

The Logistic Costs and their Role in Supporting the Competitive Advantage of Industrial Firms (A Study in the Iraqi Carpet and Furniture Company for the Period 2012-2016)

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Abstract

The Logistical costs are an important factor in the competitiveness of any country and any company, and given the acceleration of logistical activities over the few decades, countries and companies seek to enhance their competitiveness by reducing those costs which is a basic goal of industrial companies and the main purpose of this study is to shed light on, define the logistical costs, analyzing it and clarifying its impact on the company's profits, the research sample, and its impact on the competitive advantage in the company. The problem of the study is embodied in the high logistical costs and the effect of this on the company's profits and competitive advantage. For the period from (2012-2016) in order to achieve the objectives of the study, the following hypotheses are tested - the existence of a significant relationship between reducing logistical costs and supporting the company's competitive advantage.

The sample of the research implies the existence of a significant relationship between reducing logistical costs and maximizing company profits. Moreover the use of the financial analysis of the company's data, the hypotheses have been proven correct, and the study has found that a large part of the logistical costs that the company bears are transportation and communication costs, which in turn affect the company's profits, and the high logistical costs

in general and transport and communication costs in particular affect the competitive position of the company. The study suggested the necessity of introducing modern technology in communications and appropriate means of transportation to avoid any risks facing the company as well as obtaining information efficiently and with high accuracy and at the lowest costs and the necessity to develop the cost system in the Iraqi Carpet and Furniture Company so that it can confront cost reduction in light of modern industries.

Keywords

Logistical Costs, Profitability and Market Share.

Introduction

Logistical activities are considered as one of the vital and important topics that have increased interest in recent years for business organizations in terms of their concept, importance, components and practices in contemporary organizations and as a basic process that leads to adding real value. Countries and organizations have realized that the path towards increasing profits and strengthening the competitive position begins with service Customers and cost reduction, and logistical costs constitute a large part of production costs. Therefore the strategy of cost differentiation is due to the good performance of logistical activities. Companies that achieve excellence in logistical activities are able to build a competitive advantage compared to competing companies, thus expanding their market share and increasing their profitability. In the long run (Lowe, 2002).

Methodology of the Research

1. The Problem of the Study

The problem of the study lies in the high logistical costs and their impact on the competitive advantage of industrial companies and on the profits of those companies. The study problem is determined to answer the following questions:

1. Does reducing logistical costs contribute to support the competitive advantage of the research sample company?
2. Does reducing logistical costs contribute to maximizing the company's profits for the research sample?

2. The Objectives

The company aims to:

1. Determine and analyzing logistical costs in the research sample company.
2. Measuring the impact of the company's logistical costs, the research sample, on the competitive advantage.
3. Clarifying the effect of logistical costs on the company's profits.
4. Clarifying the most important financial indicators of competitive advantage and measure its financial performance for the company.

3. The Importance of Research

The importance of the research is that it deals with the issue of the role of logistical costs in supporting the competitive advantage of industrial companies, which represents an important and wide sector, and clarifies the importance of costs as one of the main influences that affect the financial and administrative decisions of the company which is reflected in the company's performance, profits, competitive position, growth and stability.

4. The Hypotheses

1. Is there a significant relationship between reducing logistical costs and supporting the company's competitive advantage?
2. There is a significant relationship between reducing logistical costs and maximizing the company's profits, the research sample?

The First Topic

First: What are the Logistical Costs

1- The Concept of Logistical Costs

Logistics costs are an important factor affecting the competitiveness of both companies and countries, and companies can enhance their competitiveness in the market by reducing their logistical costs of goods and services, and the total logistics cost analysis is the key to managing the logistics function. It is important for management to take into account the total of all logistical costs. Establish controls to reduce the overall costs of logistics rather than reduce the cost of each component. However identifying and minimizing any component of logistical costs may be problematic because there is a trade-off between cost components in reality, attempts to reduce the cost of individual logistics activities in isolation may increase total logistical costs. Thus at the company level attempts should be made to integrate the logistics system to reduce the total market

logistics costs for state companies and to increase the national industrial competitiveness on a global scale.

Where (Sanjib, et al, 2019) defines logistical costs as ((the direct financial cost of performing logistical tasks, which will be reflected in the national accounts to the final product that the consumer purchases, and includes the costs of movement of imported and exported goods, storage,...)). While Ozpeynirci (2012) defines logistical costs (the monetary amounts that the company bears without completing logistical activities). We show transportation costs depending on transport activities and the ratio of these costs to operational costs is constantly increasing. As transport activities can directly affect the total supply costs (Tokay, et al, 2011).

The logistical costs are calculated and based on the following equation (Skerlic, 2016):

$$\text{Logistics costs} = \text{Total (Transportation costs + Communication costs + Handling costs + Packaging costs + Maintenance costs)}.$$

2- The Logistic Cost Components

According to (Pohit, et al, 2019) (Skerilc, 2016) (Stepien, 2016), the components of logistical costs are as follows:

1. Customer Service Level Cost: Customer Service. It considers the cost trade-off for lost sales cost and returned goods. This may form a large portion of the total logistical costs, but it is not always necessarily included as part of the logistical cost.
2. The costs of maintaining and managing inventory: These include the costs of warehousing, warehouse construction and location, opportunity costs, inventory service costs and other risk costs.
3. Transportation cost: It includes the costs incurred by the company to move the transportation of raw materials to the company or products to the market. It consists of the costs of the transportation networks through which the transport takes place, and the cost of the means used in the transportation process.
4. The cost of activating orders and related information: It includes the expenses incurred by the company to forecast the volume of expected sales in the future to fulfill them, the implementation of orders received from customers, and the establishment of a communication system between the authorities responsible for the performance of supply activities.

Second: The Competitive Advantage, Its Concept, Its Dimensions and Its Indicators

Introduction

Competition is the essence of the establishment's success and failure. It also determines the suitability of the establishment's activities and their contribution to the performance of the establishments such as creativity, cultural interdependence or the proper implementation of performance. Therefore, establishments search for competitive strategies by researching and investigating competitive sites that are favorable to them in the field of work that pertains to the establishments. This is in order to achieve a profitable position and achieve sustainability in the services or commodities of the establishments in the face of the forces of market competition (Porter, 1998).

1- The Concept of Competitive Advantage

Heizer (2001) defines competitive advantage as "a system in which the advantage is more than what the competitors have and that the idea is based on the value that is left behind to provide the customer in an efficient way. While Porter defines it (that the competitive advantage is not specific to the state but to the institution. It arises mainly from the value that an institution has been able to create for its customers so that it can take the form of lower prices in relation to the prices of competitors with equal benefits, or by providing individual benefits in the product that are consciously compensated for the imposed price increase.) In the light of the foregoing it can be said that the competitive advantage is the potential and capacity of the organizations. This leads to provide the customer with goods and commodities at preferential prices over competitors and with high quality.

2- Dimensions of Competitive Advantage

Competitive advantage has several dimensions related to achieving competitive advantage, including (Kahil, 2016) and as follows:

- 1. Cost:** The reduced cost is the first competitive dimension that companies seek to achieve in order to market their products at a lower price than competitors and obtain the most possible profit. The facility that is able to control its cost and make it in the lowest percentage compared to competitors in the same industry. It will have the upper hand in the market and be in a good position that allows it the ability to control the market, as well as lowering costs, allowing establishments to offer products at lower prices and at the same prices as competitors, but with additional services.

2. **Quality:** The establishments seek to provide high quality products that cannot be matched by others and the quality indicates the suitability of the product design characteristics for the function of use or suitability for the purpose of use and depends on the awareness of the customer's requirements and the importance of quality since the eighties in determining the product that the customer wishes to obtain to Price side. Quality has three dimensions: ((design quality, conformity quality, service quality)).
3. **Flexibility:** Flexibility is related to the strategic perspective, that is, the ability to offer a wide range of product to customers, and that the important element here is the ability to offer products at a time when the organization is required to develop new products. (Chase, 2001).
4. **Time:** after the importance of time for the customer increased, the competition is based on time increased between organizations. Many organizations seek to expand their base with customers through on-time delivery and delivery of the commodity to him. This dimension is exemplified by providing good products in quick times, especially products that have a short life.

3- Indicators of Competitive Advantage

There are many indicators that are used to indicate that the facility has a competitive advantage, for example (profitability, market share, customer satisfaction, etc.), and he mentioned (Sherrab, 2011) the most commonly used and common financial indicators, which are profitability indicators and the market share because of the advantages that these indicators have such as obtaining. The data necessary for its calculation and ease of obtaining it, and in the following clarify these indicators:

1. Profitability

Profitability is defined as a measure used to evaluate the performance of projects by the ratio of net income to assets or return on investments, the use of modern technologies and better utilization of resources, and that there are three methods used to measure profitability, namely:

- A. The return on sales is calculated according to the following equation:
- B. $\text{Return on Sales} = \text{Net Profit} / \text{Net Sales}$
- C. $\text{Rate of return on investment} = \text{Net profit} / \text{total investment.}$
- D. $\text{Rate of Return on Equity} = \text{Net Profit} / \text{Equity.}$

2. Market Share

The market share measure is used to distinguish between winners and losers in the market. This measure is used to calculate the firm's share of sales in the market compared to the main competitors, and the market share is measured according to the following equation:

$$\text{Market share} = \text{total facility sales} / \text{total market sales.}$$

Practical side

Table 1 Shows the individual and total logistical costs of the Iraqi Carpet and Furniture Company

| The year | Transportation fees | Communications costs | Handling costs | The cost of packaging materials | Maintenance costs | Total |
|----------|---------------------|----------------------|----------------|---------------------------------|-------------------|-----------|
| 2012 | 15329500 | 12130512 | 0 | 14999 | 9193500 | 36668511 |
| 2013 | 15341000 | 12214770 | 0 | 32999 | 132935000 | 160523769 |
| 2014 | 17481000 | 260132250 | 0 | 17999 | 11534262 | 289165511 |
| 2015 | 1552000 | 14016900 | 0 | 0 | 12125500 | 27694400 |
| 2016 | 1808000 | 3076350 | 30,000,000 | 6000 | 7519600 | 58681950 |
| Total | 67783500 | 301570782 | 30,000,000 | 71997 | 173307862 | 572734141 |

Through Table (1) it is found that the highest logistical costs of the company are in (2014) and amounted to (289165511) and the lowest costs are in (2015) which amounted to (27694400).

These costs constitute the equivalent of (10 to 15%) of the cost of commodities, and therefore they affect the profits of the company and its competitive position in the market, meaning that the logistical costs decrease, the higher the company's profits.

Based on the foregoing, the first hypothesis, that states it is accepted that there is a significant relationship between reducing logistical costs and supporting the competitive advantage of the research sample company.

Table 2 It shows the financial indicators of the competitive advantage of the Iraqi Carpet and Furniture Company

| The year | Profitability ratios | | | Market share |
|----------|-----------------------------|------------------------------|-----------------------|--------------|
| | Sales profit rate of return | Rate of return on investment | Equity rate of return | |
| 2012 | 21% | 37.7% | 0.42% | 7.4% |
| 2013 | 14.4% | 25.8% | 33.0% | 2.2% |
| 2014 | 12.6% | 22% | 27.0% | 1.8% |
| 2015 | 23% | 39% | 0.49% | 8.5% |
| 2016 | 18% | 34% | 0.39% | 6.5% |

Through Table (2), reflects that the year (2015) has the highest rate of return on sales profits (23%), the highest rate of return on investment (39%), the highest rate of return on equity (0.49%), and the highest market share (8.5%), the year (2014) shows the lowest rate of return on sales profits (12.6%), the lowest rate of return on investment (22%), the lowest rate of return on equity (0.27%), and the lowest market share (1.8%). This is due to the lower logistical costs, the higher the rate of return on profits or the rate of return on investment, the rate of return on property rights and the market share of the Iraqi Carpet and Furniture Company, and the higher the logistical costs affect the low of those indicators for the research sample company, therefore the lower the logistical costs, the greater the company's comfort that are based on the above and the second hypothesis is accepted

Is there a significant relationship between reducing logistical costs and maximizing company profits?

Recommendations and conclusions

First: Conclusions

1. The year (2014) has achieved the highest logistical costs for the company and amounted to (289165511), and the lowest costs are in (2015), which amounted to (27694400).
2. The year (2015) has achieved the highest rate of return on sales profits (23%), the highest rate of return on investment (39%), the highest rate of return on equity (0.49%), and the highest market share (8.5%),
3. The year (2014) has achieved the lowest rate of return on sales profits (12.6%), the lowest rate of return on investment (22%), the lowest rate of return on equity (0.27%), and the lowest market share (1.8%).
4. A large part of the company's logistical costs are transportation and communication costs, which in turn affect the company's profits.
5. High logistical costs in general and transportation and communication costs in particular affect the company's competitive position.

Second: Recommendations

1. The necessity to work on creating a specialized department in the company, the research sample, to manage all logistical activities in an integrated and coordinated manner to control those activities.

2. Training and qualifying the cadres specialized in promoting and marketing products in the company to maximize the company's profits.
3. The necessity to expand investment in the company's business and its effect on increasing the company's profits.
4. The necessity of introducing modern technology in communications and appropriate means of transportation to avoid any risks facing the company, as well as obtaining information with high efficiency and accuracy at the lowest costs
5. The need to develop the cost system in the Iraqi Carpet and Furniture Company in order to be able to face cost reduction in light of modern industries.

References

- Ismail K. (2016). *Total Quality Management and its Relation to Competitive Advantage*. An Applied Study on the University of Palestine, MA Thesis, Gaza, Palestine: The Academy of Management and Politics for Postgraduate Studies and Al-Aqsa University.
- Syrup, prevailing, (2011). *Strategic planning and its relationship to competitive advantage*. A field study in drug distribution companies in Gaza governorates, Master Thesis, Gaza, Palestine, Al-Azhar University.
- Ozpeynirci, R, Duman, H, Arsu, T. (2012). Logistic Cost Management in Enterprises: The Example of Karaman, Aksaray and Kayseri Provinces", *Asian Economic and Financial Review*, 2(8), 1026-1050. <http://aessweb.com/journal-detail.php?id=5002>.
- Chase, R. (2001). *Operations Management for Competitive Advantage*. McGraw-Hill.
- Heizer, Jay & Render, Barry (2001). *Operations Management-Logistics cost: A Developing Country's Perspective*. National Council of Applied Economic Research (NCAER)", P. 5.
- Lowe, D. (2002). The Dictionary of Transport and Logistics" The Institute of management', *International Conference on Management and Service Science*. New York: The Free Press.
- Pohit, Sanjib and Gupta, Devendra and Malik, Sameer and Pratap, Devender (2019). *Survey of literature on Measuring*.
- Porter, M.E. (1998). *Competitive Advantage: Creating and Sustaining Superior Performance*.
- Škerlič, (2016). A Decision-Making Model for Controlling Logistics Costs. *Decision model for logistics cost control*.
- Stepień, M, Łęgowik-Świącik, S, Skibińska, W, Turek, I, (2016). Identification and Measurement of Logistics Cost Parameters in the Company. *2nd International Conference "Green Cities - Green Logistics for Greener Cities*.
- Tokay, S.H., Deran, A. and Arslan, S. (2011) "Strategies to be Followed in Logistics Cost Management and Expectations from Accounting Education". *Dumlupinar University Journal of Social Sciences*, Vol. 29.