

A NEW BUSINESS MODEL - THE PROPOSITION OF A LOGISTICS CLUSTER IN ROMANIA

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Abstract

The importance of logistics in the business environment is very high, but logistics is not just transportation from point A to point B or storage, as perceived by most of the time. Logistics involves providing optimum solutions both on the operational level and at the strategic level. The evolution of the concepts of logistics has been transposed in practice through what is called the logistics cluster, both at European level and globally. But, unfortunately, Romania had not drawn up a strategy or a legislative framework for this. In the following we would like to propose a conceptual business model, allowing the development of strategies in this field. After a short literature review in this area, we propose a theoretical model, which takes into account relevant quantifiable elements to illustrate the need for the formation of logistics clusters at a national level. After the presentation of the steps proposed to form a cluster, and also the conceptual matrix, we present our vision of what entails the foundation of a logistics cluster at the regional level, the implications on the business environment and the benefits of this form of organization. Last but not least, after the analysis of the model and a subsequent case study that will follow in the future, we consider this model relevant to be transposed into a national strategy in the field of logistics clusters.

Key words: business model, retail, logistics, clusters, strategy

JEL Code: L9, M10, O31, R41

1. Introduction

The current economic context requires companies operating in various areas to establish strategies adapted to the business environment potential. Thus, for the fast moving consumer goods market, the place where the customers are increasingly aware of their importance on the supply chain, it begins to emerge strategies enabling retailers to give the desired product at the desired time, highlighting two of the eight D of logistics.

This paper aims to be a starting point in developing further strategies by companies in the retail sector, with emphasis on the resources at their disposal, on establishing new partnerships and not least on the setting of new trends in the field of activity.

For this purpose, we are trying to present the key elements that can be taken into account when the companies from various business fields want to form a cluster. Starting from the information found on various academic data bases, we tried to develop a business matrix on three layers that can be applied in any situation when companies agree to form a cluster. The matrix takes into account general and specific elements for an organization and is a starting point in future decisions.

The business matrix developed and presented is a theoretical concept of analysis that can be applied in real case studies to demonstrate its viability, especially in the field of strategic management.

2. Literature review

Competitive advantage, the position of an organization in relation to its competitors, is determined in the literature (Petrișor, 2007) in the field of strategic management in Romania, both by the organization's strategy, the potential and its ability to progress, and the ties that are established between them. Consequently, a well-defined strategy in the field of logistics, to highlight all elements of an organization, as well as the organizations available

resources, but also the capabilities to carry out the logistics activities in optimal conditions, can stimulate the logistic potential of that organization. Thus, the logistics activity will take place in the right conditions, taking into account the elements used, leading to an organizational progress.

Nowadays, in various industries, end clients more likely are to become the most powerful members of the chain and no longer supports products and services delivered to them if it does not comply with their demands and expectations (Storbacka, Payne, & Frow, 2008).

We can speak about a chain of distribution, because the organizations do not deliver the goods or services in an independent manner, but forming partnerships with other organizations, which may ultimately be true business networks, which include among other things, production, distribution, sales and after sales service, and competition is found at the network level. So we see competition at network level, and the challenge is represented by the achievement of a competitive advantage through effective design, managing and optimizing these supply chains or networks (Christopher & Lee, 2004).

Moreover, the external supply chain managing requires and implies that internal supply chains, all the processes within the Organization are also to be managed effectively and efficiently in order to be able to be synchronized with external processes (Takeishi, 2001).

The existence of a network of warehouses favors the trading position and negotiation, with the help of the centralized flows through some logistical connections, retailers must instead find managers in physical distribution management (Pache, 1998).

Trade barriers have been reduced, but the requirements for logistics services as well as the costs have risen steadily, so that different business, especially in international companies and have changed their attitude with regard to the storage of materials, production and distribution of products (Rimienne and Grundey, 2007). Most of the countries having geographical potential for establishing and developing competitive logistics centers necessary to the transport networks.

What Romania misses, a national policy in the field of cluster, is a topical issue for Governments all over the world who invest significant resources in the development and expansion of new and existing logistics clusters, the central nodes of the network of freight worldwide. For example, the Government of Aragon in Spain has invested over 680 million euros for the development of Logistics Platform-Zaragoza (PLAZA), the largest logistics park in Europe, and the core of the logistics cluster of Aragon. While new logistical hubs are being developed, existing ones are expanding in size and scope. Thus, among the biggest logistic clusters we can include: Singapore, Rotterdam, Duisburg (Germany), Dubai, Santos (Brazil), as well as several U.S. locations, including New York, Miami, Chicago, Dallas/Fort Worth, Memphis and Los Angeles. Thus, the logistics can be defined in a broad sense as well as a group of functions associated with the production, design and marketing that include "...the carriage, storage and facility planning and location" (Kasilingman, 1998). These activities add value to the supply chain and increase competitiveness (Rivera, Sheffi, Welsch, 2014).

The cluster creation and integration of networks of firms are ways to collaborate and to increase the competitiveness of a region at the national level, and of a country at the international level, thus, collaboration is based on economic considerations, power, trust and the information sharing (Ljungberg, 2006). Such collaboration creates strong links between retailers, manufacturers and carriers, leading to economic and social benefits (Mikkola, 2008). But as the complexity increases, the supply chain collaboration and sharing of information among partners is critical.

The use of logistic clusters in a domain as well as retail, can bring significant benefits to partners (Sheffi, 2012), talking in terms of storage, logistics clusters can offer vast storage space, while reducing costs due to their structure and transportation technologies.

3. The business model proposition

In what follows, we would like to propose a theoretical business model based on a logistic cluster, ensuring the conceptual framework for future research in this area. This concept could be the next source for establishing a national framework with regard to the legislation in the field of cluster in Romania, with applications in various fields of business.

The originality of this work lies in the exploratory nature of the industry which will be proposed to the business model, the identification of key players that will form the cluster and the highlight of the activity carried out at the level of business system.

For the elaboration of the model there must be followed certain steps, as follows:

- Step 1 - Analysis of the situation, prospects and strategy establishment,
- Step 2 - Identifying future partners and establishing the collaborative relationships,
- Step 3 - Cluster formation and future strategy,
- Step 4 - The sharing of responsibilities and the establishment of the action plan,
- Step 5 - Field operations evolution,
- Step 6 - Analysis, control and corrective measures.

But to understand a business model, it should be pursued the elements that together create and provide value. The literature proposes different business models with applications in various industries, but we considered the following elements significant, treated in three levels, presented later within a matrix, as follows:

- I. **Global Strategy** -involves pursuing a set of elements with an impact on the subsequent deployment of the entire cluster. The main elements of our model considered relevant are:
 - a) **Key Resources** - tangible and intangible assets held by the company in order to provide them for all partners within the future cluster.
 - b) **Value Proposition** - defines the activities carried out in order to solve problems in terms of client needs or objectives of the company.
 - c) **Regulations** - considers elements in terms of competition nature or regulation for a good evolution of the field operations.
- II. **The potential of the cluster** - considers the elements that lead to a good development of the field operations. These items can be quantified through certain specific indicators or seen as a result of the activity, as follows:
 - a) **Key Capabilities** - the specific elements of each partner within the cluster that can be measured by specific indicators related to the nature of the work carried out.
 - b) **Key Competencies** - can be viewed at the individual level or at the level of the cluster and highlights the competitive advantage made available in order to achieve the common goal.
 - c) **Risk** - a constant concern to decrease the impact of external factors, through the setting of targets and measures to an internal level and at the same time means to counteract the effects of the market in order to carry out the activity.
 - d) **Governance** -optimum driving method of the whole cluster.
- III. **Organizational progress achieved** - is aiming to identify, measure, and analyze a set of elements at a cluster-level as well as the proposal of measures for the further development of the concept of the cluster, through:
 - a) **Business results** - can be measured in terms of gain or loss as well as for each player and at the cluster level.
 - b) **Key indicators** - aiming the sustainable development of the organization, care for the environment and social programs.
 - c) **Legislation** - the proposition of a development framework based on the experience gained through the work carried out at a cluster level and the customization for various fields of activity.

Thus, as a result of the elements of the business model establishment, we can draw all the information presented previously in the form of a matrix.

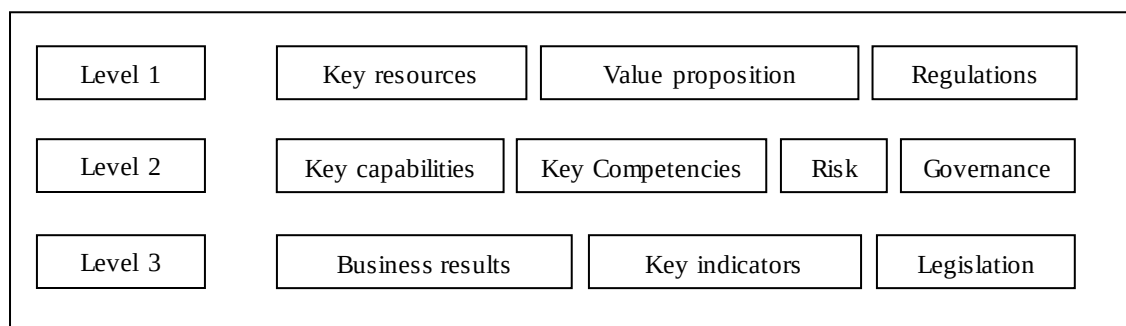


Figure No 1. **The business model matrix**

Source: authors design

The above matrix takes into account all the elements presented early and presents them in an easier way that can be applied in future case studies, by following each element of each layer, creating a framework of analysis that can be applied.

Because Romania does not have a regulatory framework to govern the activity of the clusters on the territory of the country, the proposed matrix, may constitute after an opportunity analysis, the theoretical ground of this legislative framework.

Because in Romania can be found various technological and industrial parks, we consider representative those spaces for cluster activities, going on successfully developed models of countries like Spain, Luxembourg, Germany, Netherlands, USA and others.

In the first place should be identified those technological parks near to the cities with potential in the field of transport, education and research, industry or services, such as Timișoara, Cluj and Bucharest. Technological parks

near to these large industrial centers have access to the means of transport by road, rail or inland waterway, representing the first step in implementing the cluster.

Then with the support of the academic researchers, they will be able to elaborate studies and cluster development strategies at the regional level, and together with the existing logistic operators on the market and with companies interested in developing this concept, theoretical aspects can be applied in practice, thus increasing competitiveness at regional level.

However, for a better correlation of the work it takes a form of governance in public-private partnership at national level to implement measures and analysis necessary for carrying out the activities in good condition for the logistics cluster that were created and to establish a network between these clusters.

Last but not least, the lack of a strategic approach in the field of Romanian logistics can be fixed by a full implementation of the proposed model, both regionally and nationally, and the business model matrix based on logistic clusters can be a support in the preparation and development of a good legislation in this area.

The proposed model also allows for the quantification of both resources and results, thanks to the elements taken into account in developing this model.

Each element of the matrix is relevant for a future analysis however the added value of this matrix is the synergistic effect that these elements have on the development of the business.

At the same time, this business model is an interdisciplinary model involving management, financial analysis, economic analysis, law and legislation, emphasizing the importance of the involvement of academia within the business environment.

4. Conclusions

The originality of the proposed business model consists of both novelties that it proposes to the Romanian business environment, as well as through the relevant elements taken into account in the elaboration of it. Also, the lack of vision in the field of logistics clusters, topical subject in the literature and at a European and global business environment requires measures and the creation of frameworks for development of this concept in our country.

The design of the model was based on information collected from various sources, analysis and their transposition in the case of Romania, at a purely theoretical level, but who can afford a more thorough and detailed research in future studies on this topic.

The elements taken into account in the elaboration of a matrix can be measured both quantitatively and qualitatively, considering three fundamental horizons in management: strategy, potential and the organizational progress targeted. Thus, as a result of further analysis, future measures can be proposed to improve both for each level of the matrix, as well as for the entire matrix, by proposing new elements that may have a significant impact on the performance of cluster activities and which have not been taken into account.

Each element of the matrix can be analyzed, presenting key components of the organizations environment to create a picture with the real situation found in that organization. Starting from this picture, the organizations can decide if they are able to form a cluster, which are their strengths and their weaknesses and how their contribution can improve the future activity of the cluster in the future.

Starting from the theoretical concept of the matrix presented, various studies in the field of strategic management can be improved with its help, and also, the concept of the matrix can be improved by adding new layers that can conduct to a more significant result of the study.

Last but not least, for the case of Romania, this matrix can be a good starting point for creating a framework in the field of strategic management and cluster development, by setting up laws and regulations for cluster formation in our country.

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