

CONCEPTS OF A PRODUCTION COMPANY'S LOGISTICS STRATEGY DEVELOPMENT IN ASPECT OF SUPPLY CHAIN MANAGEMENT

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Abstract

Production companies in today's economic environment are undertaking many activities leading to increasing their competitiveness. They participate in complex processes of logistic chains that largely affect their relationship with the market environment. Logistic strategies play an important role by binding together the objectives in the area of supply, production and distribution. The author analyses the distribution system of a production company in the aspect of formulating its logistic strategy. This is one of the most important areas related to managing relations in the supply chain and thus strengthening the competitive position on the market. The analyses and research presented in the article were conducted on the basis of statistical data and information obtained directly from the enterprise. On this basis, strategic options for the development of logistics activities were formulated.

Keywords: Management, strategy, logistics

1. INTRODUCTION

The area of distribution is necessary to ensure the cohesion and appropriate functioning of an enterprise. Manufacturing companies with a wide assortment of goods require a well-built network of intermediaries in order to supply goods to the widest group of clients possible. The prerequisite of attaining profit from sales is the fulfilment of the requirements of clients in terms of the quality of the goods and offering the consumer a product at the appropriate place and time. Currently enterprises build their sales networks on the basis of distribution channels. Few firms decide on the simplest form of distribution channels, namely direct sales. This first and foremost is the result of the possibilities of reducing the costs of supplies, shortening the time of the execution of orders, reaching a greater number of consumers, as well as increasing the familiarity of the trademark among the clients. The appropriate management of the sphere of distribution brings the expected profits and provides the potential opportunity to increase the group of clients. Enterprises have been trying to base the policies of their companies on strategic management for decades. The people who manage enterprises whose business activity encompasses a wide area of production, distribution and supplies are forced to correct problems of location, time and the costs of business operations. The implementation of a logistics strategy becomes obvious as it may help in terms of the general management of an enterprise and in particular to enhance the competitive advantage. A correctly formulated strategy for the development of the distribution network strives towards ensuring the efficient flow of goods between manufacturing units and consumers, while also strengthening the position of the enterprise on the market. The aim of the herein paper is to conduct an analysis of the current system of distribution in a footwear manufacturing enterprise and to formulate the strategic variants that facilitate its development.

2. STRATEGIC MANAGEMENT AND POSITION OF LOGISTICS STRATEGY IN MANAGEMENT OF AN ENTERPRISE

Contemporary enterprises constantly ask themselves the question of how to adjust the functioning of the enterprise to the current requirements and social needs. By taking account of the consumer trends in the



environs of modern-day firms operating on the market, it is necessary to focus on the process of shaping their ties. Its aim is to create a model of strategy that is not only capable of keeping up with the identified situation, but is able to have a significant advantage over it [1].

The principal aim of each enterprise is to achieve the intended economic aim. By observing the economic changes occurring on the markets over the past few years, it is necessary to bear in mind that the achievement of the intended goals and stable development constitutes a big challenge for firms. It is increasingly difficult to foresee the occurrence of fluctuations and modifications that have an impact on the pace of growth, the degree of impact and dependency between the processes. This refers to the strategic approach, while also concentrating on overcoming the difficulties of the existence of a firm at the same time, while also creating new ideas for business operations. Strategic management is to help with the attainment of a market position in difficult market conditions. This constitutes an intricate, multi-directional, multi-phase and multi-level process in the creation of a strategy that is to guide the development of the firm over a long-term perspective, while availing of the potential opportunities, as well as avoiding threats [2].

Strategic management has been defined on the basis of the general definitions of management. The term management first and foremost relates to the very essence of an enterprise, the principles of its functioning and focuses on the internal environment of the particular organization [3]. The strategic aims of an enterprise, while also the manner of their achievement (the strategies) refer to the areas of functioning that are usually key to the development of the enterprise" [4]. Strategic management should be perceived as the sequence of activities which include planning, organizing, managing, controlling and verifying the organization and execution of the intended strategic goals of the enterprise [5]. According to G. Gierszewska and M. Romanowska, strategic management is a process consisting of the following three phases: analysis, planning and management, which is understood as a stage in the realization of strategies. By developing this notion in terms of the stages of creating strategy, it is necessary to include the following [6]:

- analysis of the current situation of the firm on the market, thus enabling the definition of the factors that have an impact on the environment of the enterprise,
- formulation of the aims, missions and visions of an enterprise, thus defining the development concepts,
- implementation and control of the implemented strategy of the enterprise.

Basic elements of strategic process shown in **Figure 1**. Strategic analysis relates to the analysis of the current and future changes and their impact on the environment of the enterprise and its potential with the aim of defining the opportunities of development and the future competitive position. This constitutes the main element of strategic management that has an influence on the structure of the effective strategy of operations.

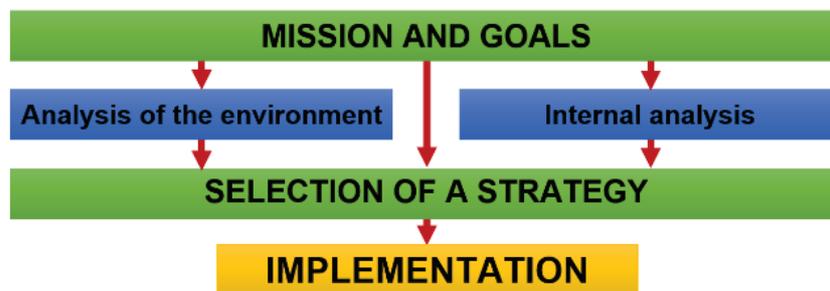


Figure 1 Elements of strategic process [7]

In the general analysis, the strategies of an enterprise may be distinguished by a group of integrated methods, which present a set of factors of the environment with an analysis of the interior of the organization. The most popular integrated method is the SWOT analysis, thanks to which the attributes and weaknesses of a company are viewed in terms of the conditions of opportunities (possibilities) and threats created by the environment [8].



A strategy is a concept of the functioning of an enterprise in a future time period, while taking account of the changes that may occur in both the external and internal environment of the firm. This encompasses the activities that are of key significance with the aim of acquiring the desired competitive advantage. An enterprise that wants to develop in times of fluctuating conditions should prepare and implement strategies at different levels of management. The prepared strategy gives rise to the procedure of activity for the particular sectors of the enterprise. In this manner, the strategy of the firm is formed, which encompasses the strategy at the highest level of management and is of the highest importance in the context of the management of the enterprise [9]. An organization that wants to successfully execute its strategy should divide its basic strategy into the particular functions of an enterprise, such as the following: marketing, production, sales, finance or logistics and ensure the integrity between these functions.

A logistics strategy is one of the types of functional strategies. These are based on the strategies of an enterprise and render the achievement of the aims of the enterprise in the sphere of logistics possible. They provide the possibility of preparing optimal solutions in the area of planning, relocating resources, organizing distribution, while also shaping ties with suppliers and clients. Combining these strategic concepts causes the fact that the general strategic assumption of logistics management is directed towards the formulation of the strong development of both the logistics areas of the enterprise and the preparation of the strategic plans [10]. **Figure 2** presents the position of logistics strategies in the shaping of the competitive advantage of the enterprise.

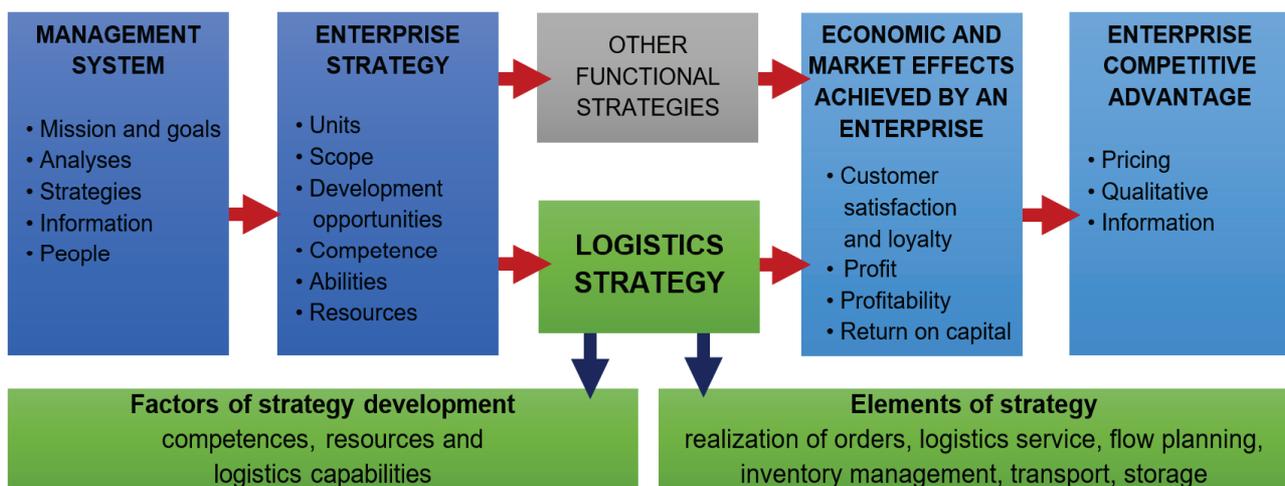


Figure 2 Logistics strategy as an element of achieving a competitive advantage [11]

Out of the existing logistics strategies with regard to the historical aspect, it is possible to distinguish two orientations as follows: strategies based on the actual demand (pull approach) and strategies based on the predictions of demand (push approach) [12]. Logistics strategies are variously defined and perceived depending on the needs of the organizations, their environment and subjectivity of the creators. One of the concepts of identifying various dimensions of logistics strategies is presented in the work of Autry, C.W., Zacharia, Z.G. and Lamb, C.W. [13]. On the basis of the research conducted, they distinguished two fundamental types of strategy, as well as the associated logistics activities: [14]

- The strategy of functional logistics (FL): management of resources and orders, while also the order of processing, supplies and storage.
- The strategy of externally oriented logistics (EOL): coordination and cooperation of activities, socially responsible logistics, strategic planning of distribution, while also technological and IT systems.
- The additional three areas of logistics activities, which did not have significant differences in terms of the enumerated strategies: customer service, operational control and management of transport.



In the table below, the main logistics strategies that match the chosen logistics factors have been presented (Table 1).

Table 1 Modern logistics strategies [15]

Dominant logistics visions					
Minimization of costs of logistics	High and differentiated level of customer service	Shortening of cycle of execution of orders	Lean Logistics	Integrated supply chain	Virtual and agile logistics
Sample modern logistics strategies					
Concept of logistics costs, analysis of trade-off, logistics controlling, VMI, cross-docking	Perfection in the execution of orders, standards of customer service, CRM, logistics audit, perfect service	JiT system, cross-docking, faster reaction system of Q-R, AI, ECR	Logistics outsourcing, reengineering, deliveries in "sucking" system	Q-R, ECR, EDI systems, strategic partnership, CPFR	Electronic platforms

The choice of the appropriate logistics strategies is determined by the conditions of the potential of the enterprise, as well as the market conditions facing the organization. When creating and implementing the logistics strategies of an enterprise, it is necessary to take account of good planning and the effective execution of the assumed activities by simultaneously constituting an important part of the basic strategy of the enterprise. This must refer to the areas of production, supplies, storage, transport or distribution and must be coordinated in terms of time and space. Strategic and operational management also relate to the area of the logistics of production, in which medium and long-term decisions are taken that lead to the creation of the appropriate conditions of production [16].

3. ANALYSIS OF THE STRATEGIC DISTRIBUTION SYSTEM OF A FOOTWEAR ENTERPRISE

The leading area of production of footwear in the world is currently Asia, which has almost 90 % of global production. The giant among these manufacturing countries is China, which in 2014 produced approximately 14.6 billion pairs of shoes. In Europe, 40 % of global production of footwear is sold. According to the report by the World Footwear Yearbook [17], Poland managed to achieve 15th position in 2016 (0.9 % share in global exports) in the ranking of the largest exporters worldwide. In 2016, the quantity of footwear imported amounted to 7,310,200 PLN, in which exports amounted to 5,509,500 PLN. This simultaneously signifies a deficit with relation to Polish goods. Despite this fact, the situation of exports to other EU countries looks much better, as in 2016 footwear worth up to 1018 million euro was exported there [18].

The analysed enterprise is one of the largest producers of waterproof and specialized footwear in Poland. The firm has several key competitors on the Polish market that may have an impact on their sales level. Its products are available all over the country which encompass supplies via retail shops, as well as large wholesale shops. Direct sales and indirect sales are conducted where utility footwear is supplied to manufacturing plants. The basic foundation of the efficient functioning of the enterprise and the attainment of profits is the effective system of distribution that ensures effective contact with purchasers. The enterprise exports approximately 50 % of the total amount of its own production.

3.1. Research methodology

Strategic SWOT analysis is the fundamental and the most well-known method worldwide in terms of the subjective and precise evaluation of the situation of the enterprise, thanks to which it is possible to create the appropriate strategy. Of the currently known strategic analyses, it is the only comprehensive analysis that simultaneously encompasses the macro-environment and micro-environment analysis, while also the analysis of the potential of the company. Thanks to this, it was possible to identify the strong points and weak points of



the enterprise, grasp the potential opportunities and threats that are derived from the environment. The analysis conducted facilitates the streamlining of the functioning of activities, but first and foremost the definition of the effective strategies that enable the acquisition of a competitive advantage. The aim of conducting this analysis is the choice of the appropriate strategies that the enterprise should implement in order to significantly improve the position of the company in the footwear sector. The SWOT analysis is complemented by the TOWS analysis carried out in reverse order. In the TOWS analysis one should start by identifying the opportunities and threats facing the company, and then comparing them with the company's predispositions to use these opportunities and overcome the threats. Based on the data provided by the company, seven factors were selected for each area (strengths, weaknesses, opportunities and threats) to analyze. Each of the selected factors was weighted to create a matrix for subsequent operations. These activities are carried out in order to look for links and interactions between identified factors.

Table 2 Summary of the SWOT/TOWS analysis results [own study]

Considered combination	The results of the SWOT analysis		The results of the TOWS analysis		Juxtaposition SWOT / TOWS	
	Sum of interaction	Sum of products	Sum of interaction	Sum of products	Sum of interaction	Sum of products
Strengths / Opportunities	56/2	8.6	44/2	7.2	100/2	15.8
Strengths / Threats	42/2	6.15	30/2	5.0	72/2	11.15
Weakness / Opportunities	32/2	4.85	36/2	5.15	68/2	10.0
Weakness / Threats	32/2	4.4	29/2	4.4	61/2	8.8

Actions taken during the analysis include the creation of extensive correlation tables by means of which the interaction between possible external and internal factors is investigated. **Table 2** presents the summary of the results obtained from SWOT/TOWS analysis.

3.2. The results of the analysis

Analysis of this situation shall commence with the examination of the external and internal factors that have an impact on the situation of the company. Subsequently, a strategy matrix was created by taking account of the results from the summary report - the sum of interactions and the sum of products. By entering the appropriate positions from the set to the matrix, it was possible to read the optimal choice of strategy for the case under analysis. In **Table 3**, the results of the conducted SWOT analysis, as well as the marked appropriate variant for the potential strategy for implementation have been presented.

Table 3 Strategy matrix [own study, SWOT analysis results]

	Opportunities	Threats
Strengths	<i>Aggressive strategy</i> Number of interactions - 100/2 Weighted number of interactions - 15.8	Conservative strategy Number of interactions - 72/2 Weighted number of interactions - 11.15
Weakness	Competitive strategy Number of interactions - 68/2 Weighted number of interactions - 10.0	Defensive strategy Number of interactions - 61/2 Weighted number of interactions - 8.8

The result from **Table 3** indicates that the analysed enterprise should adopt an aggressive strategy as the best result of the sum of interactions and their products in the SWOT and TOWS tables was achieved for this variant. The aggregate results achieved after conducting the analysis unequivocally indicate that with the

external and internal factors, as well as the defined system of weighted factors, the best of the possible variants for the company under analysis is the adoption of the aggressive strategy (maxi - maxi). Prior to the interpretation of the chosen variant of analysis, it is necessary to mention that the results of the analysis are merely of an auxiliary nature and do not impose any specific actions. Strategic analysis provides the possibility of accumulating and segregating information on the analysed enterprise, thanks to which it is possible to characterize and adopt the optimal strategic variant, which should be implemented and systematically inspected. The results of the analysis facilitated the formulation of the general strategy of development described in the subsequent sections of the work. The results for each area of the organization, including the sphere of distribution have been presented below.

By analyzing the tables built on the basis of questions relating to the interactions between the factors, it is possible to state that the principal strong points, on the basis of which the strategy of the enterprise is built, are as follows: the high quality of the manufactured products, their own technical resources, wide assortment of goods, effective policies of the distribution of goods and multi-channel promotion of products. Expansion of the activities of the listed areas enables the utilization of the occurring opportunities, such as the following: implementation of new technologies of production, acquisition of new groups of clients, as well as the possibility of entering other markets for goods. Thanks to the synergy of its strong points and opportunities, the analyzed enterprise may enter new markets with its products and gain new groups of clients. With this aim in mind, it is necessary to control the currently operating distribution network and specify whether the distribution channels built bring the expected benefits. On the basis of the analysis, the variants of the development strategy of the enterprise, including the distribution network, were stipulated.

4. LOGISTICS CONCEPTS IN THE STRATEGIES OF DEVELOPMENT OF NETWORK OF DISTRIBUTION IN THE PERCEPTION OF SCM

The first of the possible variants is the expansion of the current structures of the distribution channels, thanks to the high quality of goods and the competitive price. The channels based on several intermediaries require the application of competitive prices, particularly with regard to the first link of the distribution chain - in the case of studied company, these are distributors or wholesalers. In terms of the issue of applying this type of distribution channel, it is possible thanks to the smooth flow of finished goods from the producer to the suppliers. The inventory ratio is relatively low, while the firm does not bear additional costs for the maintenance of warehouses. The prerequisite for the functioning of this distribution network is the execution of orders:

- in a relatively short timescale,
- at an appropriately low price,
- of high quality of the manufactured goods.

This technique facilitates taking the opportunity in the form of the expanded network of clients. This variant takes account of the requirements of clients with relation to the price - quality. This is also why the enterprise should take the opportunity to implement new technologies of production. The most effective method of achieving these capabilities is the gradual replacement of machines with new and more automated machines that provide the possibility of enhancing the quality of the goods produced. Unfortunately, this variant is costly and must be taken into consideration in the long-term strategy of the enterprise. Likewise, when availing of the maxi-maxi strategy, it is important to grasp the opportunities that facilitate the achievement of the expected goal. Utilizing the strong points of the enterprise, including the high quality of goods produced, their own technical resources, the wide assortment of goods, the multi-channel promotion of products may have a strong impact on the development of this area. Despite the high costs of purchasing machines, the implementation of new techniques and the improvement of the quality of the footwear produced may influence the growing number of clients, while also improve the organization of work. Increasing the number of wholesalers in the country may bear fruit in the growth of market share in terms of total sales via the distribution of goods to retail



chains. Significant growth may also be noticeable by means of the increased number of distributors in European countries. This provides the possibility of increasing the opportunities to enter new markets thanks to the location of distributors close to the countries that were not encompassed in the hitherto sales targets due to the following, among others: the high costs of transport, high export duty, political competences and cultural circumstances.

Another possible strategic variant is the building of direct channels for the sale of products. With this aim in mind, the multi-channel promotion applied by the enterprise is essential, as well as a profound analysis of the market needs. Up to now, the enterprise has been availing of this type of distribution in the case of multi-series orders, while also supplying products directly to firms that utilize the products sold. With this aim in mind, the firm should concentrate on acquiring clients on the basis of agreements for mass production. This model is based on the expansion of the direct distribution channel that increases profits and control of sales. The enterprise is not dependent on intermediaries - wholesalers or retail shops, in which the unit price of a product is higher. On the other hand, the sale of products by a direct channel signifies greater costs of promotion, market research and the acquisition of purchasers.

An aggressive strategy creates the opportunity to take courageous moves that may improve the current situation of the enterprise. One such strategy is to take over a firm with a similar production profile, or in other words, eliminate the threat of competition. Its strong points may facilitate such action on condition that a competitor can be found that could potentially threaten the development of the company, but is now in a weaker position with regard to the enterprise under analysis. This solution generates high costs of execution and is a rather risky solution at the moment of acquiring new groups of consumers.

5. SUMMARY

The distribution system executed in the company and the implemented strategies undoubtedly bring a multitude of benefits to the producer itself, as well as the increase in the level of customer service. The expansion of the distribution network requires the synchronization of a multitude of logistics activities. With the aim of finding an easier way to take steps in this direction, it is also necessary to commence activities with regard to eliminating the weak points that may compound the force of threats. The implementation of the strategies of development leads to the achievement of the intended goals, as well as helping to eliminate the factors that have a negative impact on the enterprise. Likewise, it may have a positive impact on the possibility of implementing new technologies, as well as the replacement of old machines with new ones with the aim of modernizing the plant. The analysed enterprise currently holds a high position on the footwear sector in Poland. The analysis conducted indicates that the firm has great perspectives ahead of it that on the one hand, arise from its good position on the domestic and foreign markets, while on the other hand, from the possibilities of taking the available opportunities. Deliberations on the subject of the development of the enterprise on the basis of the analysis conducted are however debatable, while the achievement of the intended goals requires long-term observation and strong involvement on the part of all the functioning departments. The implementation of the strategies of development in the enterprise first and foremost translates to the improvement of the tools for predicting and planning. Taking the decision to implement change in the management of the enterprise in terms of a strategic direction lies with the highest levels of the organization, namely the Board. The formulated strategy would undoubtedly bring profits for the analysed enterprise. What is important is to maintain the level of control of the achievement of goals after implementing the planned strategy.

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