The 3rd International Conference on Economics and Social Sciences Innovative models to revive the global economy October 15-16, 2020 Bucharest University of Economic Studies, Romania

Supply Chain Strategy in the Context of Logistics Outsourcing

Cristian NEGRUȚIU^{1*}, Enas ABOURA², Cristinel VASILIU³, Aharon TZINER⁴

DOI: 10.2478/9788395815072-028

Abstract

The concept of strategy is present in the activity of any company in the world. The aim of this article is to analyse these ideas in the context of supply chain and logistics industry. This is especially relevant in the today world, where different kinds of shocks have been affecting global supply chains.

The research will be done by looking at the relevant literature through a top-down approach. Therefore, we will see how we get from the main concept of strategy to the specifics of logistics services industry. Every company has to adapt its own supply chain strategy to be matched with the logistics provider strategy in order to better serve the customers. The success of this integration is very often essential for the success of overall strategy.

In this context, the authors will also define the concept of strategic fit and provide examples of supply chain strategies, associated with performance measures/metrics in logistics and supply chain environment. The current Covid-19 crisis has proven even more that the world is more interconnected: when a negative event affects one region, it spreads quickly and deeply all over the world. Therefore, a good strategy may help the companies to build flexible, yet resilient supply chains.

Keywords: supply chains, logistics, strategy, strategic fit.

JEL Classification: L21, L24, L91

1. Introduction

The logistics industry in Romania is still in its inception compared to Western Europe. However, the Romanian logistics services market has experienced a

¹ Bucharest University of Economic Studies, Bucharest, Romania, cristian_negrutiu@yahoo.com.

² Bucharest University of Economic Studies, Bucharest, Romania, enaso1993aboura@gmail.com.

³ Bucharest University of Economic Studies, Bucharest, Romania, cristinel.vasiliu@com.ase.ro.

⁴ Peres Academic Center, Rehovot, Israel, aetziner@gmail.com.

^{*} Corresponding author.

significant growth in the last years. This has generated multiple opportunities for the market players, but also a lot of confusion.

The logistics services providers (called hereafter 3PL's) have to adapt and fit their strategy with their customers. This alignment is not always easy, but it's essential for a successful partnership.

2. Problem Statement

The literature review aims to provide the theoretical background of researched topic. Every functional strategy must evolve from the overall business strategy of the company. This seems like something very easy, but, in many companies, there is a big discrepancy between the vision of the senior leadership team (who drives the business strategy) and the reality and wishes of the functional manager. Therefore, the review has the two main objectives:

- Describing the main concepts, from basic to complex
- Supporting the future research methods

Following these objectives, the literature review features a review of the concepts related to supply chain strategy. The perspective used is based on the principle that the existence of any 3PL come from the strategy of the company that needs to do logistics.

3. Research Questions/Aims of the research

The main objective of this study is to provide a critical review on the literature concerning the concepts of supply chain strategy. By analysing these concepts, the author will address also other research questions:

- Is there any relation between range and quality of services and market winning?
- What is the strategic fit of a 3PL?

4. Research Methods

The authors have chosen to perform a desk research, based on selected articles dealing with the topic. Most of the articles are from international literature, but few relevant articles written by Romanian authors were selected.

The analysis aimed at selecting main ideas and trends as depicted in the literature. Therefore, the authors have included also older articles, as they provided seminal theories for the researched topics. The review was completed then with newer articles in order to round the research.

The study is also an exploratory research, due to the novelty of the topic in Romania. Such a research aims to discover more about the market and develop some conclusions. According to Beal (2002), "an exploratory research can be defined as potentially useful knowledge building in a new area. This research often yields important competitive advantages as new opportunities emerge".

Other authors, like Saunders, Lewis, Thornhill (2007) maintained that "an exploratory study is a valuable means of finding out what's happening; to seek new insights, to ask questions".

Several keywords were used in the literature review, including "supply chain strategy", "strategic fit", "3PL integration", "logistics kpi's and metrics".

5. Findings

Every functional strategy must evolve from the overall business strategy of the company. This seems like something very easy, but, in many companies, there is a big discrepancy between the vision of the senior leadership team (who drives the business strategy) and the reality and wishes of the functional manager.

Morash (2001) proposes the subsequent model to highlight the relationship between business strategy and supply chain strategy. The author starts from the overall business strategy (level 0), which, according to Porter, are cost leadership or differentiation (level 1). From these generic strategies, two generic supply chain strategies can be derived: operational excellence or customer closeness (level 2). Level 3 shows the supply chain capabilities and combinations needed to achieve the strategies, while level 4 represents the performance criteria to measure the success of the strategy.

Cost leadership

Differentiation

Operational excellence (e.g. JIT, lean supply chain)

Low logistics costs, availability, coverage, standardization, dependability, speed

Customer closeness (e.g. customized and segmental logistics, agility)

Responsiveness, value-added customer services, innovative solutions, flexibility

Customer Service and Proactive Quality

Figure 1. From business strategy to supply chain strategy

Source: adapted from Morash (2001)

The studies regarding logistics strategies can be found in the literature starting with as 1987. Bowersox and Daugherty (1987) explain that logistics strategic orientations can be categorized as *process-based*, *market-based*, and *information-based*.

This taxonomy remained for many years as the most important and resilient, due to its strong theoretical background and empirical research. However, in the recent years, the Bowersox and Daugherty concept was challenged by many authors.

In large scale survey, Autry, Zacharia & Lamb (2008) interviewed and sent questionnaires to a significant number of companies in the US, regarding to their logistics strategy.

Based on the replies received from the market, the authors propose two main types of strategies. The first cluster is called *Functional Logistics (FL) strategy*, focused mainly on inventory and order management, order processing, procurement and storage. The second cluster is identified as *Externally Oriented Logistics (EOL) strategy*, whereas priorities can be found in coordination and collaboration activities, logistics social responsibility, strategic distribution planning and technology and information systems activities. The areas like customer service, operational controls and transportation management can be found in both clusters.

The next table pictures a snapshot of both orientations:

Table 1. Logistics strategies

Logistics strategy	Description	
Strategy 1: Functional Logistics strategy	The primary goal is to achieve maximum logistics efficiency. This is accomplished by focusing on inventory and order management; order processing; and procurement and storage activities, as well as by addressing common functions related to customer service, operational controls, and transportation management.	
Strategy 2: Externally Oriented Logistics strategy	The primary goal is to emphasize the ability to respond quickly and efficiently to changing customer needs, outbound delivery, support and services. This is accomplished by focusing on inter-firm Coordination and Collaboration Activities, logistics social responsibility, Strategic Distribution Planning, and by leveraging supply chain technology and Strategy information systems, as well as by addressing common functions related to customer service, operational controls, and transportation management.	

Source: adapted from Autry, Zacharia & Lamb (2008)

This taxonomy is important for two aspects, as regards to outsourcing:

- The company must know or draft a specific strategy
- The service provider selected must share the same orientation

Any strategy requires implementation and follow-up, therefore it needs to assess the performance. Large scale performance reporting systems are used also in logistics.

Gunasekaran and Kobu (2007) analysed the main KPI's used in logistics and supply chain. They maintain that companies use very different approaches with regard to performance management in logistics; consequently, the first difficult task is to summarize them. Therefore, the authors used the main activities done in the supply chain (plan, source, make, deliver) and associate the KPI's with each of these activities. We should note the close link with SCOR model, developed by Supply Chain Council.

Table 2. Key performance measures/metrics in logistics and supply chain environment

Phases	Performance measures/metrics		
in supply chain	Financial	Non-financial	
Plan	Return on investment, selling price	Labour efficiency, perceived value of product, product development cycle time, bidding management cycle time, compliance to regulations, forecasting accuracy, perceived value of product, supply chain response time	
Source	Scrap/obsolescence cost, inventory cost, selling price of goods and service	Labour efficiency, product development time, lead time for procurement including supplier development time, delivery reliability, product and service variety	
Make	Scrap/obsolescence cost, overhead cost, inventory cost, selling price of goods/services, value added	Labour efficiency, Compliance to specifications, capacity utilization, lead-time for manufacturing, production flexibility, process cycle time, accuracy of scheduling, product and service variety, value added	
Deliver	Overhead cost, value added, inventory cost, stock-out cost, transportation cost and warranty cost	Labour efficiency, Delivery reliability, perceived value of product, value added, product and service variety, perceived quality	

Source: adapted from Gunasekaran and Kobu (2007)

Gunasekaran and Kobu provided also the complete list of KPI's, but this is too long for the purpose of the research. However, looking at it, the following interesting conclusions can be drawn:

- Non-financial KPI's received due attention in SC systems (65% of the total). Financial KPI's represent only 35% of the KPI, but all of them are related to cost, which still plays a major role in logistics.
- Quantitative KPI's received due attention (85% of the total). Only 19% of the KPIs are non-quantitative measures.
- Internal business process (50% of the KPI) and customers (50% of the KPI) play a significant role in SC environments. This shows that "customer is the king", but still we need a good operation to serve it.
- Most of the companies have weighted in a similar way the following KPI's:
 - Innovation and process improvement;
 - o Resource utilization and flexibility;
 - o Time and productivity.

The concept of supply chain management (SCM) is little widespread in Romania (Vasiliu and Dobrea, 2013). The authors carried out a research on its concept and application in Romanian companies, concluding that the level is low and the role of logistics service providers is undervalued. The authors also note that research in this area is relatively rare, with few studies leaning on this market, recommending that the subject be approached at doctoral thesis level.

6. Conclusions

The main objective of this study was to provide a critical review on the literature concerning on the concepts of supply chain strategy and strategic fit. The concepts were analysed separately, but also in a larger and integrative perspective.

The research question addressed the relation between range and quality of services and market winning. It can be said that there is strong connection between range and quality of services and market winning. The companies that have constantly improved their offer manage to acquire a substantial market share. All of these items have to be aligned in a well-thought strategy, with the appropriate kpi's and metrics.

Since the paper was based only on a literature review, the research has certain limitations. The authors intend to continue the study through case studies and quantitative research on the Romanian logistics market.

References

- [1] Autry, C. W., Zacharia, Z. G., & Lamb, C. W. (2008). Logistics Strategy Taxonomy. *Journal of Business Logistics*, 29(2), 27-51.
- [2] Beal, H. (2002). Exploratory research remains essential for industry, *Research Technology Management*, 45(11-12), pp. 26-30.
- [3] Bowersox, D. J., & Daugherty, P. J. (1987). Emerging Patterns Of Logistical Organization. *Journal of Business Logistics*, 8(1), pp. 46-60.

- [4] Council of Logistics Management's (CLM) (2003). *Annual Report*, Illinois US, Sep. 2003.
- [5] Gunasekaran, A., & Kobu, B. (2007). Performance measures and metrics in logistics and supply chain management: a review of recent literature (1995-2004) for research and applications. *International Journal of Production Research*, 45(12), pp. 2819-2840.
- [6] Large, R. (2007). The influence of customer-specific adaptations on the performance of third-party-logistics relationships document studies and propositions. *International Journal of Logistics: Research and Applications*, 10(2), pp. 123-133.
- [7] Morash, E. (2001). Supply Chain Strategies, Capabilities and Performance. *Transportation Journal*, 41(1), pp. 37-54.
- [8] Porter, M. E. (1980). *Competitive Strategy: Techniques for Analysing Industries and Competitors*. New York: Free Press. (Republished with a new introduction, 1998).
- [9] Saunders, M., Lewis, P., Thornhill, A. (2007). *Research Methods for business students*, 4th edition.
- [10] Vasiliu, C., & Dobrea, M. (2013). State of implementation of Supply Chain Management in companies in Romania. *Amfiteatru Economic*, 15(33), pp. 44-55.