**THE IMPACT OF LOGISTICS ON ORGANIZATIONAL COMPETITIVENESS**

Senior lecturer Toni Soklevski, PhDc

Vice Director of Business academy Smilevski – BAS, Skopje

Republic of Macedonia

email: [sokle2000@yahoo.com](mailto:sokle2000@yahoo.com)

# *Abstract*

# The scientific objective of the research paper is determining causation in the logistics and ensuring competitiveness of organizations. In addition, the supply chain is considered as a complete structural formula of planning, coordination, implementation and control of all activities related to a single supply chain.

**The core of this concept and thus defined supply chain to ensure efficiency in procurement and increase the organizational competitiveness. Chain of procurement incorporates all transfers of tangible and intangible resources necessary to produce a product or service then evaluate the market by customers. In scientific community there are some differences associated with differences between managing the supply chain and logistics. According to some authors, these terms are synonymous, while in others they are two different concepts, although there are some overlaps. Generally, logistics means a term broader scope.**

**Despite these differences, the management of any organization in managing the supply chain must take account of: the network configuration (suppliers, scheduling of production facilities, distribution cantri, warehouses and customers) strategy distribution (centralized or decentralized, direct or indirect distribution), information flow (integrating information systems); managing inventory (quantities and locations of raw materials, semi-finished and finished products), cash flows, organizational structure and design (delegating authority and responsibilities within the supply chain).**

**From this research and many years experience of working with small and medium organizations in Macedonia, confirming that logistics represents one of the key components that provides mutual competitiveness of the organizations, and the total Macedonian economy internationally.**

***Keywords: logistics, supply chain, organizational competitiveness.***

Doc. Ing. Zlatko V. Sovreski, PhD

Faculty of mechanical engineering - Univerzity Goce Delčev - Štip

Republic of Macedonia

email: [zlatkosovre@yahoo.com](mailto:zlatkosovre@yahoo.com)

e-mail:zlatko.sovreski@ugd.edu.mk

# INTRODUCTION

Products or services produced by the organization must "come" to customers or end users. Because it is a material (physical) production of intangible goods and manufacturing services, the problem of "distribution" is treated with appro-priate to the final product. In terms of material production, opera-raids distribution include transportation of physical product to the customer (consumer purchaser). Unlike products, services are created and isporachuvat in the presence of the client, so that the majority of services are determined by establishing direct contact, the term "distribution" gives a completely different meaning. As it comes to managing physical distribution, the focus is on products.

Logistics management is an extension of the physical distribution and typically refers to managing the flow of materials, services and information within a distribution channel. Often the end of the distribution channel is a store for retail. But with increasing direct delivery to customers (especially for innovation and internet based retail outlets), the logistics chain can be extended to the customer, bypassing the conventional way associated with distribution outlets. The term logistics of third - party indicates that logistics is carried out by a specialized organization.

Transport is a "movement" of the product from one location to another, or "movement" of goods at the beginning of the supply chain to the end customer (consumer). Transport has a key role in the supply chain, because 40% to 50% of total costs. Another important feature is its transportation entities: suppliers (chipper) and carriers (carrier). Along with costs, these entities are crucial, because depending on the costs that these entities produce change and deciding factors in transport. The main objective of the supplier is to minimize the total cost consisting of: transport costs, costs related to inventories, assets th, processes and services, and thereby to meet all customer needs for delivery. On the other hand, the main goal of the carriers is to maximize revenues from the assets invested by the optimicazija: cost of vehicles, fixed operating costs, transportation costs, costs to produce the quantities that are transported, as well as general overhead costs whether it is:

* Air (airline) transportation;
* Road transport;
* Rail transport;
* Transport by sea;
* Transport through the pipeline;
* Delivery of packages;
* Mixed transport.

In terms of operations management, it is important to know basis-inspired goals and features of different transport modes, listed below.

**Air transport.** The main objective of air transport is to maximize daily flight time and increase revenue per unit of travel. Achieved-ing this goal is challenging, having in mind the characteristics of this type of transportation:

* High fixed costs for equipment (aircraft) and infrastructure (airports, terminals ...).
* Variable costs for current operations and fuel.
* Management focused on revenue passengers.
* High speed transport.
* Benefits - when it comes to transport things that have a high unit value and chuvstvitrelni time.

**Truck transport.** The main feature of this type of transport is great flexibility. Usually used for transporting products that are sensitive to reloading and additional manipulations. There are two types of truck transport. The first is called the transport full truck (TL - full truck load), where the total costs vary depending on the length of road, fixed costs are lower and the goal is to achieve a lower cost for larger shipments. The second is called incomplete transport freight truck (LTL - less than truck load). The main characteristic of this type of transport is that the price is determined by two factors: the amount being transported and along the road. For this kind of transport, fixed costs are high and there is an evident need for suitable sites for transshipment and distribution.

**Rail transport**. The main objective of rail transport is to maximize utilization of engine and mechanical personnel and zda replace neprofitabi-lnite with profitable lines. The main negative features: long during transport and high fixed costs and low positive that variable costs stimulate transport large volumes over long distances.

**Transport by sea**. Transport by water is naturally limited transportation. He is the slowest, but also the cheapest, so prevalent in global trade.

**Piping.** Pipelines are characterized by high initial costs of construction, and their optimum utilization is 80% -90% of capacity.

**Delivery of Packages**. This type of transport is established in order to provide fast and reliable delivery. Known more as a delivery "door to door". Use all previously spoemnat modes of transport. Its main characteristics are: high cost, limited (small) size of packets delivered, need places for consolidation package, timely delivery and reduces the costs associated with keeping inventory.

**Mixed transport.** This kind of transport combine different modes of transport in order to provide a unique relative price - service that can be offered by any other form of transport. Although more used vehicles, this form of transport is developing very quickly, thanks to the development and implementation of the global container trade.

**Transport networks**.The transport network is a set of routes (paths precisely defined) and locations in which the product is transported. Well projected transport network provides a high degree of satisfaction of customer needs and low cost. There are three basic types of transport networks: direct transport network, delivery via distribution center and mixed (tailored) transport network.

# RESEARCH METHODOLOGY

1. Research design

According to a survey character development, do some action that will disrupt the normal workflow of the company, and can lead to improvement.

1. *Intention (purpose and objectives)*

To improve the management of logistics companies. This will provide an increasing number of customers, market expansion and market segments and increase profits through maximization of revenues from the assets invested by: cost of vehicles, fixed operating costs, transportation costs, costs that produce quantities transported and general overheads.

1. Hypothesis or research question

Managing logistics will increase revenue based on invested assets through optimization of total cost.

1. Variables and their measurement

Independent variables: managing logistics  
Dependent variables: income firms

1. Procedures and instruments for data collection

The research procedures and instruments, and to obtain reliability (safety), ie providing actual data to be used:

* survey;
* observation;

1. Analysis of the data

The data obtained will be analyzed qualitatively and quantitatively.

1. Methods of scientific knowledge

The interpretation of the data and information from the moment of their collection, to the process of generalizing the research findings are based on more scientific methods of locking, including:

* basic procedure of scientific locking
* analysis;
* remedial procedures scientifically lock;
* comparative analysis;
* synthesis;

1. *Resources*

* Staffing Plan: actors, roles and scope of engagement
* owners of firms
* employees in firms
* Customer service

1. Research Results and analysis

This research is realized in 52 companies in the region, of which 30 companies from the manufacturing business activity, and 22 of the service activity.

In this research conducted in 2013 as research instruments were used: questionnaires for all levels of managers, monitoring protocol in logistics processes and analysis of documents in companies.

Figure 1. Type of business activity

Figure 2. Number of years of the organization's existence

Figure 3. Review of the organizations' size according to the number of employees

By improving the management of logistics is expected to meet the needs of the providers who want to minimize the total cost consisting of: transport costs, costs related to inventories, assets, processes and services, and thereby to meet all customer needs for delivery.

On the other hand, are expected enterprise to maximize revenues from the assets invested by the optimatization: cost of vehicles, fixed operating costs, transportation costs, costs to produce the quantities that are transported, and general overheads.

Figure 4. Costs

Companies that have efficient logistics and reduced costs for it are more competitive and more respected by consumers for fast delivery, cost, flexibility, reliability and quality of the product or service.

The average effective and timely logistics are saving over 12% of the total cost of surveyed companies. It is one of the most important indicators for organizational competitiveness. For companies that are very aware, but do not take timely steps for building efficient logistics.

Managers need to make many decisions when designing effective channels that will be in service users. For example, you have to decide whether to sell directly to the user through the stores that are company-owned stores or franchise, or indirectly, through a combination of intermediaries such times as independent retailers, wholesalers and agents . You need to decide whether to use through retail stores, retail store out of a combination of both. Also, managers need to make decisions about the location of the head office of the company and the stack, the products will be delivered to customers and marketing functions that will perform in a given channel.

# CONCLUSION

Through the supply chain companies provide transfers of tangible and intangible resources (goods or services) necessary to produce a product or service then evaluate the market by customers.

Along with products in the network of suppliers to customers, each will have feedback on orders and information to their suppliers.

For companies there are three important reasons to consider the supply network:

* Assist the company as effectively compete.
* Helps identify important links in the network.
* Assist the company to focus on long-term position in the network.

The current global market is sometimes easier to find than a physical product to be delivered to the final consumer. Companies must decide how to keep the products and to observe the terms of use of the same (depending on the type of product), and to distribute them to consumers at the right time, the right place and fully intact.

The trade logistics as a science and as trade logistics activity is one of the most important types of logistics not only in tertiary logistics systems but also in logistics primary, secondary logistics, logistics and quarterly logistics systems, because without such logistics would not be able to play the system works: production, distribution, exchange and consumption. Trade logistics, in fact, covers the wholesale and retail trade (sale without processing) of any type of goods and provision of services related to the sale of goods.

In the study of fundamental phenomena of trade logistics, ie phenomena of wholesale and retail should be kept in mind an important fact, which is that it represents the last stage in view of the distribution of material goods.

##### References

1. Ross , D. F. Competing Through Supply Chain Management. New York: Chapman and Hall , 1998 .
2. Gourdin, K., Global Logistics Management - A Competitive Advantege for the new Millennium, Blackwell Publishers Ltd., Oxford, 2001.
3. Stalk , George , P. Evans , and L. E. Shulman . “Competing on Capabilities: The New Rules of Corporate Strategy.” Harvard Business Review, March–April 1992 , pp. 57–69 .
4. Jacobs, F.Robert/Chase, Richard B./Aquilano, Nicholas J. [Operations and Supply Management](http://www.bokus.com/b/9780071288040.html) , McGraw Hill Higher Education, UK, 2008.
5. Robinson, P., [Operations Management In The Travel Industry](http://www.bokus.com/b/9781845935030.html), Cabi Publishing, UK,2007.
6. Lee J. Krajewski and Larry P. Ritzman, Operations Management, Strategy and Analysis, Addison-Wesley Publishing Company, Reading. Massachusetts, 2007.
7. Slack, Nigel, [Operations and Process Management](http://www.bokus.com/b/9780273718512.html) , Financial Times/ Prentice Hall, UK, 2006.
8. Soklevski, T. Contribution of operational management on sustainable Enterprise Competitiveness, First Scientific Conference - Contemporary management challenges and the organizational sciences ,BASIM, Bitola, Macedonia, june, 2012.