



LOGISTICS CONCEPT REVISITED: TOWARDS INTEGRATED BUSINESS LOGISTICS MANAGEMENT

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<https://doi.org/10.37904/clc.2023.4837>

Abstract

Logistics is one of the most important management tools that allows firms to achieve success and to build and maintain competitive advantage. The development of logistics embedded in economic sciences, especially in economics and management sciences, is seen since the mid-20th century. Among managerial issues related to logistics a very significant role is assigned to the logistics concept. The concept of logistics means a decision-making model comprising: strategic analysis, logistics goals, logistics strategies, and logistics tools. The purpose of the paper is to present the nature and the most important dimensions of the logistics concept, concerning the development of the integrated business logistics management. The paper presents the nature and structure of the logistics concept, the stages in the logistics concept development, and logistics concept development towards the integrated business logistics management. The basic method used in the article is the review of the literature. In the development of logistics there is the shift from logistics as a concept focused on the transformation of tasks and activities concerning the flow of goods, towards logistics as an integrated concept of the flow management. The results of the above analysis point that the concept of logistics has a multidimensional impact on the business management system. The basic requirement for the concept of logistics is its integration into the entire business management system. This is already reflected in the definition of the firm mission, manifested in all stages of the logistics management process, in particular in the strategic analysis and logistics strategic planning.

Keywords: Logistics, logistics concept, logistics management

1. INTRODUCTION

The development of logistics is seen since the mid-20th century. A tangible outcome of the development of logistics is its growing importance in the practice of business management. It concerns not only the changes in the internal conditions of business management but the changes in the external conditions of firm activities as well.

In the development of logistics one may notice a significant shift from logistics seen as a concept focused on the transformation of tasks and activities in the area of the flow of goods, towards logistics seen as an integrated concept of the flow management of materials, goods and information within the firm as well as the entire supply chain or even the entire supply network.

The purpose of the paper is to present the nature as well as the most important dimensions of the logistics concept, concerning the development of the integrated business logistics management. The paper presents in particular: (1) the nature and structure of the logistics concept, (2) the most significant stages in the logistics concept development, and (3) logistics concept development towards the integrated business logistics management.



2. THE NATURE AND STRUCTURE OF THE LOGISTICS CONCEPT

In general, the concept of logistics means a decision-making model comprising: (1) strategic analysis, (2) logistics goals, (3) logistics strategies, and (4) logistics tools [1]. The basic requirement for the concept of logistics seen as the management of materials, goods and information flows, is its integration into the entire business management system.

The importance of logistics as a concept of the flow management of materials, goods and information is still growing [2-8]. The concept of logistics has a multidimensional impact on the business management system and its subsystems. Logistics is more and more often seen as one of the most important management tools that allow firms to achieve success and create their long-term competitive advantage. The firm success is mostly expressed in achieving the expected market and economic outcomes by a firm [9-11]. The concept of logistics has a multidimensional impact on the business management system and its individual subsystems, as presented in **Figure 1**.

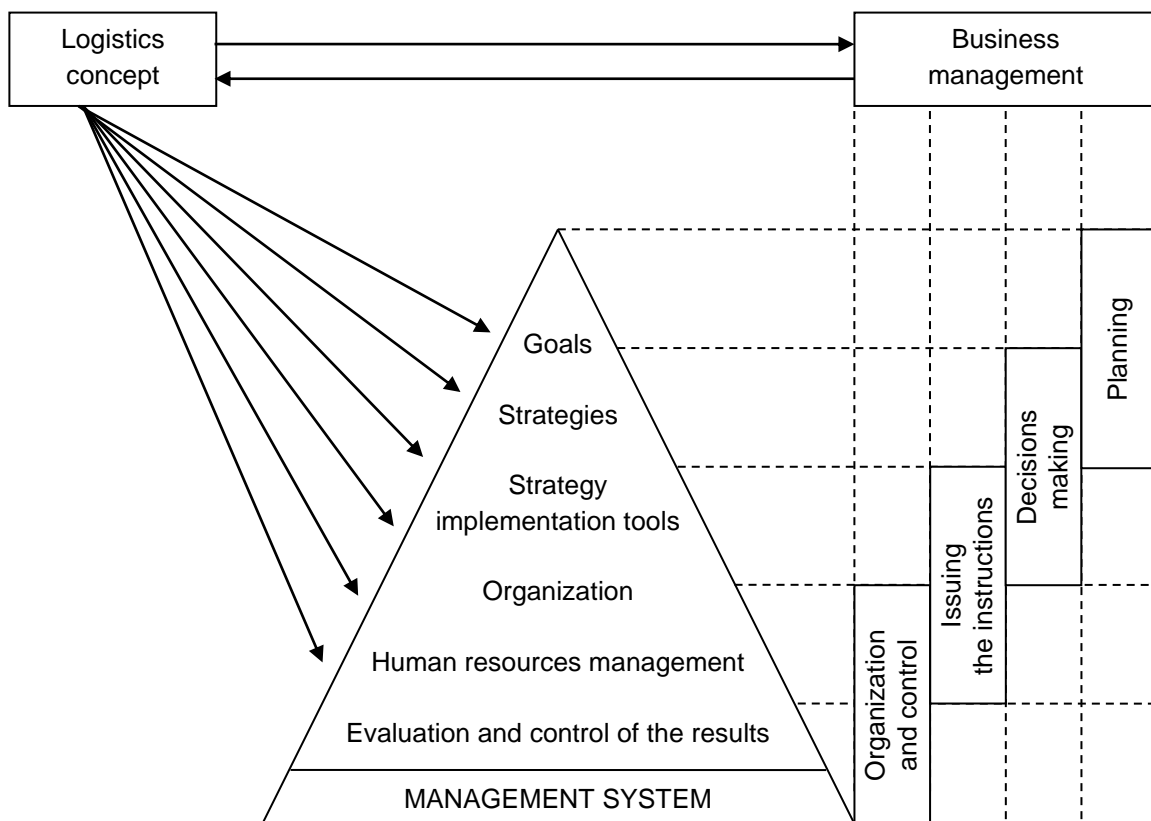


Figure 1 The concept of logistics in business management system [11, p. 88]

As Blaik [11] emphasizes, the primary role within the management system is played by the management concept, understood as a decision-making model integrated both at the strategic as well as the operational level. Blaik points out four significant relationships between logistics and business management, within which logistics management is perceived as [11]:

- 1) Business management subsystem – relationship “logistics vs. system”.
- 2) Flow-oriented concept of integrated business management – relationship “logistics vs. management concept”.
- 3) Network (structure) of the key business management and transformation processes – relationship “logistics vs. processes”.



- 4) Management tools subsystem, related to both strategic and operational aspects of logistics-mix – relationship “logistics vs. management tools”.

3. LOGISTICS CONCEPT DEVELOPMENT

In the development of the logistics concept five main stages may be identified (see **Figure 2**). The identification as well as the separation of these stages is relative because the exact borders between the individual stages cannot be clearly indicated. In the process of the logistics concept development it can be observed that each stage refers to the achievements of the previous stage, expanding knowledge as well as experience with new management skills, capabilities and competences.

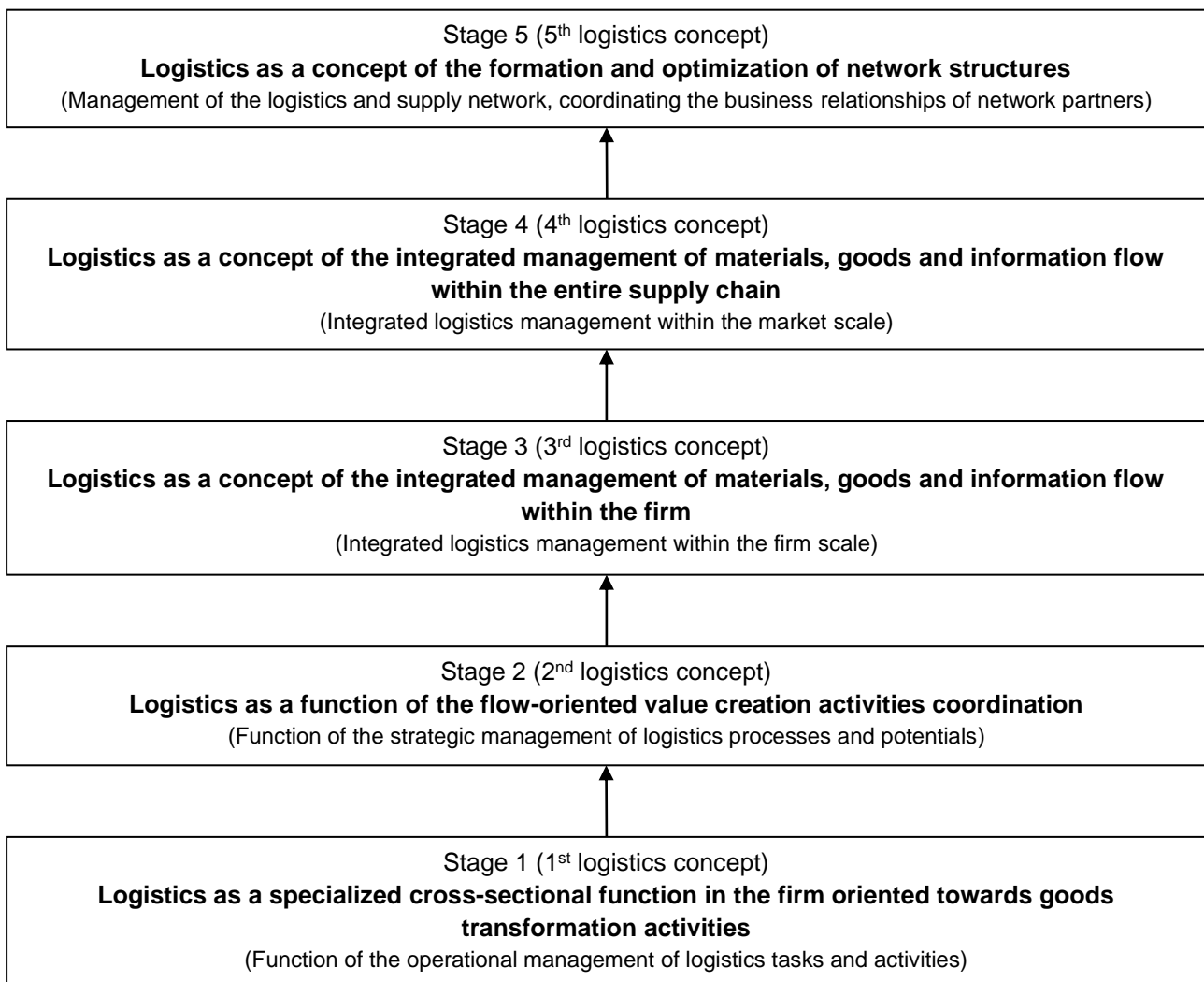


Figure 2 Stages in the logistics concept development [11, p. 33]

The first logistics concept assumes that logistics is a cross-sectional function of a firm, oriented towards the transformation of goods. In this sense, logistics “runs across” the traditional business functions of a firm, i.e. supply, production and distribution. As a result, logistics is perceived as a service function of a firm, and the main task of logistics is to ensure the availability of materials and goods desired from the perspective of customer needs and expectations. Thus, within the first logistics concept a number of tasks concern “routine activities” related to the operational management of the logistics tasks and activities, focused on a relatively short time horizon and the current achievement of operational goals.



The second logistics concept assumes that logistics is a function concerning the coordination of all flow-oriented activities related to value creation carried out by the firm. Individual coordination tasks are carried out through management activities. The most important task of logistics within this concept is to optimize the flow of goods throughout the entire value creation network. The aim of logistics is also to shape and form logistics processes and activities in such a way that leads to the optimization of the total costs of the flow of materials, goods and information, as well as to ensuring the level of service required by the customer.

The third logistics concept assumes that logistics is a flow-oriented management of a firm, also referred to as integrated logistics management within the firm scale. The main points of attention are the individual management functions relating to such business management subsystems as planning, organizing, implementing, controlling, etc. The third logistics concept draws attention to the possibilities of using flow orientation in analyzing and solving problems regarding all processes and activities carried out by the firm on all levels of management. This significantly strengthens the shaping and consolidation of the essence of logistics as a concept of materials, goods and information flow management within the firm scale.

The fourth logistics concept assumes that logistics is a flow-oriented management across the entire supply chain, or – in other words – integrated logistics management across the whole market area. In this concept logistics is the most important component of supply chain management, which in turn is perceived as the most advanced level of development and integration of logistics. Broadly speaking, the supply chain is made up by the firms engaged – through their relationships with suppliers and customers – in a number of processes and activities that are oriented towards value creation as well as the offering of products and services expected by customers. According to Weber and Schulze [12,13], the concept of supply chain management is an advanced stage of the development and integration of logistics, related to the fourth logistics concept. Supply chain management is a very dynamically developing concept of the materials, goods, information and financial resources flow management [14-16], whose main task is to optimally shape and form the flow processes throughout the entire supply chain. It is expressed in ensuring smooth, integrated flows within the entire value creation chain, i.e. from the first (initial) suppliers of raw materials, through production enterprises, trading companies, ending with final (ultimate) customers. The primary goal of the supply chain management concept is to create and deliver the highest value to the customers at the lowest costs for the entire supply chain [11,17]. Within the fourth logistics concept, logistics itself is sometimes referred to as supply chain management.

Finally, the fifth logistics concept assumes that logistics is perceived as a concept of shaping, forming and optimizing the network structures. So far, the fifth logistics concept is the most advanced approach to the materials, goods and information flow management. The central problem within the fifth logistics concept is the management of the logistics network as well as the supply network, coordinating the “course” of broadly understood business relations of all network partners. Within the fifth concept, logistics is perceived as a comprehensive business concept that integrates value chains in the form of the global networks [11,17].

4. TOWARDS THE INTEGRATED BUSINESS LOGISTICS MANAGEMENT

Logistics perceived as a concept of the materials, goods and information flow management, and consequently logistics management, can be considered in two basic dimensions: strategic and operational [18].

Within the strategic dimension, logistics as a management concept and, consequently, logistics management plays an equally important role at the highest levels of business management as other functional areas. Logistics is implemented as a cross-sectional function of the firm in relation to the basic areas of flows, i.e. supply / purchases, production and distribution / sales. Moreover, together with research and development, supply (purchases), production and distribution (sales), logistics as a cross-sectional function determines the framework conditions for shaping and forming logistics processes and systems.



In turn, within the operational dimension, logistics often plays a subordinate role for the highest levels of business management and is not implemented as a cross-sectional function. Individual logistics systems and processes are then shaped and formed separately in the case of research and development, supply / purchases, production and distribution / sales [18].

The basic requirement for the concept of logistics perceived as the materials, goods and information flow management is the proper integration of logistics and logistics management into the overall logic as well as the entire business management system. This is already reflected in the definition of the firm mission, which concerns all stages of the logistics management process, in particular the strategic analysis of logistics stage as well as the strategic logistics planning stage.

The first stage of the logistics management process, i.e. strategic analysis of logistics, serves primarily analytical, diagnostic and forecasting functions. An especially important role is played by the analysis of the firm logistics system and its subsystems, taking into account trends and circumstances occurring in the firm environment, as well as the firm strategic potentials (capacities), comprising: (1) resources, (2) capabilities, (3) competences, and (4) knowledge.

The most significant outcome of the above analysis is a comprehensive, strategic logistics concept. It leads, based on the assumed logistics goals, to the formulation and development of logistics strategies. Both logistics goals and logistics strategies should be consistent as well as integrated with the overall firm goals and overall firm strategy, as well as the long-term directions of the firm development.

The strategic logistics concept is also the basis for concretizing and specifying the further management decisions as well as processes and activities. This is primarily related to the formulation of the operational logistics goals, as well as the selection and use of logistics tools referred to as logistics-mix.

The last stage of the logistics management, related to the implementation of logistics plans and programs, includes organizational and implementation solutions, as well as control processes and activities. The most significant importance should be assigned to logistics controlling, which is closely related to the arrangements adopted at the planning stage and allows for the assessment of the degree of implementation of the assumed goals. Logistics controlling has both diagnostic and prognostic functions [11].

5. CONCLUSION

Logistics, whose inherent feature is the integration of flows and processes, occupies an important place in contemporary business management. The article presents the most important assumptions and levels of integration perceived as a key factor affecting the logistics concept and its development. Logistics as a concept of the materials, goods and information flow management affects the efficiency, effectiveness, and success of a firm, as well as the creation and strengthening the sustainable, long-term competitive advantage of a firm. The most significant symptoms of firm success as well as the basis for creating the firm competitive advantage are the market and economic outcomes achieved by the firm. In striving to achieve these outcomes, an important role is assigned to the integration of flows and processes, which – in the context of the overall logistics management process – primarily concern the integration of logistics goals and logistics strategies with the overall goals and overall strategy of the firm.

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