

Assessment of Company Competitive Advantage Strategy Through Supply Chain

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Abstract— The article discusses the methodological aspects of an enterprise competitiveness improvement based on the strategic development of supply chain management. In modern conditions, a high level of quality provision in enterprise activities is becoming an important factor forming a competitive advantage in the context of enterprise struggle increase both during the economic recovery and during the period of financial decline in various economic and political situations. The aim of the work is to justify the methodological aspects of the company competitive advantage strategy evaluation through the supply chain management. The study proposed an algorithm for a competitive advantage strategy selection using the example of a modern pulp and paper mill, developed the methodology for assessing the impact of strategic competitive abilities on company sustainable development, and identified strategic competitive advantages. Our model confirmed the relationship between supply chain management measures (strategic partnership with supplier, customer relationship management, informing level, informing quality and procrastination) and a competitive advantage's component.

Keywords— *supply chain management, strategic development, competitive advantage strategies.*

1. Introduction

The impact of information and communication technology in supply chain is unarguable in order to gain competitive advantage. Moreover the main benefits which organizations can plan to acquire are; rapid responsive supply chain, efficient customers services, less process cost, short cycle time, and new means to expand goods [1-3]. Analyzing the experience of many Russian enterprises, we can conclude that often a well-developed development strategy does not guarantee a proper result. This is because enterprises do not take into account their own uniqueness and competitive advantages which distinguish them from others when they develop and implement a

development strategy. Sustainable development is problematic in such conditions.

After analysis of domestic and foreign economist works, state statistics, legislative and regulatory documents, economic and sociological works on company competitiveness improvement, we can conclude that the issues of quality management strategic development remain problematic and relevant. The most famous authors on this topic: [4-8]. Based on literature analysis of definitions and various interpretations of the economic concept of "competition", the following conclusions can be drawn:

1. The concept of "competition", proposed by various scholars, does not meet the requirements of a systemic and complex one as a whole, that is, it defines only a single of many aspects of competition established by A. Smith and other authors, taking into account the study of knowledge specificity.

2. There are various approaches to the formulation of the concept developed by scholars:

- a competitor is the competitive struggle of firms, that is, legal entities;
- as a confrontation of individuals;
- as the presence of a sufficient number of buyers and sellers on the market;
- as a situation;
- as aspiration;
- as a process, etc.

3. Modern concepts of competition definition development do not cover their analysis, taking into account interdisciplinary relationships, such as social, industrial and biological systems.

4. There is no view on the development concept in the unity of competition statics and dynamics, on the survival of systems in predetermined or uncertain conditions [9-12].

2. Methodology

The behavioral interpretation approaches the formulation of competition as a struggle for consumer money by his need satisfaction.

Foreign representatives of this approach, evaluate the competition from the competitive, rival relations between business entities in accessible market segments [16]. In this case, the goal is the following: provision of the most profitable conditions for obtaining and/or manufacturing and/or marketing products (goods, works, services), increasing the market share in a specific segment, maximizing profits and/or for achieving other specific goals. The activities of business entities in this case are implemented in a situation of limited resources that are required for the manufacture of products and maintain demand for these products from buyers. In the most general sense, competitiveness is understood as the ability to get ahead of others, using their advantages in their goal achievement [13, 14].

Competitiveness is one of the most important integral features used to analyze the efficiency and effectiveness of the general economic activity of business entities. The very idea of competitiveness in relation to any subject is the ability of a subject (potential and / or real) to withstand competition.

On the other hand, competitiveness is a multilevel multifaceted concept characterizing the dynamic state of assessment subject, determined by a set of competitive advantages and expressed in the ability to withstand competition in the system of market relations during the period under review [12].

A product competitiveness indicator is expressed by the ratio of the beneficial effect to the cost of consumption, and the integral indicators of the product properties - its quality - are taken as a beneficial effect.

When they consider competitiveness, they do not take into account product quality characteristics that are not of interest to the consumer (for example, product manufacturers) [15].

It should be noted that in recent years an important feature of the economy has been the interconnection of virtual and real technologies. The development of a digital (virtual) economy has become possible due to the quantitative development of information technology and

communications on media channels and the Internet. This quality phenomenon associated with Internet technologies is developing new forms of entrepreneurial activity, markets, industries and their services.

The main difference between the traditional economy, the main tools of which are business management and the market model, the information economy is based on the messages of innovative entrepreneurship, information engineering and the automatic formulation of economic processes. The main factors of digital technology influence on the economy are the following: Internet technologies that allow you to create new business models; manage remote business processes using mobile devices; data (databases) as a source of consumer value and intangible property, available and free on the market; to simplify payments, and reduce the flow of documents.

3. Results

The importance of the customer and sources, focuses supply chain to be more responsive and create competitive advantage. This research investigates the impact of supply chain integration on competitive advantage. In order to improve the quality of products, it is proposed to analyze the company competitive positions using a balanced system of characteristics according to the following scheme, which acts as a strategic tool to ensure the stable development of the company, focused on achieving the best balance of innovative, financial, environmental and social factors.

We propose using the following algorithm to develop a competitive advantage strategy, which includes seven stages in aggregate, each of which should actively take into account the opinions of all interested parties (Fig. 1).

	Ц										
	СЦ										
Etc.	...										

Fig. 2. The matrix of a balanced system of indicators to select a strategy for the competitive advantages of pulp and paper industry companies (A - key aspects of the activity, Ц_{СТ} – strategic goal, Ц – the 2nd level goal, И – indicator, СЦ – strategic potential)

Based on the generalization of the research results, we suggest characterizing a company competitiveness with the following interconnected balanced components: innovative, economic, organizational, and environmental.

The innovative potential of an enterprise reflects its ability to implement most effectively certain functional tasks, subject to the maximum use of the economic resources at its disposal.

The economic potential of an economic entity is characterized by production resource use efficiency increase, financial stability, business activity, by solvency improvement, and the profitability of financial and economic activity increase.

Organizational potential characterizes the level of company management.

The environmental potential is very important for industrial companies, as the waste products of the pulp and paper industry companies create a big burden on the environment.

Let's move on to the methodology of diagnosing the impact of strategic advantages on company competitiveness improvement using the example of the pulp and paper industry.

The following industrial enterprises were selected as the empirical basis for this technique testing: Spetsgarant LLC, Adishchevskaya Paper Factory LLC, Family and Comfort LLC, Skol Company LLC, IE Kitaykin (Table 1).

Due to the fact that the choice of organizations determined that location in one region is necessary, strategic competitive advantages will be comparable for the selected pulp and paper industry companies. The findings of this research assure the practitioners that SCM is an effective way of competing, and the implementation of SCM practices does have a strong impact on supply chain responsiveness and competitive advantage of the firm

Table 1. Determination of strategic competitive advantages on the example of pulp and paper companies

Competitive advantage	Spetsgarant LLC	Adishchevskaya Paper Factory LLC	Family and Comfort LLC	Skol Company LLC	IE Kitaykin
Strategic competitive advantages					
Solvent consumers	x	x	x	x	x
Price level	x	-	-	x	x
Consumer properties of products	x	x	-	-	-
Degree of production automation	-	x	x	-	-
Personnel qualification level	x	-	-	-	x
Resource-saving technology use	-	x	x	-	-
Effective motivation system	x	-	-	-	x
Meeting current and future customer needs	x	x	x	x	x
The presence of an effective management apparatus	x	-	-	-	x

Innovative project development	-	-	x	-	-
Tactic competitive advantages					
Access to quality and cheap raw materials	x	x	x	x	x
Tastes and preferences of consumers	x	x	x	x	x
Favorable market conditions	x	x	x	x	x
Available modern technologies, the secrets of competitors	-	-	-	-	-
Staff savings	-	x	x	-	-
Supplier competitiveness	x	x	x	x	x

Next, let's proceed to a graph development characterizing the impact of strategic competitive advantages on the level of company sustainable development (Fig. 3).

4. Conclusion

In this study we attempt to explain and identify the impact of supply chain management techniques on gaining a competitive advantage in the organization. The pulp and paper industry enterprises have a linear relationship of sustainable development from the level of strategic competitive advantages. The companies with the best indicators of competitive advantage are included only in the group of a weak level of sustainable development, and occupy its lower boundary. The following companies have such level of development: Adischevskaya Paper Factory LLC, Family and Comfort LLC, and Skol Company LLC, which have such strategic competitive advantages as solvent consumers, the level of production automation, the use of resource-saving technologies, and the satisfaction of current and future consumer needs. These strategic competitive advantages make it possible to implement the chosen strategy successfully and achieve the goal.

Based on the analysis of the market situation, there are the following main trends in strategic competitive advantage development:

- an appropriate institutional environment development;
- staff qualification level increase;
- intensification of innovation;
- an effective motivation system development;
- a productive management system development that can respond to sudden environmental change timely and competently.

The established methodology for diagnosing the impact of strategic advantages on competitive capability of industry company increase has several advantages:

- accessibility (the required reporting of the analyzed enterprises is in the public domain);
- information content (systemic and multidimensional analysis, which reflects a huge number of factors of the internal and external environment);
- universality (it is possible to use in the analysis of enterprises of various industries);
- information about the problems that arise appears during the assessment, which allows you to eliminate them in time;
- determination of development dynamics.

The most important strategic task of any company is to ensure a competitive strategy, the level of which is determined by a large number of multidirectional factors, the most important of which is product quality improvement. The proposed supply chain for competitive position evaluation allows companies to make an informed choice of a competitive advantage strategy that ensures their stable development.

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