



Analysis of Strategic Logistics Tools in a Beverage Distributor

Análisis de las herramientas logísticas estratégicas en una empresa de distribución de bebidas

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Abstract: The logistics department is considered one of the most important within the associations, and when it comes to a beverage distribution company, it is certainly essential attention. Thus, the main objective of this research was to understand which strategic logistics tools are used in a company located in the interior of Paraíba that operates in the beverage sector. For this, a bibliographical research was carried out, in addition to the online submission of a structured questionnaire to the person in charge of the logistics department, based on relevant literature. So, as a result of this work, it was noticed that the company exercises cost leadership strategies, outsourcing, reverse logistics, strategic alliances and part of the push and pull method, concentrating only on pulls. However, the department manager was unable to identify the use of the vertical integration and delayed logistics strategies in the company. In this way, it is customizable that the company seeks to further improve these strategies, without forgetting the need to improve them, in order to remain competitive in the market at all times.

Keywords: *Strategic tools; Logistics; Beverage distribution.*

Resumen: El departamento de logística se considera uno de los más importantes dentro de las organizaciones y cuando se trata de una empresa de distribución de bebidas, es sin duda de atención indispensable. Por lo tanto, el objetivo principal de esta investigación fue comprender qué herramientas logísticas estratégicas se emplean en una empresa ubicada en el sertão de Paraíba que opera en el sector de las bebidas. Para ello, se realizó una investigación bibliográfica además del envío en línea de un cuestionario estructurado al responsable del departamento de logística, basado en la literatura pertinente al tema. Entonces, como resultado de este trabajo, se percibió que la empresa ejerce las estrategias de liderazgo en costes, externalización, logística inversa, alianzas estratégicas y parte del método push y pull concentrándose sólo en el pull. Sin embargo, el director del departamento no pudo identificar el uso de estrategias de integración vertical y de logística diferida en la empresa. Por lo tanto, se sugiere que la empresa busque mejorar aún más estas estrategias, sin olvidar la necesidad de su perfeccionamiento, para seguir siendo siempre competitiva en el mercado.

Palabras clave: *Herramientas estratégicas; Logística; Distribución de bebidas.*

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INTRODUCTION

According to Ballou (1993) logistics has been playing a fundamental role in organizations. This, given that its science is being utilized in such a manner as to assist companies in the distribution and search for the productive inputs they require for the delivery of the end product to their clients. Besides contributing in a way to provide the lowest possible cost to the organization and minimize the production and delivery time, this being a contributing factor to the organizational success. In this way, it provides its customers with precise deliveries of the product that is required. Its good management increases competitiveness in the marketplace, since companies improve and work together with their suppliers in order to obtain control over them, constantly monitoring them in order to ensure good prices and good forms of payment (BALLOU, 1993).

Technological, social and economic advances are constantly changing in society. These are factors of paramount importance that should be observed frequently so that continuous planning occurs, checking the information arising from the emergence of market variations (TENÓRIO et al, 2014).

A change that occurred in Brazil and in the world, affecting the entire business sphere due to the gravity of the situation faced was the emergence of the new contagious virus called COVID 19. This one, as far as it is concerned, forced for personal and collective safety reasons, the isolation and social distancing, in an attempt to reduce the spread of the disease. Thus, companies had to reformulate their strategies with the prospect of staying in the market during the crisis, which also affected the beverage industry, since it is related to environments that suffered its impact.

For Brasil and Rocha (2010) it is important to perform organizational planning, with regard to the organization's strategic logistics sector, aiming to increase competitiveness, development, and productivity, so that the work occurs together to obtain success. Thus, it is necessary to equip oneself with logistical strategies to reach the proper possible solutions to the problems that arise in the face of market adversities. To this end, the beverage industry can adopt some strategies that will facilitate the functionality of logistics, such as: cost leadership, outsourcing, reverse logistics, vertical integration, delayed logistics, and Push and Pull.

The logistics process is strongly linked to the beverage industry. This, when considering that it goes through long processes from its manufacture to the delivery of the final product to the consumer's table, having as a challenge to deliver the right beverage, at the right place and at the right time, with the lowest possible cost. This goal, in turn, is sought by each and every organization, regardless of its segment. Understanding the distribution chain as a major challenge of this sector, a study is necessary to evaluate the

use of possible logistics strategies tools, to best meet the demanded need. According to Castro et al. (2011), these are distant delivery points, from the factory to distributors, restaurants, conveniences among others.

Given the information presented, it is possible to understand that to stay alive and competitive organizations had to adapt their methods, in order to generate strategies in all sectors. Therefore, this study aims to answer the following question: what are the strategic logistics tools used by a company located in the sertão of Paraíba that operates in the beverage industry?

THEORETICAL FOUNDATION

This section will discuss general characteristics of logistics strategies, as well as the main strategic logistics tools used by companies in the beverage distribution segment.

Logistic Strategies

Logistic strategies have been present in organizations since the 1950's, when companies started to worry about the logistic system and the satisfaction of the end consumer. Nunes (apud BRASIL; ROCHA, 2010, p. 42) proposes that logistics strategies form a set of components that are able to bring about changes in the business sphere and consequently leverage organizational development.

In summary, as Brazil and Rocha (2010) assure us, logistics strategies contemplate the supply chain activities, aiming to facilitate the competitive development, due to the stakeholders present in this segment. Besides increasing corporate competitiveness, the strategies aim to optimize and minimize costs along the chain and add value to the organization's product (CHOPRA and MEINDL, 2002).

Since the beginning of the collection of information about logistics strategies, one notices the emergence of different solutions and adequacy of tactics, for each sector of the economy. As explained above, the competitive differential provided by them has great relevance for companies, making it indispensable for those who wish to conquer a slice of the market in which they operate.

According to Porter (1990), the logistic strategies determine a position for the organization, among them the profitable and the sustainable, dealing undeniably with forces that repel competition. The author makes it clear that strategies are based on making companies different from the consumers' perspective, creating a unique personality for the organization and generating an advantage over its competitors.

It can be said that the foundation for satisfying logistics activities is the ability that the company develops to efficiently and effectively apply and use the strategies supported by dividing consumers into segmented groups. "The result that is expected is that at all stages the logistics proves its effectiveness, performing the tasks, but always with safety, punctuality and quality" (FERNANDES, 2012, p. 15). As

mentioned by the author, the effectiveness of this process will be proven with the satisfaction of the needs of its customers.

Currently, companies on the rise and especially those that produce on a large scale such as, for instance, those in the beverage segment utilize logistics strategies. According to Filho (2012) logistical strategies contribute so that organizations obtain profits, reduce product benefit costs and improve customer service. As explained above, the beverage industry is a major beneficiary of these strategies.

Filho (2012), makes it clear that it is necessary to be prudent in logistics operations, since these represent a significant part of the logistics costs in the organization. This is the reason why it is important to emphasize this point, since this dimension interacts directly and indirectly throughout the company's internal and external flow.

The logistics strategies that are most used in the current market, including in the beverage industry, are: cost leadership, outsourcing, reverse logistics, vertical integration, delayed logistics, and push and pull. Strategies should be prepared in conjunction with the organization's planning so that they maximize its performance and adapt to changes in the environment (BRASIL AND ROCHA, 2011).

Types of Strategies

Some logistics strategies that are used in the beverage segment were chosen to be conceptually defined with the purpose of theoretically grounding the development of this work.

Cost Leadership

According to Kotler (apud MARINHO et al, 2019), cost leadership is one of the most used strategies in logistics in the current market. The objective of this, is to reduce as much as possible the logistics costs that comprise the entire flow, from obtaining the raw material until reaching the final customer. Therefore, this is one of the most advantageous strategies for the organization, since it makes the company lead in costs among its competitors.

Cost leadership focuses on large-scale production, so that a large number of sales can be achieved to reduce the cost of the logistics operation. "To achieve low production costs, practices such as process standardization and automation, use of lower cost materials, intense advertising, and intensive distribution with strong pressure on the wholesale and retail channels are adopted." (GONTIJO; GESSNER, 2015, p. 14).

Outsourcing

According to Nunes (2001), outsourcing is based on the acquisition of the company's product or service, which is not part of the key activity of the business. Companies that use outsourcing are specialists in their segment, so this strategy configures itself as a way to reduce costs and maintain quality in the face of large-scale production

According to Wanke (2004), the main reasons for companies to outsource their activities are: reduction of logistics costs, flexibility in operations, control of logistics activities, search for greater efficiency, market expansion, increase in logistics services offered to customers, search for greater know-how, and improvement of information systems.

Reverse Logistics

Reverse logistics is an interphase of the logistics process that begins with the consumption of the product and goes through the following stages of packaging and transport until it reaches its origin. These steps are part of the product's life cycle where its packaging impacts on the environment are evaluated (Lambert et al. apud BRASIL e ROCHA, 2010).

Araújo (2007), says that reverse logistics is used by companies in order to achieve strategic advantages, among which he highlights: competitive reasons, cost reduction, differentiation of the corporate image and adequacy of environmental issues.

The customer satisfaction is the key point of every company that wants to make profits, so it is necessary that organizations have the ability to manage the return of products, which are outside the requirements of the consumer, have defects, or need to be discarded after use (LACERDA, 2007).

Vertical Integration

Vertical integration aims to reduce costs, such as production, sales and distribution costs. The reduction of costs and risks is the attraction for companies that adopt this strategy (PORTER, 2004).

Verticalization for Gontijo and Gessner (2015) acts in the supply chain activities, allows the domain of the process and the chain, besides a greater freedom of decision and cost management.

Delayed Logistics

Delayed logistics is the process in which the strategy of delaying the manufacturing or the delivery of the final product occurs, aiming to reduce risks of changes in the logistics environment (BRASIL and ROCHA, 2010).

According to Brasil and Rocha (2010, p. 51) "the delayed logistics in the company is used to control situations in which forecasts are uncertain and is also used, as support for the factory not to stop producing due to lack of orders and finally, avoiding the management of stock in stores".

Strategic Logistical Alliances

For Nunes (2001) logistic alliances are a quick way to strategically enable the company's areas, and are performed through alliances with organizations that possess the knowledge that will be pertinent to another organization.

The objective of the alliances is to reduce the operational and storage costs of the company in order to always offer the best quality of service to the consumer. The alliance as a strategy enables the development of customized logistics services (BOWERSOX, CLOSS and COOPER, 2006).

Push and Pull

According to Rodrigues and Colmenero (2018) some companies use the Push and Pull system as a logistics strategy. The objective of push and pull of the company's inventories is to adjust the production and distribution flows of the product in the market.

The push and pull strategy makes it possible to use the flexibility of inventories according to market demand, thus making it a competitive advantage over competitors, as well as reducing operating costs.

METHODOLOGY

The present research has an exploratory character, as it seeks data and information on the theme addressed; and descriptive, as it aims to analyze and record the characteristics of a given environment. According to Gil (2009), descriptive research is that which has as its main objective the description of characteristics of a phenomenon or object of study (population, company, or problem situation), establishing relationships among its variables.

The technical procedure used was bibliographic research, based on previously published materials, such as books, magazines and articles. The theoretical basis is essential for the foundation of the research.

The method used was a case study in a beverage distribution company. A qualitative research was carried out, analyzing the information collected through the application of a questionnaire with 11 discursive questions. The questionnaire was sent to the e-mail address of the company's logistics manager, who was responsible for answering it.

To prepare the data collection instrument, the main logistics strategic tools perceived during the theoretical foundation preparation phase were selected. Thus, questions were created about the use of these

tools in the context of the organization studied, and what the implications of these tools for the organization's performance were. For this, before each question, a brief comment was made explaining what each of the tools is. This, in turn, was done because we understand that sometimes an institution uses a certain tool, but does not know the scientific name used for it.

Finally, the data analysis was based on the answers obtained using the qualitative technique. Thus, the arguments given by the person responsible for the sector were explored, being interpreted and written according to the standard grammatical norm, in order to facilitate the reader's perception.

RESULTS AND DISCUSSIONS

At the end of the readings related to the theme during the theoretical foundation phase, a structured questionnaire was sent to the person in charge of the logistics department of the analyzed company. This was done in order to analyze the use of the main strategic logistics tools used by the company.

Presentation of the Company

The beverage distributor analyzed is a company located in the interior of Paraíba, in the municipality of Sousa-PB. It is a medium-sized company that supplies the main town and the entire high hinterland of Paraíba, in the form of distribution of alcoholic and non-alcoholic beverages. It is also part of the AmBev group, and currently has a network of 145 employees, who are divided into several departments. Thus, 65% of the employees are involved in the organizational logistics, being 41.5% deliverers, 12.2% warehouse and 6.8% pullers.

Thus, concerning the importance that the company demonstrates towards the logistics department, the sector manager stated that it is fundamental to the business, since, without it, it would only be a commercial company and would not have the potential perceived today. Besides, the company is considered one of the main sources of municipal income, being so called because of the amount of employees, mainly in logistics.

In a strategic sense, the sector is responsible for 25% of the organizational budget. Thus, it is seen as a division with competitive power, since it generates a considerable part of the organization's monthly turnover. In this way the company that has financial incentive programs in all areas, prioritizes the management of means and materials through variable remuneration according to the level and function, based on monthly and annual production.

Strategic Logistics Tools

Regarding the strategic logistics method based on cost leadership, the company adopts an OBZ (Zero-Base Budgeting) management system. This way, package and cost center divisions are made, being possible to plan a budget with fixed and variable costs, using simulators in all directions of the logistics department.

In relation to the use of outsourcers, they are hired for security services, medical support and fleet maintenance and supply services, besides freight services in seasonal periods, i.e. those of sporadic demands. Therefore, activities that are not considered fundamental in the development of the process, can easily be outsourced by other people or companies, reducing costs of hiring and paying salaries for employees who provide little useful services.

When questioned about the practice of reverse logistics as a strategic tool for logistics, the manager said that the company is not a producer, only a distributor, and therefore they cannot act more effectively in this sense. However, it is used in the processes of returnable products, so that when the deliveries are made to customers, this asset returns to the reseller and then to the factory, where it goes through the process of cleaning and refilling the liquid.

As for the vertical integration method, in which there is freedom to manage the supply chain, it was stated that it is not used, since it is not positioned as a producer. However, the supply chain can also be used by distribution companies, in order to minimize the distance between the levels and people involved in the process of delivery and management of the products. In this way, it is not in the difference between producers and consumers to adopt this method. In reality it focuses on an integrated verticalization of the institutional process.

Delayed logistics is a strategic tool that causes a delay in the manufacturing or delivery of the final product, in order to reduce risks of changes in the logistics environment, such as a price increase from one week to another. When asked about the usefulness of this mechanism, the logistics manager said that he doesn't use it because the company is only a distributor. However, this answer is unsatisfactory, since it is precisely the distribution company that must decide jointly with the industry on the distribution and production or not of a product, in order to take advantage of some irregularity in the consumer market.

Regarding the formation of strategic alliances, the company constantly acts in the form of carrying out leadership training where the company selects leaders in different segments to share their benchmarking or best practices. Analyzing this answer, it is understood that the institution develops this leadership program internally, which in turn establishes contact with other companies in order to obtain positive results, that is, the formation of commitments in the form of partnership with auxiliary companies, which may even be hired as outsourcers. An example of this situation may be that the logistics manager, in his

capacity as leader, meets with a security outsourcer, who, in turn, when noticing the organization's reports, decides to ally himself with it and offer his services at a lower cost than that of the others.

When it comes to the push and pull methods, the company adopts only the pull, where the system updates the stock. In addition, according to the average sale, the adopted stock simulators signal the stock-out and stock-over, allowing the understanding of the products that are below or above the average sale. This, in turn, helps the company in issues related to purchasing and inventory management, besides showing managers directly which products need more promotion and which can have their promotion reduced, which is the case of some item that even if there is no advertising or price increase, will still be consumed by the target market.

Finally, we were asked about the measures used and changes made in the activities regarding the pandemic caused by the new Covid-19 virus. Thus, it was found that new habits such as implementation of strict hygiene rules, social distancing, implementation of the home office system, and online meetings and training were initiated with the intention of promoting social distancing, and consequently the contamination of employees with this virus. It is necessary to emphasize that these methods were used in all departments of the company, not only in logistics, although it has gained emphasis by promoting constant contact with people from the external environment, in the sense of performing the receipt and delivery of goods.

CONCLUSIONS

The present study aimed to analyze the logistics strategies adopted in a medium size beverage distribution company in the interior of the state of Paraíba and the impacts caused in the logistics sector due to the Covid-19 pandemic. The aim was to associate the most commonly used theories with the company's practice.

The work was delimited to analyze a beverage distribution company in accordance with the following steps: survey of the theoretical foundation of logistics strategies; the methodology adopted was determined, under the perspective of the company's segment and the questionnaire used for the development of the discussion, in order to identify the logistics strategies used; and analysis of the results, based on data collection.

The main logistics strategies employed in the beverage distribution companies and that obtained connection with the object of study, were: cost leadership, outsourcing, reverse logistics, strategic alliances and part of the push and pull method concentrating only on the pulls.

The interviewee was unable to identify the use of vertical integration and delayed logistics strategies in the company. About the changes in the logistics sector during the pandemic period it was verified the

adoption of preventive measures and social distancing, besides training and the use of the Home Office system.

From these results, it is recommended that the institution seek an improvement plan to improve the use of these tools, understanding that the effective application of these can increase the institutional performance, for example in relation to customer satisfaction, which consequently will increase profits, either by prioritizing the time of purchase, or by the good reputation spread among consumers of this service.

The objective of the study was achieved, however, there were limitations, such as not being allowed to visit the site in order to gain a practical understanding of how the tools are applied. Thus, it is proposed that further research be carried out based on this study to verify the impact of the use of various strategies on the company's budget, as well as to extend the research to other companies in the segment and similar sectors.

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