

The Impact of the Supply Chain Management on the Quality of the Products in the Nabil Company for Food Industry

Dr Atef Saleh Aladwan

Business Administration Department, Albalqaa Applied University, Jordan

Abstract

This article aims to investigate the impact of the supply chain management on the quality of the products in the Nabil Company for Food Industry in Jordan and, This paper shall present on the impact of supply chain management in nabil food industries and the effectiveness of practicing SCM. A field study is done then analyzed and presented in a statistical analysis. From the analysis, it reveals that effectiveness of practicing the SCM give a lot of good performances and granted benefits to food industries. This article aims to provide a literature overview of SCM. The outcome of this article can be used as a guide to explain and orientate researchers and practitioners in the field. The article comes out with various recommendations to be implemented in the related field to be keys and gaudiness for most organizations to apply supply chain management in perfect ways.

Keyword

Supply Chain Management, product, competitive advantage.

I. Introduction

Despite the importance of the study of the supply chain and its role in the development of business and enable companies to operate effectively, but it has not received the attention of researchers and students, especially it has become efficient tools to keep a gap of recent rapid development, the importance of the study it is based on extrapolation and diagnosis of the current reality of the supply chain management and analyzed, and Assess the response to the requirements of the surrounding environment and raise the efficiency of management and achieve different purposes, represented mainly in improving the performance of these companies in response to this requirements.

Over the past two decades we have seen the buyersupplier relationship evolve from an arm's-length/ adversarial approach to one favoring developing longterm partnerships. Significant competitive advantage can be achieved by organizations working closely with their suppliers. Without a shared vision, mutual benefits, and top management commitment, partnership are likely to be short-lived. Other ingredients necessary for developing and managing lasting supplier relationships are trust, creating personal relationships, effective change management, information sharing, and using performance metrics to create superior capabilities. Mutually agreeable measures to monitor supplier performance provide the basis for continuous improvement to enhance supplier quality, cost, and delivery. Supplier certification ensures that buyers continue to work with their best suppliers to improve cost, quality, delivery, and new product development to gain a competitive advantage. Finally supplier relationship management software automates the exchange of information and allows for improved efficiency and effectiveness in managing supplier relationships and improving performance

Supply chain management is management of material and information flow in a supply chain to provide the highest degree

of a supply chain to provide the highest degree of customer satisfaction at the lowest cost.

Supply chain management requires commitment of supply chain partners to work closely to coordinate order generation, order taking and order fulfillment thus, creating an "extended enterprise" spreading far beyond the producer's location. Supply chains encompass the companies and the business activities needed to design, make, deliver and use a product or service. Businesses depend on their supply chains to provide them with what they need to survive and thrive. Every business fits into one or more supply chains and has a role to play in each of them. And also supply chain management is the integration of key business processes from initial raw material extraction to the final or end customer, including intermediate processing, transportation and storage activities and final sale to the end customer. Today, the practice of supply chain management is becoming extremely important to achieve and maintain competitiveness. Many firms are just now beginning to realize the advantages of supply chain integration. Supply chain management is an out-growth and expansion of logistic and purchasing activities and has grown in popularity and use since the 1980s. Important elements in supply chain management are in the areas of purchasing, operations and production and distribution. Finally, as markets, political forces, technology and competition change around the world, the practice of supply chain management must also change.

II. The Importance of Study

The present study is gaining importance through the following things:

1. It supports studies and theoretical and applied research from the field of supply chain management on the performance of the quality of products in the Nabil Company.
2. This study deals with the manufacturing sector and are thus come as a contribution to the definition of this sector.
3. It provides part of the base information and data about the reality of supply chain management and its impact on the performance of the companies.
4. It helps senior departmental managers and employees in purchasing and marketing departments in Nabil Company for making food.

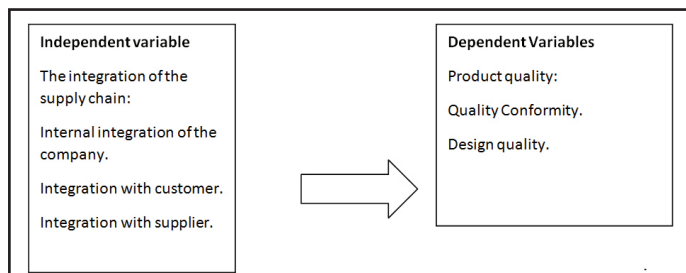
III. Objectives of the Study

1. Knowledge and estimate the amount of the internal impact of the supply chain for the Nabil Company for Food Products on the quality of the products and how the effect of each variable on a set of variables associated with it.
2. Identify the impact of supply chain management on the performance of Nabil Company for Food Products.
3. Identify the performance of managers; working in the upper departments and to identify the positive aspects.
4. Identify the concordance between the realities of the supply chain management of the Nabil Company.

IV. The Problem of the Study

The problem of the study related to impact of the supply chain management for the Nabil Company for Food Products on the quality of the products and how the effect of each variable on a set of variables associated with it.

V. Model of Study



VI. Operational Definition

A. Independent Variable

1. **The integration of the supply chain:** The degree of applying of logistic services in the organization and practicing of supply chain management in the organization in terms of goods and services.
2. **Internal integration of the company:** The degree of harmony of the organization within itself and with its environment
3. **Integration with customer:** The relationship of organization with customer in term of dealing with customer services and other requirement
4. **Integration with supplier:** The relationship of organization with suppliers in term of providing and receiving raw materials and goods and services and other requirements.

B. Dependent Variables

1. **Quality Conformity:** This is a section of the organization and the meaning of his work, which is that the company's products are the bare minimum that has been developed by specialists within the limits of product quality through several standard measures were taken thoughtfully.
2. **Design Quality:** This is also a special section in the organization who is specialized with the shape and product design concerns a suit product through standards that have been developed by specialists regarding the exterior of each product from the packaging and the form and explain and clarify and internally split shape and size within the specific criteria method It may not be bugs out.
3. **Product Quality:** This section in the organization that is specialized with the total quality management and standards and must be suit with organization standards of goods and services.

VII. Study Hypothesis

HO: No effect is statistically significant at the significance level ($\alpha \leq 0.05$) to manage the integration of the supply of the product in Nabil Company for Food Industries and the quality of branched chain including the following sub-hypotheses:

1. **HO:** There is no significant effect at the statistical significance level ($\alpha \leq 0.05$) for the integration of internal company on quality products Nabil Company for Food Industries.
2. **HO:** No effect is statistically significant at the significance level ($\alpha \leq 0.05$) for integration with the customer on the quality of products Nabil Company for Food Industries.

3. **HO:** No effect is statistically significant at the significance level ($\alpha \leq 0.05$) for integration with the supplier on the quality of products Nabil Company for Food Industries.

VIII. Methodology

The target population for this research is the nabil food industry in Jordan so both primary and secondary data were collected for this study. Qualitative interviews were carried out, and the study is a statistical constructive descriptive through the data provided in the questionnaire.

IX. Population of Study

Population samples include a random sample of employees of "Nabil Company for Food Industry" workers from all sections and departments of the Organization: Higher Management production, IT Department, Department of human resource, department of Packing. It has been distributed to the sample community, has been chosen and the number of questionnaire is 120, has been distribution to different sections and collecting 93 out of 120 questionnaire. And then work on to bring out detail and divided and summarized questionnaires to bring out the options that have been selected by the employee, in the form of a table summarized in an orderly and secrete all options.

And then do the statistical side through the SPSS program to bring out and complement the work, secretion of variables, and take out the statistical results, and knowledge of the dependent and independent variables, find out how much the influence of the independent variables on the dependent, and to know the relationship between them. And then take out a host of other necessary statistical calculations, such as the arithmetic mean and standard deviation.

For each of the various paragraphs of the study, which was formed from the five main paragraphs: Internal integration, integration with the customer, integration with the supplier, the quality of design and quality of conform the relationship between the variables and their impact quote from the organization through:

The integration of the supply chain	-	product quality
Internal integration	-	conformance quality
Integration with customer	-	design quality
Integration with	-	suppliers

And the correlation of these variables- with each other through a visits by researcher to Nabil Company for Food Industry and met with some of the administrators in the presence of variation in the level of supply chain management, although the supply chain management is a competitive factor in the success of the company and therefore, the purpose of this study is to identify the supply chain management in Nabil company and can achieve the purpose of this study by answering the following main question: What is the impact of supply chain management on the performance of Nabil Company and quality of their products? And has emerged from this question the following sub-questions:

The first sub-question: Is there a relationship with brokers and distributors on the quality of Nabil Company?

Sub Second question: Is there a relationship with suppliers on the quality of Nabil Company?.

X. Determinants of the Study

1. The nature of the field study as required time and extra effort to visit all of the sites for the distribution of questionnaires and sometimes non-existence of the respondents do during their visit, which the researcher was forced to re-visit more than once.
2. Adoption of a researcher at the unit of analysis, which included managers working in senior management.

XI. Previous Studies

1. Study (Alshmot 2007) entitled "The impact of the company's relationship with suppliers in the supply chain management in Jordan's medium industrial companies"
The study aimed to examine the effect of the type of Jordan's medium industrial companies relations with the suppliers in the supply chain by studying the relationship of supplier companies surveyed.
2. Study (Abu Men 2007) entitled: "impact of the supply chain management on the institutional performance in industrial companies in Yemen "The study aimed to identify the level of the impact of supply chain management at the institutional performance in the Yemeni industrial companies as well as to identify the main obstacles in the implementation of supply chain management.
3. Study (Aljozanih and Hourri, 2010) entitled: "evaluating the performance of the supply chain Management in the Jordanian industrial companies: An Empirical Study "The study aimed to identify the level of performance of supply chains in the chemical industry sector organizations, and the paper industry, and Food & Beverage Industries Jordan.
4. Study (Logo 2011) entitled: assessing the impact of the supply chain and procurement practices on the financial performance of industrial organizations and service strategies in Jordan. This study aimed to assess the impact of the supply chain and procurement practices strategies in the financial performance of industrial and service organizations in Jordan.
5. A study (tallri, 2004)
(An IT/IS Acquisition and Justification Model for Supply Chain Management Supply-Chain Management (SCM) involves coordinating and managing all the activities from raw materials procurement to the delivery of the final product to the customer. A key ingredient for effective SCM is timely planning and information processing across the entire value-added chain. This process demands the efficient use of Information Technologies/Information Systems (IT/IS) at strategic, tactical, and operational levels of SCM. There are currently several software vendors that support planning and execution at each of the aforementioned levels, which provide the decision-maker with several alternative choices. Proposes a multi-objective mathematical model for effective acquisition and justification of IT/IS a system for SCM. An illustrative example details the application of the model.
6. A study (George L. Harris, 2003), (The Value of Integration R Measurement Systems and Application of Knowledge In Supply Management to Organization Performance.

This study traced the impact of scientific management and knowledge management in the management of supply chain management. The impact was defined by the independent variables of the application of knowledge, cross-functional integration, and the use of performance measurements methods on firm performance.

XII. Statistical Analysis

Descriptive the characteristics of the study sample have been extracted frequencies and percentages for members of the study sample distributed according to the personal information set out in Table (1)

Table 1:

Property	Categories	Repetition	Ratio%
Social Type	Male	71	76.3
	Female	22	23.7
	Total	93	100
Age	Less than 25 years	7	7.5
	25-35 years	39	41.9
	35-45 years	33	35.5
	45-55 years	7	7.5
	55 years and over	7	7.5
	Total	93	100
Years of Experience in Current Position	Less than 5 years	19	20.4
	5-10 years	58	62.4
	10-15 years	13	14.0
	15 years and over	3	3.2
	Total	93	100
Years of experience in the Company's current	Less than 5 years	73	78.5
	5-10 years	12	12.9
	10-15 years	5	5.4
	More than 15 years	3	3.2
	Total	93	100
Qualification	Diploma	25	26.9
	BA	65	69.9
	M.A.	2	2.2
	Doctorate	1	1.1
	Total	93	100

XIII. Test Hypotheses

HO: No effect is statistically significant at the significance level ($\alpha \leq 0.05$) to manage the integration of the supply of the product in Nabil Company for Food Products Quality series

H A: There is a statistically significant effect at the significance level ($\alpha \leq 0.05$) to manage the integration of the supply of the product in Nabil Company for Food Products Quality series as in below fig. 1.

Calculated value of T	Tabulated value of T	SIG	Degree of Freedom	R	R2	Result of Premise nihilism
4.47	1.9861	0.00	92	0.424	0.180	Reject

Fig. 1:

The test was used simple regression and we find our reading of computer results in Table (5) The value (T calculated = 4.47) greater than the value of tabular Since the decision rule is to accept the premise of nihilism (HO) if the calculated value is less than the value tabular and rejects nihilism value (HO) if the calculated value is greater than the tabular value, and therefore we reject nihilism value (Ho) and accept the alternative hypothesis value (Ha) and confirm this result the value of Sage and adult (0.00) which is less than the significance level (0.05) this means there is a sign with a statistical significance level ($\alpha \leq 0.05$) for

integration with the customer on the quality of products Nabil Company for food products.

XIV. Results of the Study and Analysis of the Hypotheses

First: The impact of the supply chain in the performance of companies: The results indicated the presence of the impact of supply chain management on product quality in Nabil Company and that of the viewpoint of managers in the upper departments. The researcher believes that because the organization's success is achieved without that there will be integration and coordination between the various functions of the company and its effectiveness.

Second: The impact of the relationship with suppliers to improve the performance of companies: The results indicated the presence of the effect of the relationship with suppliers on the performance of Nabil Company for Food Industry and that of the viewpoint of managers in senior management, as the results show the importance of the effect of the continuity of the relationship between the supplier and the company and that the relationship is based on trust and commitment.

The researcher believes that companies can get some benefits and rumor trust and cooperation between the organization and its suppliers and other companies in the supply chain.

Third: The impact of the relationship with brokers and distributors in improving product quality: The results indicated the presence of the effect of the relationship with brokers and distributors of the product in Nabil Company and that of the senior management viewpoint quality. The researcher believes that the good performance of the supply chain practices associated with the level of attention given by the departments of organizations to maintain strong relationships with brokers and distributors.

Fourth: The effect of the relationship with customers to improve the performance of companies: The results indicated the presence of the effect of the relationship with the customers on the product in Nabil Company for quality, from viewpoint of senior management. The researcher believes that the importance of focusing on the relationship with customers because the long-term relationship with customers provides a competitive advantage for companies.

XV. Recommendations

Recommendations can be summarized in the form of a set of points, including:

1. To adopt a strategic gateway for the management of the companies based the series on the basis of the establishment of long-term relationship with suppliers.
2. The companies maintain a relationship with customers by giving customers a greater role in determining the nature of the products and services.
3. The companies are working to take advantage of the capabilities of suppliers to provide important information to help companies develop their products.
4. The companies are working to acquire the elements which support the supply flexibility.
5. The decision-maker is working and who is to it upon himself to develop strategies on suppliers properties analyzed in terms of the number of suppliers and their abilities.
6. The managers of companies mastered the ability to own the

supply chain, and its composition and management contribute to generate a competitive advantage.

7. The companies are working to establish relationships with suppliers.

References

- [1] Allnoch A, "Supply chain management can benefit utility companies", *IE Solutions* 29(9) pp. 10-11, 1997.
- [2] Bechtel C., Mulumudi, J., "Supply chain management: A Literature Review", *Proceedings of the 1996 NAPM Annual Academic Conference*, 1996.
- [3] Bhawani S, "Up the value chain", *Telecommunications* 31(3) pp. 43-44, 1997.
- [4] Cavinato JL., "Identifying Interfirm Total Cost Advantages for Supply Chain Competitiveness", *International Journal of Purchasing and Materials Management* 27(4) pp. 10-15, 1991.
- [5] Davis T, "Effective supply chain management", *Sloan Management Review* 34(4) pp. 35-46, 1993.
- [6] Ellram LM., Easton L, "Purchasing education on the Internet. *Journal of Supply Chain Management* 35(1) pp. 11-19, 1999.
- [7] Fisher M. L., Hammond J. H., Obermayer W., Raman A., "Configuring a Supply Chain to Reduce the Cost of Demand Uncertainty", *Production and Operations Management*, 6(3) pp. 211-276, 1997.
- [8] Gattorna J.L, Walters D.W., "Managing the Supply Chain", A strategic perspective. Macmillan:New York, 1996.
- [9] Hafeez K, Griffiths M., Griffiths J., Naim M M., "Systems design of a two-echelon steel industry supply chain", *International Journal of Production Economics* 45(1-3) pp. 121-30, 1996.
- [10] Johnson E.M., Davis T, "Improving supply chain performance by using order fulfillment metrics", *National Productivity Review* 17(3) pp. 3-16, 1998.
- [11] Kasouf C.J., Celuch K.G., "Interfirm relationships in the supply chain: The small supplier's view", *Industrial Marketing Management*; 26(6) pp. 475-86, 1997.
- [12] Laios L. Moschuris S, "An empirical investigation of outsourcing decisions", *Journal of Supply Chain Management* 35(1) pp. 33-41, 1999.
- [13] MacDuffie JP., Helper S., "Creating lean suppliers: Diffusing lean production through the supply chain", *California Management Review* 39(4) pp. 118-51, 1997.
- [14] New S.J., "A framework for analysing supply chain improvement", *International Journal of Operations & Production Management* 16(4) pp. 19-34, 1996.
- [15] Poirer, CC., Reiter SE, "Supply Chain Optimization. Building the strongest total business network", San Francisco:Berret Koehler, 1996.
- [16] Ziad Zeid Riad, "Psychological impact on workers in the Social Security Corporation in Jordan staff behavior", 2010.
- [17] Ismail Mohamed Nasser, Jassem. Thanon Nabil Nasser, "The regulatory climate in the employee in the organization's behavior raised", 2012.
- [18] Al khaddar Beshr. Marwa. Ahmad Abu Hantash, "The relationship of staff stationed in the behaviors within the organization", 2013.