after crisis of 2008. Every year the world economy moves away from real sectors, from production, the services sector extends (Zhang & Yang, 2013). The number of economic subjects who are occupied not with production, but providing various services grows. Money makes money. Logistics is not an exception.

Each new company to aspire it is simply to gain income, thus anything without doing therefore an increasing number of tasks of the organization is entrusted to intermediaries, dealing only with investment issues (Boyko, Sekerin & Šafránková, 2014). Actually it is also the main plus of 3PL: the company doesn't go in for logistics, doesn't make mistakes at its forming, thus it saves the budget. The economy on outsourcing can average to 10%.

In spite of the fact that since 2008 passed 7 years, national 3PL of operators in Russia didn't appear. Now all main 3PL operators are foreign companies with long-term experience. A striking example – FMLogistics. And those who apply for this role, actually those aren't, and in fact are usual transport companies. But in a pursuit of quickly changing market and not to miss clients, call themselves somehow.

In this regard it is advisable to investigate the content of concept 3PL of services, to analyse a current state of the market 3PL of services, to reveal prospects of development of the market 3PL of services in Russia.

1. 3PL-services concept and condition of the world market of 3PL-services

Services in management of deliveries chains and optimization of logistic business processes, consulting in the field of logistics; provides use digital and IT technologies, cloudy technologies and integrated solutions for management of transport and warehouse logistics (Sekerin & Gribov, 2014).

Depending on the level of involvement of the independent companies (carriers, forwarding agents, logistic providers) for the solution of business challenges in interests and on behalf of the customer (the producer, the distributor etc.) are allocated 1PL, 2PL, 3PL, 4PL and 5PL-logistics.

1PL (First Party Logistics), as a rule, is understood as autonomous logistics when all necessary operations (transportation, warehousing etc.) are carried out by the cargo owner independently by means of own infrastructure and the personnel.

2PL (Second Party Logistics) – the simplest form of logistic outsourcing. The third-party specialized company within contractual obligations assumes performance of tasks of transportation of goods and to management of the elementary warehouse operations.

3PL (Third Party Logistics) – more developed outsourcing form: except standard tasks, the professional logistic company (3PL-provider) provides a wide service range with a considerable value added and possibility of involvement of subcontractors.

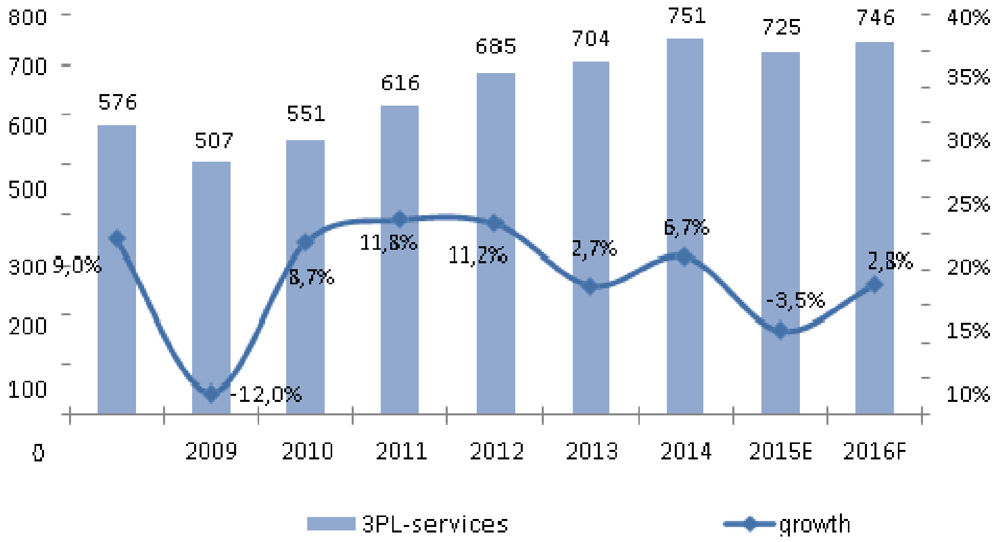
4PL (Fourth Party Logistics). The main function of system logistic integrators is planning and coordination of information flows of the client, optimization of a chain of deliveries, including integration of clients of the company, customers of clients and suppliers.

3PL-providers (third party logistics providers) are the firms rendering to clients (industrial, trading and other companies) complex logistic service. Such companies take some or all logistic functions under the control. Providing full range of services, the logistic provider becomes closely integrated partner of the customer and provides functioning of the major links of a chain of distribution of firm therefore its work with clients usually is based on the basis of average and long-term contracts. Often contracts fix a liability of such providers for quality of service of a certain part of a logistic chain that creates the atmosphere of an individualization of logistic service and has positive impact on the market of contract logistics in general.

Cost the volume of a segment of 3PL-services is defined as gross revenue of logistic providers which includes services of cargo transportation own or attracted transport, services of the third-party organizations (subcontractors) and actually service of a value added (forwarding, warehouse logistics, administrative logistics). The average world indicator of penetration of 3PL-services in 2014 made 17.6% of size of the market of a logistic outsourcing. The total volume of the world market of 3PL-services in 2015 is estimated at US$725 billion (fig. 1).

About 35% of total amount of revenue of 3PL-operators provide the services provided to 500 largest world companies (Global Fortune 500). Thus the share of 3PL-providers in total costs of Top-500 of leading companies of logistics exceeds 20%. The business cycle of logistic provider substantially depends on dynamics of development of separate branches or groups of productions in which clients (industrial, trading or service companies) work.

Figure 1: *Dynamics of volume of the world market of 3PL-services, 2008-2016, US$ one billion*



Source: Armstrong & Associates, M.A. Research assessment

The world market of logistic services is fragmented, more than 50 thousand operators act on it, over 95% from them are rather small by the size and have limited material and financial resources. 36% of all sales volume fell to the share of 50 global companies dominating in the market in 2015.

The majority of the leading logistic companies along with the organization of transportations, rendering of services for cargo handling and warehousing of goods, provide also complex services in management of chains of deliveries within long-term contracts (contract logistics).

According to the accepted classification, the contract logistics includes the following services: warehousing and processing of freights, the organization of their delivery by transport, and also traffic control of goods throughout all chain of deliveries. The contract logistics develops due to outsourcing of part of functions of the company's clients in the sphere of the organization and support of dealer networks and creation of chains of the movement of goods from the supplier to the client *(inbound logistics)* and from the client to consumers of his goods *(outbound logistics)*, and also the return movement of material values from consumers to the supplier *(reverse logistics).*

By estimates of the leading 3PL-operators, in 2005-2008 the size of the market of contract logistics increased on average by 8% a year. Under the influence of crisis in 2009 the revenue of the companies working in this segment was reduced from-5% (Kuehne & Nagel) to-10% (DHL Supply Chain, CEVA Logistics).

In general the contract logistics leaves crisis, than other segments of the market of transport and logistic services more slowly. At the same time, crisis pushed trade production companies to outsourcing of bigger number of logistic functions and concentration on the main business. Increase of demand for the complex logistic services allowing to optimize chains of deliveries and to lower expenses is noted, the number of contracts with 3PL-operators increases. The new impulse gave to development rapid growth *of e-commerce* which increased demand for services of contract logistics from Internet retailers, including logistics of "the last mile".

According to the leading 3PL-operators, this tendency will define dynamics of the world market of contract logistics and in the next years.

According to Transport Intelligence, in 2014 the volume of a segment of contract logistics made US$234 billion (€176 billion), and its share in the total volume of the market 3PL of services exceeded 30%. According to Kuehne & Nagel, in 2015 the size of the market of contract logistics grew by 4% to €183 billion that turned out to be consequence of improvement of an economic situation in Europe and increases of demand in North America and Asia.

In a dollar equivalent falling made 13.2% (US$ 203.2 billion) as a result of an adverse change in the exchange rate of euro to dollar. Concentration of the market of contract logistics is low: on it tens of thousands of the specialized companies operate, thus the share of 10 largest logisticians in the total amount of revenue makes 20%.

The most important direction of development of the world logistic market is expansion of the large western logistic companies to developing countries. The following tendency is rather accurately traced: the markets of countries of Eastern Europe and the CIS, and for North American – the markets of the countries of Latin America are especially attractive to the European operators. The companies of Asia-Pacific countries choose the markets of China and India.

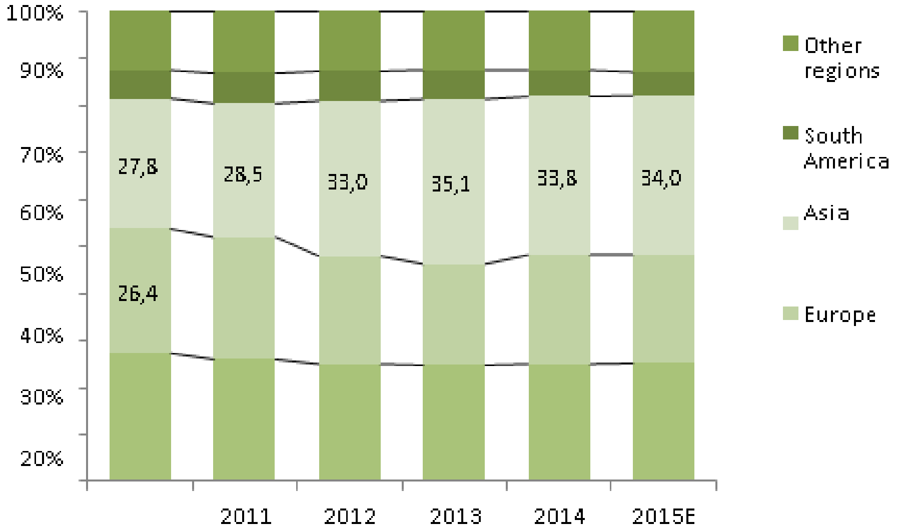
Orientation of strategy of most of the leading logistic operators to strengthening of presence and volumes of operations in Asia, including service of regional trade becomes the general trend on medium-term prospect. Thus in response to decrease in demand for international transport the global 3PL-operators working in Asia began to be focused on creation of regional structure of storage and distribution, but not on development of export activity.

According to Armstrong & Associates, and mature the transport and logistic market of Europe is the most developed today. Taking the third position in the world on the volume of logistic expenses and the size of the transport and logistic market (18% in 2014), the countries of Europe provide 23% of revenue in segmente3pl-services.

At the same time, by the absolute size of the market of 3PL-services Europe concedes to the countries of Asia and North America. The total volume of revenue of 3PL-operators in the Asian market in 2014 made US$ 253.7 billion (against US$ 174.4 billion received in the European market), and its share in a world segment 3PL reached 33.8%.

The second position (25%) is taken by the North American market of 3PL-services with a capacity of US$188,2 billion. However at the level of the certain countries the market of the USA from shares in a world segment of 3PL-services in 21% is still in the lead (fig. 2).

Figure 2: *Geographical structure of the world market of 3PL-services, 2010-2015, %*



Source: authors

2. The market of 3PL-services in the USA

According to Armstrong & Associates, cumulative logistic expenses in the USA in 2014 made US$1,44 trillion (8,2% of GDP of the country), the size of actually transport and logistic market of the USA (costs of transport and logistics without taxes, percentage payments, depreciation and insurance) is estimated at US$1,23 trillion.

In structure of the transport and logistic market the segment of cargo transportation (74% of market size) prevails. Superiority holds the motor transport occupying about 80% of this sector. The share of railway transport makes 7.1%, on river and aviation it is necessary on 4.6%. Expenses on forwarding don't exceed 4%. Cumulative costs of storage and distribution are estimated at the USA within 9% of total amount of the market, another 4% are spent for logistic management.

According to the experts, about 81.3% of volume of the transport and logistic market are the share of logistic outsourcing (US$ 1001.3 billion in 2014). In the market of logistic outsourcing the share of 3PL-operators makes 15.8%.

In outsourcing logistic business of the USA, as well as in other countries of the world, two main groups of the specialized companies work: with own park of vehicles, hoisting-and-transport and other equipment, and also warehouse capacities (asset-based) and intermediary (non-asset-based).

In structure of the American market of 3PL-outsourcing the services connected with the organization of international transport (30% in 2014) and forwarding of internal transportations (36%), and also services of a value added in responsible storage and distribution (23.7%) prevail.

The great demand on internal transportations in the USA is connected, first of all, with the growing popularity of Internet trade. Quickly the number occupied performed by and delivery of orders for e-commerce increases. So, according to the analytical company BI

Intelligence, only in July, 2016 there were 1700 new vacancies of drivers of trucks for delivery of purchases. 2600 more new experts employed the companies providing warehouse services for the companies of electronic commerce. Also 1800 couriers were in addition employed.

Good results were shown by the operators working mainly at domestic market of the USA that allowed increasing consolidated revenues of Top-50 of the companies significantly. According to Armstrong & Associates, the revenue Top-50 of the logistic companies of the USA in 2015 made US$ 115,5 billion (+ 8%), and their share in market size reached 71.7% in comparison with 67.7% in 2014.

3. The market of 3PL-services in Europe

By an assessment Armstrong & Associates Inc., cumulative logistic expenses in Europe in 2014 made US$1660,6 billion (€ 1248,6 billion, 9.2% of GDP). The volume of costs of transport and logistics is estimated at US$ 1337.2 billion (€1005.4 billion).

64,6% of costs of transport and logistics are the share of the logistic outsourcing including services in transportation, processing and warehousing of freights, and also administrative logistics (SCM and 4PL) and value added services (VAS).

In 2014 the volume of the European market of transport and logistic services increased by 8.5%, to € 649.5 billion from which €131,3 billion (20.2%) were the share of a segment of 3PL-services. The European market of transport and logistic services showed restoration of volumes after reduction in 2013.

The largest in Europe is the market of transport and logistic services of Germany which volume in 2014 was estimated at €220 billion. Then in decreasing order there are markets of France, Italy and Great Britain with a capacity from €80 billion up to €110 billion. Germany, France, Great Britain, Italy and Spain – it is the share of the five of the leading countries to 72% of the market of transport and logistic services and 3PL of services of Europe.

The largest European 3PL-providers are logistic divisions of Deutshe Post World Net holdings (DHL Supply Chain & Global Forwardingl) and Deutsche Bahn Group (DB Schenker Logistics), and also Kuehne & Nagel.

By data from the reports for 2015 published by twelve European 3PL operators, the cumulative turn of the largest players made €112 billion, having increased by 6,4% in comparison with 2014.

The share of the largest European logistic companies in the world market 3PL of services in 2015 made 17.2% (the volume of the global market was estimated at €653,1 billion, US$ 1 = € 1,11).

The greatest increase in sales in euro in 2015 was recorded in the GEODIS, Norbert Dentressangle and Wincanton companies.

4. Prospects of development of the market 3PL of services in Russia

In structure of the Russian market of logistic outsourcing services 2PL prevail, the share of gross revenue of logistic providers in a turn of the market of transport and logistic services makes 6.2%, the share of services of a value added of 3PL doesn't exceed 3%.

In 2015, according to participants of the market, growth rates of a turn of the companies working in a segment of complex logistic services were significantly lower than dynamics of the market of transport and logistic services in general that turned out to be consequence of decrease in size of a value added due to reduction of the prices and tariffs in the conditions of fierce competition. The maximum focus on the client, the offer of the new products and services aimed at reduction of expenses in chains of deliveries became basic elements of competitive fight and factors of growth of the most successful logistic operators (Dudin, Lyasnikov, Veselovsky, Sekerin & Aleksakhina, 2014).

The consolidated gross revenues of logistic operators in 2015 were stated in 174.8 billion roubles. Over 70% of a turn provide operations on transportation and forwarding of freights (own and attracted transport), about 30% are the share of segments of warehouse and administrative services, including management of chains of deliveries. 3PL-operators occupy rather big share in the Russian market of warehouse services (31,8% in 2015), thus their participation in the organization and performance of a cargo transportation doesn't exceed 4,6%. In these segments of the market of transport and logistic services the main volume of services provides the transport-forwarding companies (segment 2PL).

The low share of 3PL-services in a turn of the market of transport and logistic services substantially is a consequence of the existing structure of production and according to fright traffics in the Russian Federation which is characterized by prevalence of raw materials and semi-finished products – hydrocarbons, of ore, coal, mineral fertilizers, the wood and timber.

The raw companies are, as a rule, ready to transfer only basic services in transportation and cargo handling to outsourcing, reserving management of chains of deliveries. Cargo delivery from the producer to the consumer (within the country or to border) is carried out mainly by rail within direct contracts with forwarding companies or the companies carriers (first of all with JSC RZhD and its affiliated structures, and also independent operators of a rolling stock) at the minimum forwarding margin.

At the same time, as shows experiment "the Russian Railway Logistics", complex transport and logistic service of the export companies of raw materials is capable to lower significantly their logistic expenses at the expense of the organization of optimum chains of deliveries of production to borders of the Russian Federation (to seaports and overland boundary transitions), and also optimization of internal logistics of the enterprises.

In general in the market of contract logistics and complex industry solutions which basis in Russia, as well as in all Europe, are services 3PL providers, there is a considerable volume of a pent-up demand (Byun, Sung & Park, 2017). Main objectives of cooperation of trading and production companies with logistic intermediaries of this class are obtaining competitive advantages for the account:

- reductions of operational logistic expenses, general increase of efficiency of functioning of logistic system and, as a result, decrease in a product cost,

- increases of flexibility of firm and ability to adapt for continuous changes of conditions of a business (Šikýř, 2015),
- reduction of risks,
- reduction of duration operational and logistic cycles.

The main demand for services of 3PL-providers is formed by the companies which are specializing on production and trade in goods with a high value added, engaged in foreign economic activity or realizing the projects demanding special conditions and schemes of cargo delivery by several means of transport. So, in 2013-2014 on growth rates the logistic providers who are carrying out supply of equipment within projects of oil and gas and power sectors of economy, the companies working in an express delivery segment, and also the operators providing complex services (including transportation of combined freights, storage and distribution) for retail networks were in the lead.

In 2015 the best results showed the companies which actively joined in logistic service of online stores including formation of orders, warehouse logistics and delivery to the consumer. In the conditions of the high level of the competition increase of demand for logistic outsourcing in a segment of retail trade, including the organization of work of distribution centers and ensuring delivery of goods in shops was noted (Carayannis & Grigoroudis, 2014). Thus the logistic operators capable to propose the new technological solutions directed on decrease in expenses in chains of deliveries had serious competitive advantages. In 2015 in the market of warehouse services there was an ambiguous situation. Against decrease in rubble rental rates (on average for 11% in a qualitative segment) rather high level of demand on direct rent of warehouses (2PL service) from end users – wholesalers, distributors and, especially, retailers. Thus transition of part of tenants to warehouses of higher category which became comparable at cost to less qualitative objects was noted. In most cases complex logistic service (including the organization of chains of deliveries) is assumed by specialized divisions of the company’s tenants. However, recently cases when the tenant or the owner of a warehouse signs the contract for logistic service (and even warehouse service on the platform) with logistic providers even more often began to be noted. Such practice is used, in particular, by producers of automobile accessories, spare parts, large distributors of consumer goods and retailers.

At the same time, following the results of 2015 and the special first half of the year 2016 the market of warehouse services was compelled to leave a number of averages by the size of the logistic companies rendering services of responsible storage which couldn't cope with reduction of business of the clients. At the general falling of size of the market of warehouse services on qualitative squares at 14,6% in 2015 the volume of the carried-out operations in warehouses decreased more considerably (in certain cases by 3 - 4 times), because of sharp delay of turnover of goods, reduction of the range and reduction of volumes of storage. Those companies which were focused on two-three major customers and which business was insufficiently diversified left from the market. Thus the remained players could reduce and optimize significantly expenses and increase efficiency of the business.

At the same time, according to participants of the market, strengthening of export operations against devaluation of rubble, increase in demand for logistic outsourcing from the trading and distribution companies developing e-commerce, need for new logistic decisions for reduction of expenses in chains of deliveries will promote a gradual exit of a segment of 3PL-services from recession.

Conclusion

3PL service in the world develop not the first decade, in Russia such service became actual only after crisis of 2008. In paper the content of 3PL services concept is investigated, the current state of the 3PL services market is analysed, prospects of development of the 3PL services market in Russia are revealed. It is proved that main objectives of cooperation of trading and production companies with logistic intermediaries is obtaining competitive advantages for the account: reductions of operational logistic expenses, the general increase of efficiency of functioning of logistic system and, as a result, decrease in product cost, increase of flexibility of firm and ability to adapt for continuous changes of conditions of business, reduction of risks, reductions of duration of operational and logistic cycles.

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