

LOGISTICS OUTSOURCING – A MEANS OF ASSURING THE COMPETITIVE ADVANTAGE FOR AN ORGANIZATION

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The logistics approach suggests integration of separate units in the delivery supply chain into a unified system of direct management of material and information flows targeting the accomplishment of the desired result with a minimum loss of time and resources.

The implementation of an up-to-date logistics management in companies provides more effectiveness. This means to use outsourcing. Logistics outsourcing brings to the reduction of stocks, order-to-delivery lead-time reductions and an increase of quality, expansion of production flexibility, lowering the cost of production, accelerated capital turnover. This guarantees lower production costs and better quality of deliveries, which is a decisive competitive advantage. The application of logistics outsourcing helps the rational allocation of resources to those types of business, which are worth competing and where the company has distinctive advantages.

So this work debates the application of logistics outsourcing as a means for ensuring competitive advantages for an organization.

Keywords: outsourcing, logistics, provider

Introduction

The development of recent means of transportation, information systems, communication and telecommunication systems reveal great opportunities for rapid distribution of information, technologies, goods and financial resources. The competitive advantages, connected with the growth of globalization and innovations, begin to lose gradually their originality, and new competitive advantages come up in front – flexibility, order-to-delivery lead-time reductions, reliable and quality deliveries, choice opportunities. The ability of manufacturers to join the individual consumer preferences together with their production process and system of planning will be a decisive factor in the field of competition. Quick changes in buyers' choices and their demand for quality production delivery lead to shortened lead-time and decreased amount of deliveries, contraction of retained reserves of time and materials. The solution of the problem with individual client orders is possible only by setting up of a flexible system of production management.

Firstly, it will require the implementation of new and up-to-date concepts of production management like CFM (Customer Focused Manufacturing), SCM (Supply Chain Management) and technologies, based on the same concepts as ERP (Enterprise Resource Planning), CRM (Customer Relationship Management), etc. It will also require supply handling, synchronized with production and effective distribution based on the interaction of logistics intermediaries [5].

Secondly, by intensifying the processes of integration there emerge new opportunities to locate production in countries with cheaper workforce and lower rates of taxation. The growth of international trade facilitates the access to cheaper resources. These factors contribute to the progress of multinational corporations, using the global logistics chains and channels, which, on their part, tend to become more complicated and require more qualified and complex management.

Thirdly, it is necessary to optimize the transportation system both at a micro- and macro-level. The complex development of transport infrastructure is based on the standardization of goods and freight, means of transportation, mechanisms of handling cargo, delivery speed, widening of road and railway networks, improvement of service maintenance.

Fourthly, the information exchange plays an increasing part. Industrial companies have to interact in the field of information so that information can be accessed in the right form, at the right time, by the right authorities and in authentic type, protected from unauthorized use.

The aim of the paper is to examine the application of logistics outsourcing as a means of assuring a competitive advantage for an organization.

Contemporary logistics management and outsourcing

The aim of logistics process is formulated by the basic rule of logistics – the 7R principle: the *right product* with the *right quality* in the *right quantity* has to be delivered at the *right time* and *right place* to the *right customer* at the *right cost*. Disregarding of even one of the above conditions may lead to a loss of customers and, thus, to a decrease of the company's competitive advantages and reduction of its market share.

The logistics approach, unlike the traditional one, suggests integration (technical, technological, information and economic) of separate units in the delivery supply chain into a unified system of direct

management of material and information flows targeting the accomplishment of the desired result with a minimum loss of time and resources.

The implementation of an up-to-date logistics management in companies provides reduction of stocks, high predisposition of merchandise towards deliveries, order-to-delivery lead-time reductions and an increase of quality, expansion of production flexibility, lowering the cost of production, accelerated capital turnover. This guarantees lower production costs and better quality of deliveries, which is a decisive competitive advantage.

Besides lowering the operative costs, together with the logistics ones, one of the basic directions of the organization strategy is concentrated on priority types of business and operations. This helps the rational allocation of resources to those types of business, which are worth competing and where the company has distinctive advantages (technology, know-how, special equipment, and trained personnel). This approach can be defined as "core competence".

The universal practice therefore is to use "outsourcing" more and more widely.

The term "outsourcing" suggests contraction or decline of one's own business process, usually that, which is not the core one (not the profiting one) and/or that, which is not profitable for the company and passing it to a company, which specializes in this field [1].

The main advantage in the use of outsourcing is that it lets the organization focus on its basic activity.

Organizations can actually pass to outsourcing each of their functions or activities ranging from human resources management to logistics, information maintenance, payroll processing and even production itself.

The expedience of the use of outsourcing is determined only after its analysis from the point of view of four aspects:

- strategic focus;
- operative ability;
- financial benefit;
- possibilities for improving all activities in an organization.

Outsourcing has the following advantages:

- *Concentration on the basic activity (core competence).* The company focuses resources and attention on its primary activity (core competence). The company focuses resources and attention on its basic competitive business. Management may concentrate on the important strategic tasks (strategic planning, elaboration of competitive strategy, etc.) and to pass for execution to an external organization the routine everyday tasks.
- *Use of the best methods and experience.* Outsourcing allows the application of the best management methods. To win in the field of competition, the organization, which provides outsourcing, constantly improves its services and looks for opportunities to use the best technologies and solutions. This on its part helps the client-organization quickly attain a productive, effective and more economical business process.
- *Increase of competitiveness.* The organization may react more quickly and effectively to the changing client needs. Outsourcing lets a business be more flexible and respond to customer preferences.
- *Cost-cutting and application of high technologies.* Many, if not most, organizations generally use their internal reserves instead of investing in implementation of new technologies. But providers of outsourcing implement the new technologies; they simply have no other choice in order to stay on the market. In this way the use of outsourcing allows the organizations to apply new and high technologies. Since the provider of outsourcing is a specialized organization, the company, which is serviced, has a chance to decrease its capital investment and to improve the quality of production, which it manufactures. The organizations, providing outsourcing services, may also reach economies of scale. This contributes to diminishing of the total costs in the system as it permits companies to increase their profits. On the other hand, those companies, using outsourcing may gain benefits from their innovations and the provider's flexibility.

The mechanism of outsourcing and its usage suggests taking into account the following aspects:

- *Diminishing expertise.* Outsourcing applied to any company function leads to the point, where internal expertise, usually necessary for its application, diminishes or disappears at all. On the other hand outsourcing increases the vulnerability of the company as it begins to depend partly or fully on the servicing organization.
- *Alteration in policy/organization.* In order to interact effectively with the provider of outsourcing services, management might possibly modify its company policy and business organization or

elaborate new policy and organization. The policy of quality management and the procedure for solving the problem are due to correspond to the alterations, taking place in companies. They have to be ready to solve the problematic situations, arising, in view of the quality of the services, rendered by the provider.

- *Attitude of human resources towards company policy.* Staff attitude towards outsourcing plays a very important part in its realization. The questions regarding personnel may vary from redistribution of all functions carried out by them (or training) to dismissal. The training and instruction of employees defines the quicker adaptability of the organization towards the new environment and new job organization.

Outsourcing has been applied for a long time in industrial countries; it is estimated that its market resources account for billions of USD, but in Bulgaria it is still being scarcely spread. There is little research for the market resources of logistics outsourcing. In the European and Asian countries, the USA, Canada, and many others there is a trend in the field of outsourcing that is aimed at passing a part or all of the logistics functions to another organization, the outsourcing of logistics services is used by a greater number of organizations. The intermediaries in these relations are the so-called providers of logistics services (Third Party Logistics Services – 3PL's).

The essence of logistics outsourcing

The concept of logistics outsourcing

The concept of logistics outsourcing suggests the use of external partner for organizing the necessary logistics operations [2].

Some companies distrust the possibilities for switching to production outsourcing. This happens because they:

- are anxious about the loss of intellectual capital, know-how and gained experience;
- are dubious about production quality and delivery reliability;
- select with difficulty a qualified servicing company;
- are afraid to transfer their expertise (basic competencies) and technologies to another organization.

Yet, when the company uses outsourcing in order to fulfill its logistics functions, such fears are ungrounded because logistics is not a basic activity of the company and could be realized more effectively by a specialized servicing organization.

The development of the logistics outsourcing market depends on four main factors:

- *Globalization of supply and distribution chains and globalization of trade.* The cooperation with local providers gives way to interregional and international cooperation and the distribution chains spread over many countries. These alterations make the logistics chains more complicated. The decisions to choose a logistics provider are of crucial importance for the effective management of international logistics, and most notably for those companies that lack experience.
- *Management of logistics chains. Logistics affects high-speed stock replenishment, product life cycle time and quick turnover of capital.* In order to perform it with the necessary quality, companies are set to increase their staff, means of transportation, etc. This means additional costs for wage bills, car maintenance, warehouses, etc. The external 3PL partner may overcome the inner momentum of the organization, which is a disincentive for the improvement of the company's logistics process within its own power scope. The use of 3PL provider practically means to obtain logistics resources without any additional investments made by the organization. The additional benefit from the use of 3PL provider is that it may follow the market fluctuations and maintain the necessary requirements for the integration process.
- *Consumer pressure.* The success in logistics chain management is due to satisfying the growing consumer requirements for lead-times and deliveries, improvement in stock replenishment, management of the complicated international and domestic delivery chains, maintenance of the balance between costs and quality of service. All the above mentioned indicators define the compulsory conditions for subsistence of companies on the field of competition and reaching their level of effectiveness. A 3PL provider can be referred to as a means, with the help of which logistics costs may be lowered, the necessary level of information technologies might be provided for, etc. Companies, above all, will not invest alone in their development, not to mention that the use of 3PL services intensifies and improves the logistics process.

- *The use of outsourcing as a business model of the organization.* Outsourcing is an acceptable device for development, realization and management of the business model of an organization. It allows the company to focus its efforts and resources on core competence. Many companies have already understood that the successful management of logistics chains is essential for the overall success of the company.

Types of logistics providers

It is assumed that the outsourcing of logistics services (3PL's Logistics Outsourcing) is defined as an activity which passes a part or all of the logistics functions, basically from the non-production character, to external logistics organizations – third-party logistics providers. *Logistics providers (LP)* can be further called *Logistics Service Providers* or *3PL providers (LSPs, 3PLs, TPLs)* [4]. They are trade organizations, which provide services in the fields of logistics, execution of separate operations or complex logistics functions (warehoused stock, transportation, order management, physical distribution, etc.) and accomplishment of integrated management of logistics chains of the client-organization.

Companies may leave under the control of an external partner all logistics operations, including consulting, execution of the necessary surveys, and implementation of information systems. These companies frequently possess rich experience in logistics management, have at their disposal qualified personnel and developed infrastructure (terminal or terminal network, car pool, often even international transport agents).

3PL providers are predominantly daughter companies, which separate from their headquarters (a freight forwarder, a company providing warehouse services, etc.) in order to satisfy the growing consumer needs and to offer them a wider range of services.

There are five types of *3PL providers*: *LP* – carrier-companies, *LP* – warehouse operators, *LP* – freight forwarding & broker companies, *LP* – optimizing transportation services, and *LP* – software processing programs (Table 1.).

Table 1. Types of logistics providers

Types of logistics providers	Basic services	Companies
Providers of transportation services (on the basis of carrier-companies), possessing assets	Dedicated logistics. Transportation, centrally planned carriage, servicing, route optimizing	Schneider, Ryder, Hunt, Danzas, TNT, UPS, FedEx, Airborne, DHL
Providers optimizing transportation services (do not possess assets)	Integrated logistics. Service-orientated logistics, directed to technologies and engineering	CHRoninson, Mark VII, UPS Worldwide, Menlo, FedEx
Providers of warehousing, forming value-added cost	Integrated logistics. Dedicated logistics, technology, warehousing and transportation	Caliber, DSC, Tibbet Britten, GATX, Exel Logistics
International freight forwarders – providers of outsourcing services (do not possess assets)	Integrated logistics with possibilities for international freight forwarding	AEI, Circle, M SAS, Kintetsu
Providers of software programs	Logistics program packs	Manigistics, 12/Intertrans, McHugh, Logility, Extricity

These companies may also be divided into two categories, bearing in mind another principle: asset-based companies and non-asset based companies, using outsourcing in their activities.

Asset-based companies possess or obtain through lease contracts means of transportation, warehouses, etc. Non-asset based companies conclude contracts with other firms, rendering all or part of the services in the field of physical distribution. Firms providing information services are a variation of non-asset based companies which act as intermediaries in the optimization of company's logistics systems and interact with other asset-based companies on a contract basis.

According to the requirements of Armstrong&Associates (1999), over 1/3 of the revenue belongs to non-asset based logistics providers, employed in the sphere of rendering value-added services in the field of warehousing and to the companies optimizing transportation (Fig. 1.).

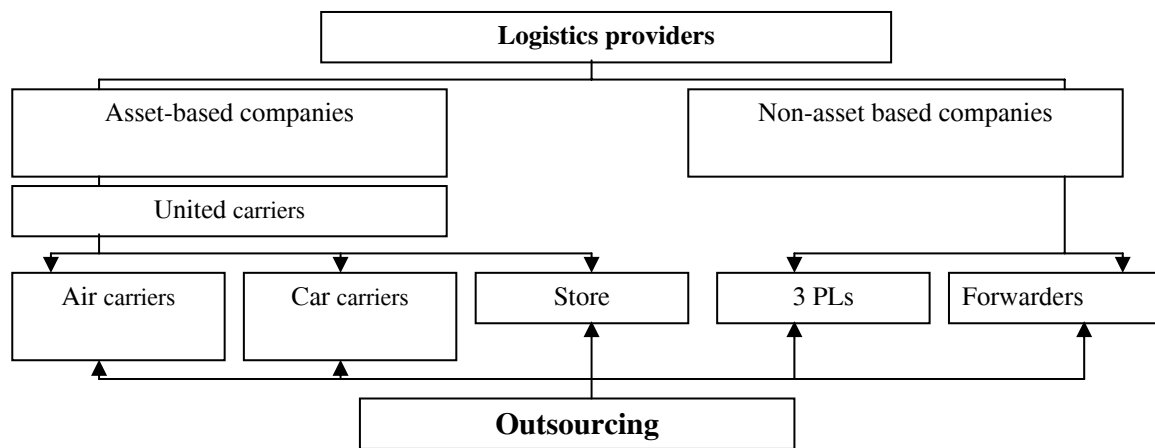


Fig. 1. Logistics providers

In addition to the above mentioned general advantages, the use of logistics outsourcing is being extended because of:

- high quality servicing by the specialized company;
- growing flexibility of the company, using outsourcing;
- synergic effect;
- insufficient expertise among employees in the company, using outsourcing;
- experience in companies, providing logistics services;
- strategic reasons.

Activities that can be passed to logistics outsourcing

In logistics there is a multitude of complex activities, which can be passed for execution to outsourcing companies. These might include: management of inbound material flow (supply management), inventory management, and management of procedures for receiving and handling of customer offers, conventional and special packaging, transportation, JIT (just-in-time) deliveries, warehousing, information and software and hardware maintenance. Yet before a function will be passed to outsourcing company it has to be considered which aspects of the company activity will be influenced (e.g. distribution costs, supervision of the supply chain, company flexibility, customer service, seasonal fluctuations in product demand and/or implementing a new product).

When the issue of outsourcing is being decided, many companies reject it and maintain the distribution function on its own, because companies could possess warehouses, car pool, etc. This way or the other, the possibility of using outsourcing may be treated even in those cases, because the issue of exploitation costs is more important.

Besides personnel costs and costs for maintenance of equipment and premises (e.g. warehouses, etc.) there are other costs that can be difficult to include in the structure of the balance sheet (which are not less important). These are costs for transportation management, security costs, and costs for using means of transportation, information service costs, taxes, costs for regulation of administrative and personnel issues, and legal support.

Information is an important aspect in the company's logistics activity and a basic source of control in the logistics chain.

There is an opinion that the outsourcing of company's logistics will lead to loss of control over the logistics chain. Yet many 3PL providers possess new, tested technologies, with the help of which, the processes of warehousing and transportation can be linked into a unified information flow.

Today the market conditions are changing rapidly and those companies, wishing to be competitive, require quick reactions both from their subsidiaries and the companies, which are under contract for outsourcing.

The buyer is becoming more demanding and knowledgeable nowadays and his/her choice is wider than ever. The outsourcing organization has the possibility to quickly expand the existing market opportunities without attracting permanent assistants. It can also take advantage of its network of carriers, in order to expand the options for transportation.

The situation in a company may vary from survival to profit in accordance with the extent to which it satisfies customer expectations. It can be expected that the internal departments of the organization identify the situation more quickly and more acutely than the outsourcing company.

Yet for the servicing organizations to render services is a means for survival, hence their success is directly linked with the success of the client-company.

When an external logistics partner is being chosen it should be interested in discussing not only its own needs, but also the needs of the customers of its user organization.

The logistics organization has to set standards for key parameters of its activity. Professional providers may implement a number of programs in order to maintain and improve the quality of their services. They usually include performance metrics in their contracts. When they surpass their customers' expectations they offer to discuss agreements on the basis of the participation in the division of profit, and when they fail to complete the set assignment they are ready to pay fines and forfeiture.

Many carriers of goods maintain a range of products, characterized by the significant seasonal fluctuations in demand. These fluctuations influence distribution and transportation volumes. The maintenance of own assets is also a prerequisite for generating excess costs. Outsourcing of warehousing and transportation services therefore is an adequate alternative to own car pool and warehouse premises.

When a company introduces a new product on the market this usually causes alterations in the logistics chain. Furthermore, commercialization of the product suggests two alternatives – the product may succeed in prevailing on the market or it may not. The external organization can improve significantly the effectiveness of distribution by cutting the costs for maintenance of premises (e.g. warehouses), basic equipment (cars) and human resources (personnel).

Assessment of logistics outsourcing market in the USA and Europe

One of the most developed markets of logistics providers and logistics outsourcing is the market in the USA and Europe. According to experts' estimates, the annual growth of 3PL services market in the USA is between 18% and 22%.

In 1998 the surveys of *Armstrong & Associates* and *Piper Jaffray* in the USA showed that companies' logistics costs amounted to US\$ 898 billion, where, approximately 2/3 rds belonged to 3PL providers. In 1998 the current and potential market of 3PL in the USA was US\$ 606 billion. During the last 20 years the incomes of 3PL providers have grown 27 times more. In 2000 *Armstrong & Associates'* survey "Who's who in logistics?" (9th edition) proved that they accounted for US\$ 56 billion [9].

In Europe the total logistics costs in 1999 were approximately US\$ 129 billion, from which US\$ 31.6 billion (24%) belonged to contract logistics. There is a permanent tendency of growth in logistics costs, which will amount to prognosticated US\$ 175 billion in 2007, and the logistics outsourcing market will increase its share to 28% (US\$ 44 billion) [6]. Great Britain leads the European logistics outsourcing market with 39% of the companies using the services of 3PL providers.

Nowadays Western Europe is a basic source of international proceeds for the American 3PL providers according to *Accenture* and *Northeastern University* survey) [10]. During the last few years the most significant growth of proceeds is expected in Eastern Europe. The other two regions of expected growth are Mexico and Asia.

Services rendered by logistics providers

The assembly of the application of logistics tools and the tendencies of company concentration on "core competence" gives wide opportunities to the growth of logistics outsourcing and specialized logistics intermediaries.

In 2001 *Cap Gemini Ernst & Young*, *Georgia Institute of Technology* and *Ryder System Inc.*, conducted the regular annual market research of logistics providers [7]. This research was conducted among companies from the automobile, chemical, electronic, medical and computer industries, companies manufacturing consumer products, retail and wholesale companies, also companies from the telecommunication business. These branches of industry were chosen because of the fact that logistics in them was an element of strategic importance, which directly influenced the management of integrated delivery chains. The total number of sent questionnaire forms was 725, and the number of received completed forms was 93 (13%). From those completed, 71% assumed that their companies either used or will use 3PL services. The approximately same percentage of respondents whose firms used the services of 3PL providers compared to 1997. For the 6-year period the lowest level of use of 3PL approach was 68% (in 1999), and the highest – at 73% in 1997 and 2000. In 2001 29% of all inquired responded that their companies do not use the services of 3PL providers (Fig. 2).

Although the overall percentage of companies using logistics provider services remains relatively constant from year to year, the percentage of 3PL services varies by the industries studied. The most active users of 3PL services are companies from the computer industry and producers of consumer goods (90% and 85% respectively). The automotive, chemical and retail companies use lesser amount of logistics outsourcing. According to this survey, 50% to 60% of the firms from these branches use the services of logistics providers.

According to a survey by *Cap Gemini Ernst & Young*, the average costs of companies for outsourcing in 2001 are 35% and their projected growth amounts to 50% in the next 5 years. If this growth turns into reality, a substantial increase of proceeds in the industry of 3PL providers can be expected.

According to a study by *Dr. Robert Lieb* and *Brandon Schwarz*, conducted in 2001 among 500 producers – participants in the *US Fortune 500 manufacturers* ranking, the basic logistics functions, offered by 3PL providers to companies are services for transportation, warehousing, documentation, freight forwarding and choice of carrier [8].

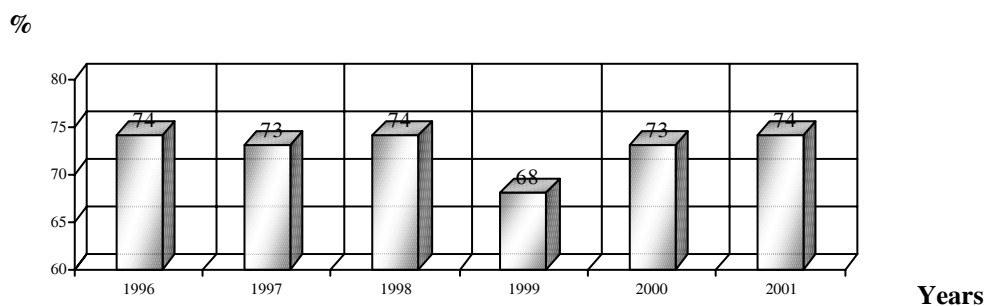


Fig. 2. Logistics providers' services

The Cap Gemini Ernst & Young study shows that the use of logistics services increased in 2001, compared to 2000. In 2001 logistics outsourcing was used most frequently for warehousing (73%), outbound transportation (68.4%), settlement of payments (61.4%), inbound transportation (56.1%), shipment consolidation/distribution (40.4%), and direct transportation (38.6%).

Functions, which are less frequently used, include product returns and repair (22.8%), inventory management (21%), shipment tracking/tracing and fleet management (19.3%), order fulfillment (15.8%), order entry/order processing (5.3%), customer service (3.5%).

The conclusion from this study is that there appears to be a tendency to use outsourcing for both, logistics functions and activities of strategic importance, directed towards the purchaser, and functions, very closely related to information technologies.

The users are usually interested in the integrated character of services rendered by the logistics providers, e.g. cross-docking, handling of goods, additional services, spare parts procurement, etc.

The studies in 2000 showed that 60% to 70% of the logistics services were integrated, which coincided with users' demand. Moreover, the users of outsourcing should like 3PL suppliers "to provide a broad and comprehensive set of service offerings". They disagree with the assumption that "logistics providers should focus on a limited set of services". It is obvious that the respondents have a growing desire to cooperate with a single logistics provider (single source solution), acting as a "lead logistics manager" together with logistics services integration.

Influence of the use of 3PL service providers on company effectiveness

According to the surveys, companies get the greatest economies from outsourcing of all functions of the logistics chain. According to experts, companies using 3PL approach may reduce inventory management costs from 15% to 30%. The analysis of the logistics outsourcing used by European companies shows that 56% of the respondents have achieved logistics cost reduction [3].

The studies of *Cap Gemini Ernst & Young* show that the use of 3PL providers leads to the following changes for the companies:

- logistics cost reduction by 8.2%;
- fixed logistics asset reduction to 15.6%;
- the average order cycle length is reduced from 10.7 to 8.4 days;
- overall inventories are reduced by 5.3%.

All these metrics help the company, using 3PL approach, improve its financial performance. It is logically expected that the overall financial-economic metrics of the company, including Economic Value Added (EVA) and shareholder value, would be positively affected.

The account of *Northeastern University* and *Accenture* makes the following assessment of the 3PL providers' activities on the company performance.

It is interesting to note that 84% of the respondents give a negative answer to the question "Did the economic slump affect your company's interest in using 3PL provider services?" Most of the respondents with a positive answer, note that the economic slump would inevitably attract the attention of managers toward costs control and, respectively toward the alternative – outsourcing.

The process of perfection in technologies during the last five years has changed the companies' approach in projecting delivery chains and has increased consumer expectations for logistics outsourcing providers. These changes create unprecedented opportunities for 3PL, which can manage the delivery chain information as effectively as the physical assets.

The changes in techniques, when managing the logistics chain, influence the 3PL providers in the following directions:

- *Expansion of customer expectations and their clients.* During the last few years users of outsourcing have significantly modified their expectations and their requirements towards logistics providers. Some years ago clients treated logistics as a service, which helped them supply "the right product, at the right place, at the right time". Yet nowadays the clients want to use their logistics chains for fuller satisfying of their consumer needs and obtaining of competitive advantages. Logistics providers practically turn into a sort of an extension of the servicing companies and they expect some customization of the logistics processes in a way that they correspond to their requirements. The customization offered by the logistics provider, leads to an increase of service costs for clients.
- *Growth of logistics service integrity.* Customers need their logistics providers to be able to manage the increasing number of distribution channels and the rapid growth of assortment of goods, and can render services on new geographic markets.
- *Growth of logistics chain integrity.* Logistics chains become more and more complex. End-customers require, on the one hand not only company attendance on global markets, but also growing assortment of appropriate products, and on the other hand frequent introduction of new products and high share of their customization. As a result logistics providers must process orders, acquired through different sales channels (e-trade, e-logistics systems, e-trade exchanges) and to maintain simultaneously the traditional logistics channels (ERP systems, EDI protocol interface, customer-focused order management systems). The Internet reveals opportunities for creating direct distribution channels between the manufacturer and the consumer.
- *"Customization approach".* Clients treat the logistics providers as an extension to their companies and expect from them to be offered services in accordance with their specific requirements.
- *Demand for more effective inventory management.* In order to exercise more effective control over the inventory, clients require from their logistics providers to be rendered such services, like: management of client inventory, management of supplier inventory, direct transportation, etc.
- *Real-time information exchange.* Real-time information exchange nowadays turns into a norm, and therefore clients expect from their logistics counterparts to be rendered operative and reliable information.
- *Closer partnerships in the logistics chain.* Logistics providers should possess sufficient knowledge and technical skills to successfully work with different counterparts and opportunities for rendering new services and cutting costs.

These tendencies, to a great extent, changed the original functions of 3PL providers, as logistics intermediaries, fulfilling one or a small number of logistics functions for the client-company (Fig. 3).

The ever-growing expectations of client-companies for the integrity of rendered services, the use of information technologies, the customization of logistics decisions and improvement of the logistics chain of companies lead not only to an increase in their competitive advantages. These expectations also cause integration of logistics providers by means of mergers/acquisitions. According to a survey conducted by *Arthur Andersen* (*Arthur Andersen Mergers & Acquisitions* in the Logistics Industry 2001), the number of merger and acquisition deals in the field of logistics in Europe grows from 361 in 2000 to 436 in 2001, i.e. more than 21%. For example, in 1999 *Deutsche Post* acquired *Danzas*, later on *Nedlloyd* (operating in the field of distribution), the Swedish company *ASG* and the controlling interest in *DHL*. The German company *Schenker* acquired the Swedish company *Bilspedition* (*Scansped*) and became the second largest 3PL provider in Europe. Several

years earlier the Danish *TPG* bought *TNT*. All these companies have tried to acquire a logistics network, which would cover a large part of Europe, in order to be able to offer the customers a wide range of services in different regions.

Providers of logistics services merge not only with similar companies. Many of them join their capacities with consulting companies and information technology providers. Thus, the American logistics provider *Ryder Integrated Logistics* established two strategic partnerships: the first one – with *IBM* and *Accenture*, and second – with *i2 Technologies*.

Since these alliances continue to grow and expand there emerges a new modification of logistics outsourcing and a new type of logistics providers – 4PL providers (Fourth Party Logistics TM Providers).

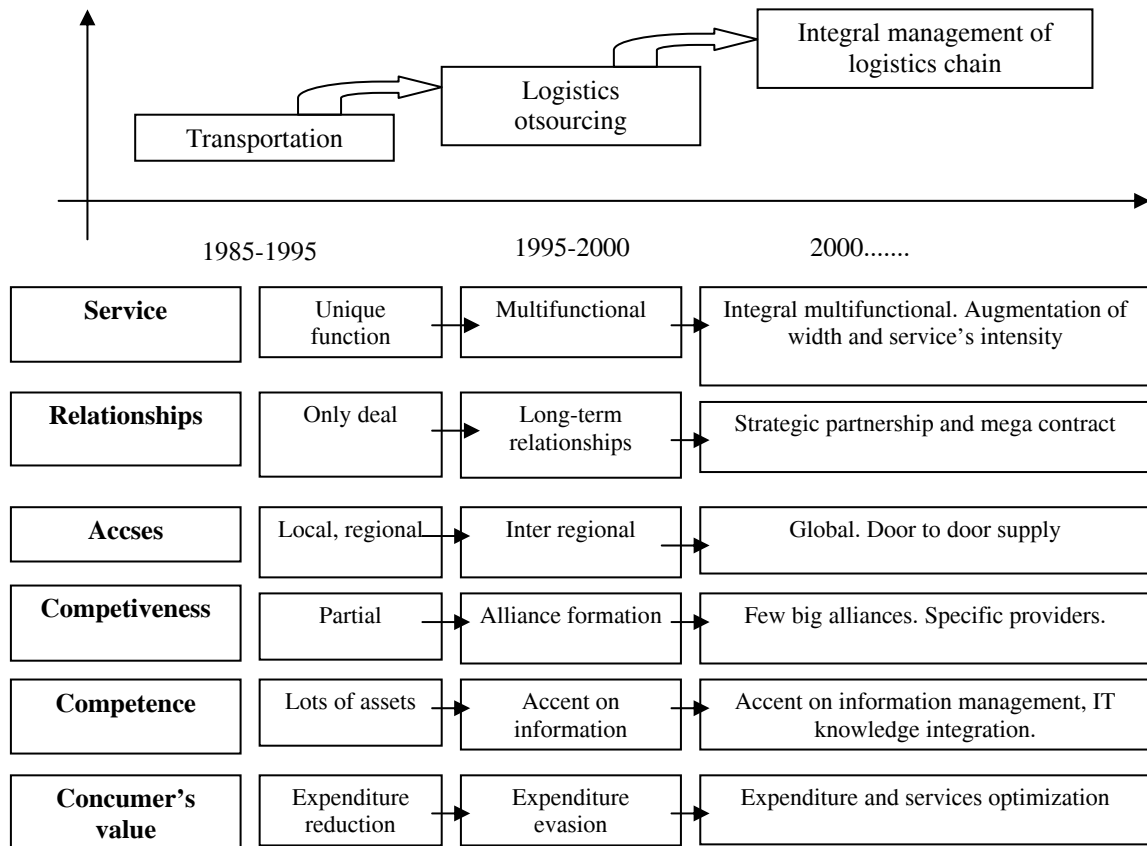


Fig. 3. Functional modification of logistics approach

A 4PL provider is an integrator of all logistics chains of a company, who manages not only his/her resources, but also the opportunities, technologies and resources of complimentary service providers to deliver a full and comprehensive solution for the supply chain configuration of the company. The key to the success of a 4PL provider is to make the best decisions for the client-company. These solutions are taken, having in mind the capabilities of the assisting 3PL providers, suppliers of technologies and managers of business processes.

The 4PL provider successfully couples the strategic logistics chain management and the operative management of implementation and execution of strategic solutions, i.e. joins in itself the functions of a consulting company and a 3PL provider. Furthermore the high level of services, rendered to the end-client, is reached in return for an increase in the technological level of consultants, information technology providers and 3PL providers.

The basic difference between the 4PL approach and the logistics outsourcing is in the unique capability for increasing the company value and share prices in a number of ways (Fig. 4). Unlike traditional outsourcing, which offers advantages mainly in separate units of the logistics chain, the 4PL approach is set to optimize the logistics chain as a whole.

The revenue growth is achieved by improvement of product quality, its availability and betterment of the client's department activities, through application of leading technologies. As 4PL providers focus on

management of the whole logistics chain, a significant improvement in the quality of services can be achieved, and the growth in satisfying purchasers leads to respective growth in their income.

The lowering of operative costs by 15% may be reached in return for increasing the operative effectiveness, widening of the process and cutting delivery costs by means of outsourcing the logistics chain functions. The synchronization of activities, the information flow and technologies among the participants in the logistics chain leads to cutting the operative costs, lowering the price of goods, thankfully by process integration, planning improvement and fulfillment of logistics tasks.

The reduction of variable capital to 30% is possible due to effective inventory management as well as time reduction in the cycle “order – money”. Technologies for order management and shipment tracking in the logistics channels lead to minimizing of the necessary stock/inventory, as well as the increasing cargo availability, which on its part helps reduce the cycle “order – money”.

The reducing of basic capital is a consequence of passing the physical assets to the 4PL provider, as well as its more effective use.

The passing of physical assets to 4PL providers gives the opportunity to release resources for investment of the company in the profile areas of its activities, e.g. production, R & D (research and development), marketing, etc.

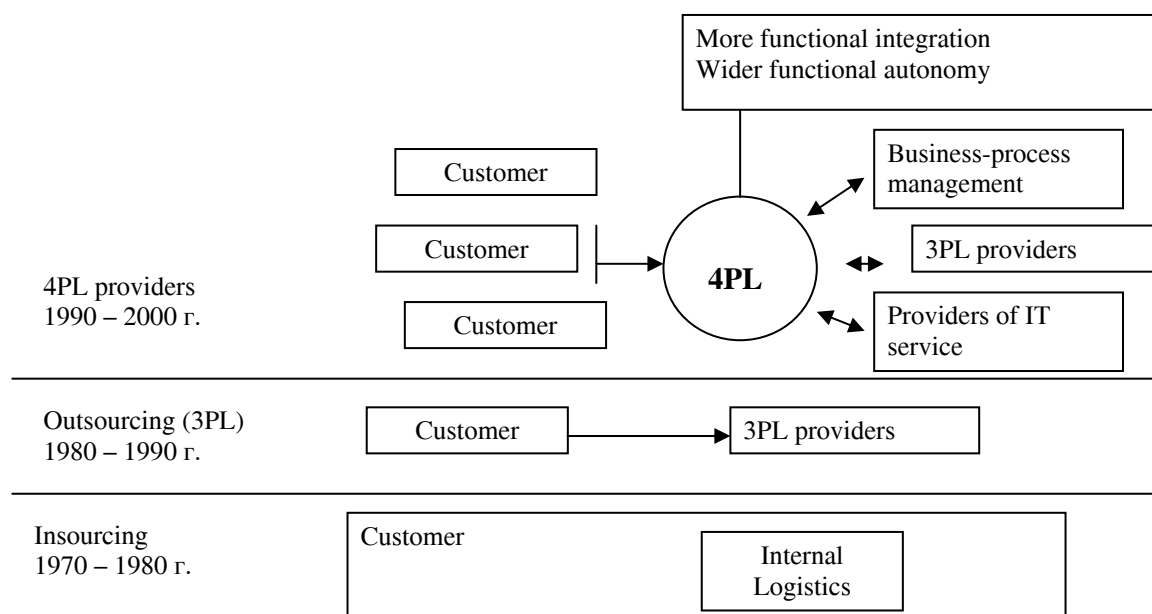


Fig. 4. PL approach

Conclusions

Having in mind all of the above-mentioned trends, it can be concluded that the logistics market, and in particular, logistics outsourcing have a powerful capacity for development. The processes of globalization, integration and cooperation, as well as the growing customer needs and demands incite companies, which want to be competitive on the market, to apply the logistics approach in structuring their business, as well as use in their activities a tool like logistics outsourcing.

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