

LOGISTICS CONCEPT WITHIN BUSINESS MANAGEMENT

MATWIEJCZUK Rafal

Opole University, Opole, Poland, EU, rmatwiejczuk@uni.opole.pl

Abstract

Firms permanently search for new methods and instruments of performance improvement, as well as for strategies and operational programs affecting business competitive advantage achievement and maintenance. During the recent years, one may notice the progressive growth of logistics significance as a management concept influencing economic outcomes (profit, profitability, ROA, ROE, ROI) and market outcomes (customer satisfaction, customer loyalty, market share) achievement by a firm. In particular, more and more frequently managerial re-evaluations in the logistics concept are emphasized. The paper points at logistics concept development within business management. There are four basic "stages" in logistics concept development: (1) Logistics as a service function (transport, warehousing, reloading, packaging, labelling, etc.), (2) Logistics as a function of coordination of materials, goods and information flow, (3) Logistics as an integrated management of materials, goods and information flow within a firm, (4) Logistics as an integrated management of materials, goods and information flow within the whole supply chain. Apart from the literature studies, the article also refers to the research conducted in the Chair of Logistics and Marketing at Opole University, Poland, concerning the following logistics determinants of business management: flow orientation, logistics competences, logistics strategies, logistics management tools, logistics planning, organizational solutions in logistics, and logistics controlling.

Keywords: Logistics, Logistics Concept, Business Management

1. INTRODUCTION

In the recent years, one may notice an increasing importance of logistics, perceived as a concept of materials, goods and information flow management [5], [6], [7], [8], [11], and [14]. Logistics is more and more often seen as the crucial factor of firm success and firm performance, including effectiveness, efficiency and differentiation [2], as well as the significant factor influencing business competitive advantage creation [9] [10]. There are four basic "stages" in the development of logistics concept, conventionally referred to as "consecutive" logistics concepts: (1) Logistics as a service function, (2) Logistics as a function of coordination of materials, goods and information flow, (3) Logistics as an integrated management of materials, goods and information flow within a firm, and (4) Logistics as an integrated management of materials, goods and information flow within the entire supply chain [3]. The article presents the place as well as the role of the logistics concept within business management. Except for extensive literature studies, the article also points at empirical research conducted by the Chair of Logistics and Marketing at Opole University, Poland.

2. FOUR LOGISTICS CONCEPTS ("STAGES" IN LOGISTICS CONCEPT DEVELOPMENT)

Within contemporary business management one may find four significant types of relations between logistics and management [1]:

1. Relation between "logistics" and "business management system" (logistics management as a subsystem of business management),
2. Relation between "logistics" and "business management concept" (logistics management as a flow oriented business management concept),

3. Relation between “logistics” and “business management processes” (logistics management as a network of key managerial and transformational processes within the firm),
4. Relation between “logistics” and “business management tools” (logistics management as a “black-box” concerning strategic and operational dimensions of logistics-mix).

The most important directions of the logistics concept influence on business management are shown at **Fig. 1**.

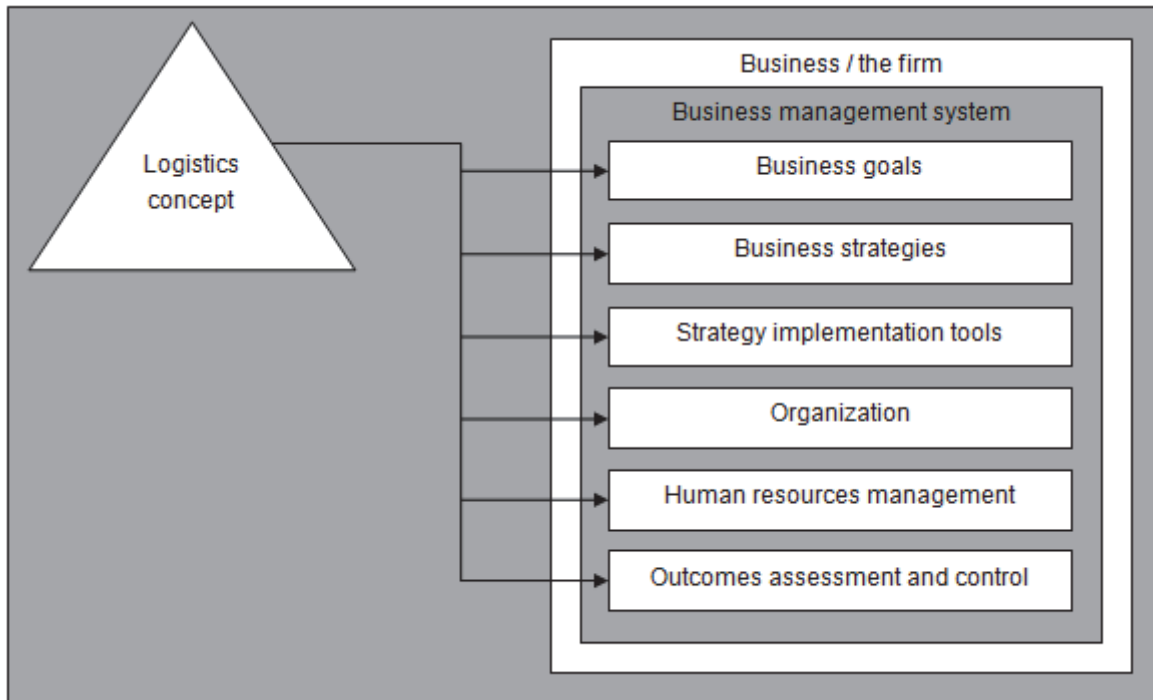


Fig. 1 Logistics concept influence on business management, modified [1]

As it has been mentioned above, within contemporary business logistics management one may distinguish four logistics concepts. They play different roles in business management, including goals achievement, strategy and operational programs development, market and economic outcomes achievement, competitive advantage achievement, etc.

The first concept - *Logistics as a service function* - is the least developed logistics concept (compared with the next three) concerning: transport, warehousing, reloading, packaging, labelling, etc. In this concept logistics is perceived as a function of the operational management of logistics tasks and activities and - simultaneously - as so called “knowledge concerning transfer activities” [14]. Due to its “cross-cutting” nature, logistics “penetrates” traditional firm’s functional areas (i.e. purchasing/procurement, production/operations, distribution/sales). As a result, in practice the most important logistics task within this concept is to secure adequate availability of materials and goods according to customer needs and expectations.

The second concept - *Logistics as a function of coordination of materials, goods and information flow* - emphasizes the importance of logistics coordination function concerning materials and goods flow. The superior logistics goal is to optimize the structure of materials and goods flow along with the entire value creation network [11]. Within this concept logistics is often understood as so called “knowledge concerning the coordination and integration of business functions in the flows area” [14].

Within the third concept - *Logistics as an integrated management of materials, goods and information flow within a firm* - logistics is referred to as so-called “sub-discipline of management science”. An important role is first of all played by individual business management functions (planning, organizing, controlling, etc.). As P. Blaik points out, this concept of logistics refers to “specific management perspective”, which is based on the logistics process of value creation and - in the same time - is integrated with the entire business management system [3].

Finally, within the fourth concept - *Logistics as an integrated management of materials, goods and information flow within the entire supply chain* - which is the most developed logistics concept (compared with the previous three), logistics is perceived as a key “component” of supply chain management (SCM), and - simultaneously - SCM is seen as the most advanced “stage” of logistics development and integration [15] [16]. The subject of SCM are integrated flows along the entire value chain, from the initial suppliers of raw materials, through production and trade enterprises, up to the ultimate customers, while the superior purpose of SCM is to create and provide the highest value to the customer at the lowest cost for the entire supply chain [3].

According to J. Deepen [4], the more developed logistics concept, the more advanced knowledge, including logistics knowledge is required. Such knowledge is a key resource of the firm and it plays the crucial role in the logistics concept implementation within business management. The results of the studies conducted worldwide show that logistics concept development is associated with increasing importance of knowledge as well as other business success potentials, including resources, capabilities and competences. Such potentials are the basis for expected market and economic outcomes achievement by the firm as well as for business competitive advantage creation [3] [10].

3. LOGISTICS DETERMINANTS (FACTORS) INFLUENCING BUSINESS MANAGEMENT

Firms' natural way of behavior is aspiration to reach economic as well as market success. Superior indicators of firms' success are expected market and economic outcomes. Simultaneously, one of the most significant symptoms of firms' success is business competitive advantage. Trying to achieve sustained and long-term competitive advantage, firms are supposed to create and employ a large number of changes in their management systems and processes.

The growing role of logistics is a result of its crucial influence on changes in business management systems. The changes contribute to achieving greater market and economic outcomes (“benefits”) by firms. Logistics in its newest (more advanced) concepts is often seen as systemic determinant of business management, conditioning and stimulating a great number of crucial changes in specified management subsystems: planning, organizing, motivation and human resources management (HRM) as well as controlling. The changes also involve fundamental components of management concept (i.e. strategic analysis, goals, strategies and tools) as well as management levels (normative, strategic and operational).

In general, logistics determinants (factors) affect the expected changes in business management system and its subsystems. Logistics determinants of business management are characterized by three fundamental features:

1. They influence changes of forms, parameters, features and/or structure of “object” on which they have an impact (for example management system),
2. They form and determine expected change directions of the “object” and its parameters, features and structure,
3. They generate expected effects/results of changes (market and economic outcomes achieved by the firm).

On the one hand, logistics determinants of business management determine expected directions of changes related to business management system and its subsystems. On the other hand, they lead to expected market and economic outcomes achievement by a firm. The most significant function of management determinants is

to cause such changes in business management system which leads to the growth of total benefits achieved both by customers as well as by firms.

Logistics determinants of business management are specific “drivers” of changes which occur in management system and its subsystems. As a result of the logistics determinants influence, there appears a unique transformation in management system and its subsystems. The transformation makes it possible to “go” from up-to-now solutions to solutions which condition achieving expected and more profitable outcomes, connected with benefits for customers and firms. A firm desire to improve achieved outcomes requires - among others - continuous improvement of logistics systems, logistics processes and logistics solutions, which is seen in the feedback between achieved outcomes and “drivers” of changes in a firm. As it has been mentioned above, in recent years one may notice the growing importance of strategic decisions related to logistics and supply chain management areas. Such decisions can significantly contribute to the creation and exploration of new premises, opportunities, possibilities, etc. related to business success as well as business competitive advantage creation.

4. LOGISTICS DETERMINANTS INFLUENCING BUSINESS MANAGEMENT WITHIN THE RESEARCH CARRIED OUT BY THE CHAIR OF LOGISTICS AND MARKETING AT OPOLE UNIVERSITY, POLAND

Within the area of logistics one may find a number of determinants affecting, among others, the changes concerning and/or influencing: business management system and its various subsystems, business success, market and economic outcomes achieved by the firm, business performance, business competitive advantage, firm’s market success, firm’s competitive position etc.

Among the studies on logistics factors affecting business management an important place occupies research project carried out by the Chair of Logistics and Marketing at Opole University, Poland. The research has included a sample of 111 companies operating in Poland, representing five lines of business: (1) Mining and extraction mining - 5.4 %, (2) Industrial processing - 27.9 %, (3) - Media production and delivery: energy, gas, etc. - 1.8 %, (4) Building engineering - 11.7 %, (5) Commerce - 53.2 %.

The research results show that 19.8 % firms have implemented the first logistics concept, 32.5 % firms have implemented the second logistics concept, 17.1 % firms have implemented the third logistics concept, and 30.6 % firms have implemented the fourth logistics concept in business management.

However, the most significant result of the Chair of Logistics and Marketing research was the identification of the following logistics determinants of business management: (1) Flow orientation, (2) Logistics and supply chain competences, (3) Logistics strategies, (4) Logistics management tools, (5) Logistics planning, (6) Organizational solutions related to logistics and supply chain management, and (7) Logistics controlling [3], [10], [12], [13]. Enumerated determinants influence not only the changes within business management system, but business success (including market and economic outcomes achieved by the firm), business performance (including effectiveness, efficiency and differentiation), and business competitive advantage (including firm’s market success and firm’s competitive position) as well (see **Fig. 2**).

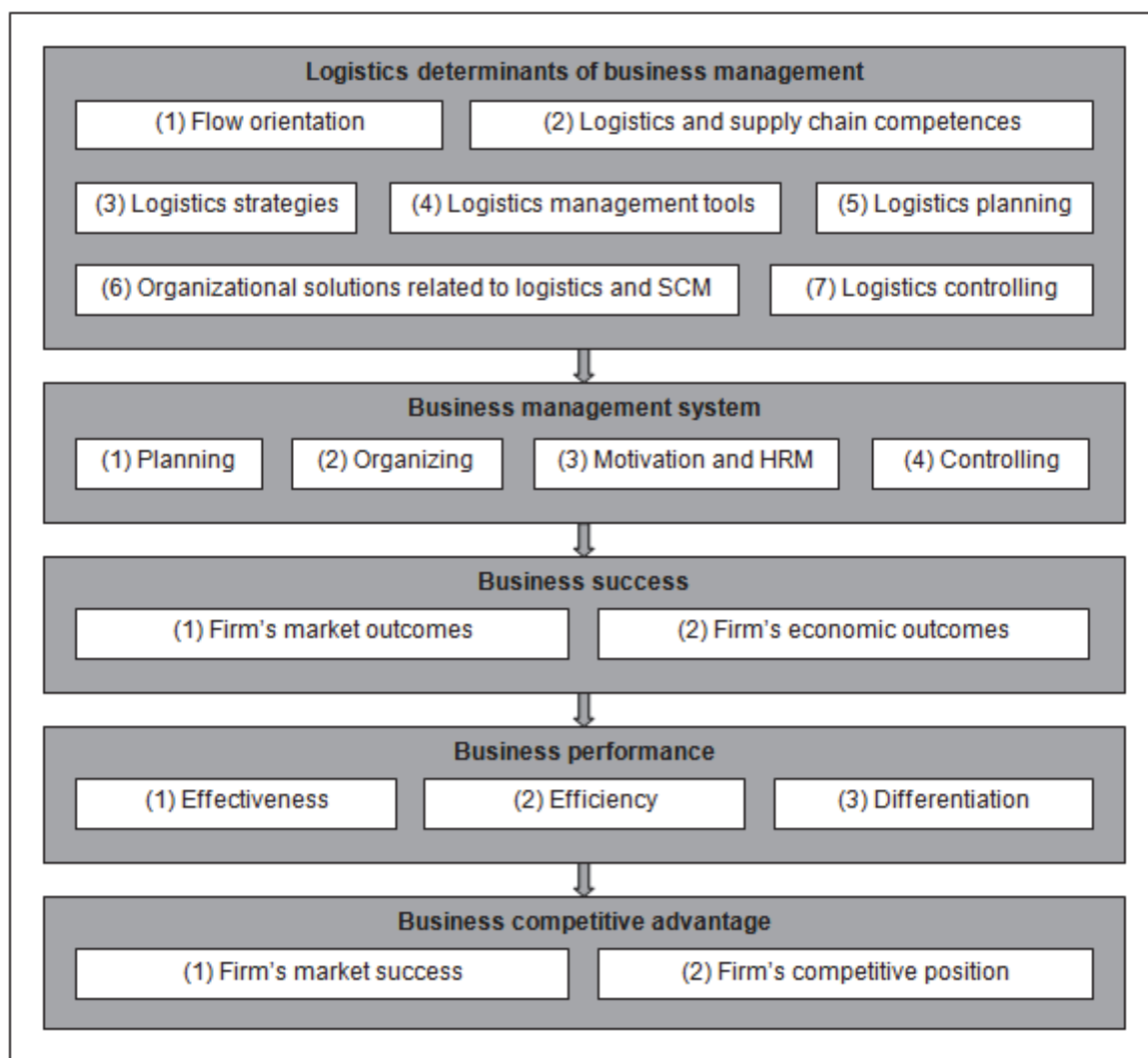


Fig. 2 Logistics determinants within the research carried out by the Chair of Logistics and Marketing

Logistics determinants (factors) directly affect the changes in business management system and its various subsystems. These determinants also affect the conditions for success achievement by the firm. The most significant symptoms of business success are: (1) market outcomes /customer satisfaction, customer loyalty, market share/ and (2) economic outcomes /profit, profitability, ROA, ROE, ROI/. Such outcomes may lead to “expected performance level” achievement by the firm. The final result of the logistics determinants impact on business management is gaining and maintaining sustainable, long-term competitive advantage by the firm. The most significant symptoms of such the advantage are: (1) market success achieved by the firm and (2) firm’s competitive position.

5. CONCLUSION AND FURTHER RESEARCH

As it has been mentioned in this paper, logistics determinants of business management contribute to the achievement of the expected market outcomes and expected economic outcomes by the firm. On the one hand, the achieved market and economic outcomes are the symptoms of broadly defined business success. On the other hand these outcomes are the basis for business competitive advantage creation as well as the determinants of “general” business performance.

Logistics concept as well as its role in business management requires further, in-depth research. Taking into account the most significant and influential research stream within contemporary strategic management, referred to as “resource-based view”, the crucial role in business success achievement as well as business competitive advantage creation is played by so-called “business success potentials”. Business success potentials include: resources, capabilities and competences. A very important part of such potentials are success potentials related to the logistics and supply chain management areas. They are supposed to play a major role in logistics concept development in the nearest future.

REFERENCES

- [1] BLAIK P. Nowoczesna koncepcja logistyki jako systemowa determinanta zarządzania przedsiębiorstwem. *Gospodarka Materialowa i Logistyka*, No. 5, 2009, pp. 2-9.
- [2] BLAIK P. *Logistyka. Koncepcja zintegrowanego zarządzania*, Warszawa: PWE, 2010.
- [3] BLAIK P., BRUSKA A., KAUF S., MATWIEJCZUK R. *Logistyka w systemie zarządzania przedsiębiorstwem. Relacje i kierunki zmian*. Warszawa: PWE, 2013.
- [4] DEEPEN J. *Logistics Outsourcing Relationships. Measurements, Antecedents, and Effects of Logistics Outsourcing Performance*, Heidelberg: Physica-Verlag, Springer, 2007.
- [5] DEHLER M. *Entwicklungsstand der Logistik. Messung - Determinanten - Erfolgswirkungen*. Wiesbaden: DU-Verlag: 2001.
- [6] GÖPFERT I. *Logistik der Zukunft - Logistics for the Future*. Wiesbaden: Verlag Gabler 2006.
- [7] KLAUS P. Logistics research: a 50 years' march of ideas. *Logistics Research*, Vol. 1, No. 1, 2009, pp. 53-65.
- [8] MATWIEJCZUK R. The Influence of Logistics Potentials on Business Management. *LogForum. Scientific Journal of Logistics*, Vol. 8, No. 3, 2012, pp. 201-216.
- [9] MATWIEJCZUK R. Logistics Potentials in Business Competitive Advantage Creation. *LogForum. Scientific Journal of Logistics*, Vol. 9, No. 5, 2013, pp. 265-275.
- [10] MATWIEJCZUK R. *Kompetencje logistyki w tworzeniu przewagi konkurencyjnej przedsiębiorstwa*. Opole: Wydawnictwo Uniwersytetu Opolskiego, 2014.
- [11] MIKUS B. *Strategisches Logistikmanagement. Ein markt-, prozess- und ressourcenorientiertes Konzept*. Wiesbaden: Deutscher Universitäts Verlag / GWV Fachverlage, 2003.
- [12] OPOLE LOGISTICS RESEARCH TEAM 2014 Report: Logistics Determinants of Business Management, Research in Business Logistics and Supply Chain Management, The Report Prepared by Rafał Matwiejczuk, Opole Logistics Research Team, Chair of Logistics and Marketing, Faculty of Economics, Opole University, Poland, EU: Opole, 2014.
- [13] OPOLE LOGISTICS RESEARCH TEAM 2015 Report: Logistics Competences Affecting Business Competitive Advantage Creation, Research in Business Logistics and Supply Chain Management, The Report Prepared by Rafał Matwiejczuk, Opole Logistics Research Team, Chair of Logistics and Marketing, Faculty of Economics, Opole University, Poland, EU: Opole, 2015.
- [14] PROCKL G. *Logistik-Management im Spannungsfeld zwischen wissenschaftlicher Erklärung und praktischer Handlung*. Wiesbaden: Deutscher Universitäts Verlag / GWV Fachverlage, 2007.
- [15] SCHULZE M. *Prozesskostenorientierte Gestaltung von Wertschöpfungsketten*. Wiesbaden: Deutscher Universitäts-Verlag, 2007.
- [16] WEBER J. *Logistik- und Supply Chain Controlling*. Stuttgart: Schäffer-Poeschel Verlag, 2002.