



Strategy Formulation to use of Elements of Logistics and Supply Chain Factors (Case Study: Iran Khodro Company)

KEYWORDS

logistics, supply chain, Strategy formulation, SWOT techniques, FAHP techniques.

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ABSTRACT *In the present investigation to "Strategy formulation to use of elements of logistics and supply chain factors)" are discussed. The statistical population consists of 43 managers of Iran Khodro Company. Beginning with a review of previous research and interviews with the target population elements of logistics and supply chain factors identified using FAHP technique and the validation of the strengths and weaknesses have been identified. Then, using the opportunities and threats identified in terms of population Using SWOT technique and applying FAHP has been a good strategy. According to the management of supplier performance with minimum weight as the raw material weaknesses and asset management firm with a strong point of highest weight and the best strategy for the optimal use of these elements is WO strategy (revision strategies).*

1. Introduction

Transition from period of product-oriented marketing and the rise of post-industrial age where knowledge and information is the core of human movement, companies and organizations are faced with new challenges. Accordingly competitive advantage of those companies and organizations is with a focus on value creation and customer oriented, lean organization and processes have been implemented. Among these key to survival in today's organizations in understanding customer needs and respond quickly to these needs lies. Any organization, whether corporate, governmental corporations, or smaller businesses want to meet demands of various stakeholders and customers. So they are need for materials, equipment, facilities, and suppliers of other organizations and performance of an organization by the activities of other organizations that comprise the supply chain would be affected. (Exlson, 2012, p.290) And performance of an organization by the activities of other organizations that comprise the supply chain would be affected. Efficiency and effectiveness of any organization result to performance of management and structure of the supply chain organization. (De-Groote, 2011) (Ganishan, 2010, p.101)

The main objectives of this research are:

- 1 - Identify and investigate the dimensions and elements of logistics and supply chain factors of production
- 2 - Strategy formulation for efficient use of factors of production, logistics and supply chain with SWOT technique.
- 3 - Prioritize the proposed strategies using a fuzzy AHP method.

2. Identify elements of the production logistics and supply chain

After reviewing previous research and numerous interviews with heads of different parts of Iran Khodro co. elements of logistics and supply chain before the final product were identified as follows: (Hazen, 2011, p.10609),(Chang Yu Wei, 2007, p.62)

- 1 - Raw material supplier performance management (At the time of preparing contingency material supply time variability, completion rates, and inconsistent in providing total purchase order)
- 2 - Efficient resource management for greater profitability (resource inventory level, the need for manpower, equipment and energy)
- 3- Planning between terminals handling raw materials and transportation and warehousing (Material Handling should in the right condition, at the right place, at the right time, in the right position, in the right sequence, by

using the right methods, for the right cost.)

- 4 - Warehouse Management (Including the admission of raw materials and production equipment, placement and movement of raw materials and production equipment, selection and collection of raw materials and production equipment for departure)
- 5 - Asset Management (Compare the planned budget cost suppliers, shipping and handling costs, warehousing costs, labor costs and equipment costs with actual expenses done)
- 6 - Management of R & D (Research and development, production technology, research and development, diversification of production, research and development, competitive advantage, manufacturing, research and development, increase production quality)

3. methods of research

This study was a cross-sectional survey and the target is classified as applied research. The aim of this research approach, describing objectively real and regular attributes of an issue. In other words, the researcher tries to infer what is, without any interference or subjective and objective results of the report will be positioning. Sources of data collection to be divided into two categories: primary and secondary sources of information. The secondary sources of articles, books, research, studies and thesis done in these areas (which are collected through the internet and libraries and documentation) is used. The primary data using researcher made questionnaire, collected. The data set for each of the paired comparisons of the data were scored using fuzzy AHP matrix. Since the strategy formulation and evaluation of important things that managers directly be commented on that this sample statistical study Moderators factors produced by Iran Khodro Co. , which includes the number 43 has been a census the collected data were investigated.

4. Analysis of data

The logistics and supply chain factors identified through the study of four books and numerous articles and reviews organizational Iran Khodro Co., the criteria identified in the form of a Likert scale questionnaire validity of the factors discussed in the company by the directors of the factors has been determined. After completing the questionnaire by the statistical community and get out ideas and putting the results in SPSS Since the higher average of 4 were all criteria and sub criteria approved by society.

In this study, after analyzing the internal environment by all of the weight factors are obtained by multiplying the average of the comments and the final weight is obtained. Factor that

has the highest weight as the strong points and weak points are identified factor that has the least weight. In accordance with the results, management of raw material supplier with the lowest weight with highest weight as asset management weaknesses and strengths were identified Iran Khodro.

Table 1 - Identification of strengths and weaknesses

Factors	Average of comments	The final weight	Weight Factors
Options of performance management suppliers of raw materials	4.1	1.111	0.271
Options of efficient resource management	4.46	1.45	0.3267
Options of planning and handling of raw materials and transportation terminals and warehouses	4.32	1.46	0.3371
Options of warehouse management	4.16	1.15	0.2761
Options of Asset Management	4.99	2.08	0.4181
Options of research and development management	4.23	1.68	0.3984

To identify the opportunities and threats of the external environment analysis was performed. Then adjust and catch them in terms of population and the software SPSS (average higher than 4), so that the SWOT factors that affect the success of the organization, but the organization cannot control them, were identified. Finally 18 interviews with managers of Iran Khodro Co. following SWOT factors and four option strategies were identified.

The first steps of the criteria weight than any of the strategies developed by dyadic scale questionnaire and obtain of Experts opinion. Also obtain weight of each of the strategies for achieving and the initial weights are multiplying factors the final weigh up options than in developed strategy achieved. Then we compute the inconsistency rate them. And finally with respect to the sum of the normalized weights were prioritized strategies. All these steps are summarized provided in Table 2.

Table 2 - Total weight gain normalized

	WT	ST	WO	SO
Comparison planned budget suppliers cost with actual cost done	0.02	0.07	0.06	0.05
Comparison planned budget Transport costs with actual cost done	0.03	0.09	0.04	0.01
Comparison planned budget warehousing costs with actual cost done	0.04	0.01	0.07	0.01
Comparison planned budget expenses of human forces with actual cost done	0.05	0.04	0.06	0.03
Comparison planned budget equipment costs with actual cost done	0.01	0.04	0.01	0.01
suppliers of raw materials performance at the time of materials preparation	0.08	0.01	0.05	0.02
suppliers of raw materials performance at the time of supply time variability	0.02	0.07	0.09	0.01
suppliers of raw materials performance at the time of rate of order fulfillment	0.05	0.02	0.05	0.03
suppliers of raw materials performance at the time of inconsistencies in of the whole order	0.001	0.01	0.03	0.01
The lack of strong competitors in the domestic arena	0.01	0.02	0.03	0.03

	WT	ST	WO	SO
Ability to export to allies	0.01	0.02	0.04	0.02
The use of multiple Internal suppliers	0.02	0.09	0.03	0.03
Support government institutions in crisis of the company	0.02	0.04	0.03	0.03
Despite international competitors (private China) internal market of Iran	0.04	0.01	0.09	0.03
Limits the number of foreign suppliers because of international sanctions	0.03	0.03	0.01	0.05
Exchange rate rises	0.01	0.09	0.04	0.06
Fuel shortage	0.06	0.06	0.08	0.07
Rise of inflation	0.01	0.05	0.01	0.08
Sum of normalized weights	0.44	0.77	0.86	0.54
Ranking Strategies	4	2	1	3

5. Conclusions and recommendations

In accordance with the results of data analysis appropriate strategies that can be used for elements of logistics and supply chain factors produced by Iran Khodro Co. offered is "WO" strategy (revision strategies). That should take advantage of opportunities and weaknesses into strengths or weaknesses of the intensity of reduced. In accordance with the results, it is suggested suppliers regarding the impact on prices and quality products at the exit and survival of an organization and their greatest contribution to the industry and has also organized access to their goals; companies must continually assess their suppliers. Managers should note that of supplier's resources company, organization, resulting in more satisfied customers and retention goals will help the organization. As a result, it is suggested to improve the company's relationships with suppliers. However, due to the Iran Khodro's main suppliers are introduced through SAPCO Co. recommended that inspection of the raw material supply is more and more precise. Of course you can create and strengthen the e-procurement supplier relationship management (SRM) monitoring was more comprehensive and thorough.

Also, in accordance with results appropriate Strategy that can be used for optimization of logistics and supply chain elements of Iran Khodro produced WO Strategy (revision strategies) is formulated it is recommended that the following actions be taken:

- 1 - Strengthening e-procurement in manage relationships with suppliers (SRM).
- 2 - Create a shared public and private capital investments in supplying raw materials to produce new products.
- 3 - Interaction and collaboration between managers and suppliers in order to advance the supply of parts.
- 4 - Use of managers of several techniques and methods for evaluating and selecting suppliers (Such as data mining techniques) according to lean manufacturing.
- 5 - Establish mechanisms to improve the supply chain to share information on the level of supply chain factors of production.
- 6 - Strategic planning to improve supply chain agility factor

It also recommended the Strategy identified the following actions are taken: SO Strategy (competitive strategies / offensive); 1 - Development of internal logistical lines (transportation of raw materials and transportation and storage terminals) 2 - Development of warehouse

WT Strategy (defensive strategy): 1 - improving logistics providers (Kanban production / cell production). 2 - Using government loans to cover parts.

ST Strategy (diversification strategy): 1 - Select multiple suppliers 2 - Development of production technologies 3 - Create a variety of raw materials and consumer products for a variety of domestic

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