Examining the Relationship between Supply Chain Relationships and Practice of Distributors (Case Study: NoshinCo)

Hassan Mehrmanesh¹*, Seyed Rahim Safavi Mirmahalleh²

¹Department of Industrial Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran, ²Department of Management, University of Payame Noor, Tehran, Iran. *Email: Has.mehrmanesh@iauctb.ac.ir

ABSTRACT

The term “relationships” covers a lot of ground in supply chain management. There are strategic relationships, tactical relationships, transactional relationships, internal relationships, and possibly more. For industrial companies, the last part of the supply chain that is distribution and sale is of great importance due to its direct relationship with the profit, so they seek to improve the performance of their distributors at the end of the supply chain at any costs. This study aims to investigate the relationship between supply chain relationships and the performance of distributors of manufacturing company, and research methods is descriptive-correlational. The study population is NoshinCo. The results show that there is a significant relationship between relationships in supply chain and the performance of distributors.

Keywords: Supply Chain, Relationships, Supply Chain, Distributors’ Performance, NoshinCo

JEL Classifications: E37, E32, C53, C5

1. INTRODUCTION

In today’s knowledge-based economy, competitive advantage is increasingly found work in facilitating the process of information than in resources available and access to specific markets. Thus, knowledge and intellectual capital are outlined as the primary core for the acquisition of competencies and a strategy for superior performance. In order to achieve sustainable competitive advantage, attention to the existing knowledge, how to use it effectively, and creating a structure to use information and new knowledge are considered as vital and organizations must have special attention to them. Supply chain management is about more than making sure all the different links in your network are operating in the right way. Relationships play a central role in supply chains and if organizations don’t get them right, they’ll feel the ramifications all the way from suppliers to customers. Firms are building collaborative relationships with their supply chain partners in order to achieve efficiencies, flexibility, and sustainable competitive advantage. However, it is unclear if collaborative relationships provide benefits that compensate for the additional expense associated with such relationships (Karimi et al., 2009). In global competition of this era, diverse products must be available to the customer upon his requests. Customer demand for high quality and instant serving have increased pressure that did not exist in the past, so the company cannot afford to do all things alone. Therefore, activities such as supply and demand planning, materials procurement, product production and planning, product maintenance service, inventory control, distribution, supply and serving the customers that all used to be done at company level have transferred to supply chain level. The key point in a supply chain is management and coordinated control of these activities. Today, supply chain management is as one of the principles underlying the implementation of electronic business in the world (Karimi et al., 2009). The customer or final consumer ultimately determines the success and failure of the supply chain. Supplying the proper commodities at the correct time and price to the consumer the right time is not only the most important factor for competitive success, but also plays a key role in the survival of a business entity. Thus, in order to establish a new strategy for supply chain, customer satisfaction and recognition of the market are the critical elements essential in these areas. Only when the limitations of the market are known, one unit can supply, mine,
Mehrmanesh and Mirmahalleh: Examining the Relationship between Supply Chain Relationships and Practice of Distributors (Case Study: NoshinCo)

and develop strategies in order to cover the needs of the supply chain and in fact the final customer. In today’s markets, competitive and technological factors are so increasingly increase that for the companies, the production of what is needed is difficult and not cost effective. Moreover, the increasing globalization and customer-orientation have led to sensitivity in organizational planning. Supply chain management is an approach that is formed from the heart of these issues. Supply chain management has become important as one of the 21st century’s paradigm of production in order to improve corporate competitiveness. Thus, we witness a rapid growth in this area. Supply chain management is facing challenges such as building trust and cooperation among supply chain partners, determining the best steps that can facilitate alignment and integration of the supply chain process, and the successful implementation of the latest information systems both computer and internet technologies that are the drive for efficiency, performance, and supply chain quality (Alvani and Mirsharifi, 1999).

Each business organization is at least a part of a supply chain and many organizations are part of several supply chains. The number and type of organizations in a supply chain are determined by whether the supply chain is production-oriented or service-oriented. The figure below shows normal service and production supply chains. Most manufacturing firms manufacturing are like networks of locations and distribution. One of their tasks is procurement of raw materials and changing them into finished and intermediate products and then delivering them to customers. Supply chain management manages these networks. Short-term goal of supply chain management is primarily to increase productivity, reducing inventory and total cycle time. While its long-term goal is to increase customer satisfaction, market share, and earnings for all organizations involved in the supply chain, i.e. suppliers, manufacturers, distribution centers, and customers. To achieve these objectives, rigorous coordination among agencies involved in supply chain is needed (Ghazanfari, 2002).

For industrial companies, the last part of the supply chain that is distribution and sale is of great importance duets to its direct relationship with the profit, so they seek to improve the performance of their distributors at the end of the supply chain at any costs. The main problem in industrial firms in our country is that the effect of relationships in supply chain, especially at the end of the chain that is distribution on sales and the performance of the last chain of the organizations that is distributors is unclear. In other words, whether trust relationships, cooperation, or electronic exchange in supply chain of the firm has a significant relationship with the performance of the distributors in supply chain in the characteristics of financial performance, value, promotion, and staff or not.

1.1. The Objectives of the Study
Determining the relationship between supply chain relationships and the performance of distributors in NoshinCo.

The research question is: Is there a significant relationship between relationship in supply chain and the performance of distributors of NoshinCo?

The research hypothesis is there is a significant relationship between the relationship in supply chain and the performance of NoshinCo distributors.

2. SUPPLY CHAIN
In the past, most organizations rarely managed their supply chains. Instead, they tended to focus on their operations and on their immediate suppliers. However, some factors make supply chain management favorable for business organizations that their supply chain is active. The major factors are the need to improve operations: During the past decade, many organizations did activities such as lean manufacturing and total quality management. As a result, they will be able to achieve improved quality and at the same time destroy a lot of additional cost external to their system, however, there is still room for improvement. Now, the opportunities exist mainly in providing and procurement, distribution, and supply chain support. One of the main issues of supply chain is the selection and evaluation of suppliers of a product and services. There is always quality criteria such as time of delivery and procurement of the goods for each basses of a supply chain in order to select or rank suppliers. Overall, supply chain is made up of two or more organizations that are officially separated from each other and related by material flows and financial flows of information. These organizations can be firms that produce raw materials, components, finished products or services such as distribution, storage, wholesale and retail. Supply chain includes all activities related to the flow and conversion of goods from the raw stage to delivery to the final consumer as well as information flows associated with them, and are made of the following components.

The upstream supply chain: This includes primary suppliers that can be assembler or manufacturer.

Internal supply chain: It covers all the processes used by an organization in turning the data transferred to the organization by hosting providers to output, from when the material is organized as long as the final product to be distributed outside the organization, activities include material handling, inventory management, manufacturing and quality control. Downstream supply chain: This includes all processes involved in the distribution and delivery of products to end customers. Very often can be seen that the product is relegated or consumed, supply chain ends. Here, the activities may be performed using several distributors such as retailers and wholesaler. A management construct cannot be used effectively by practitioners and researchers if a common agreement on its definition is lacking. Such is the case with the term “supply chain management” — so many definitions are used that there is little consensus on what it means (Mehta et al., 2006).

3. LITERATURE REVIEW
Abbasiraei and Kamalabadi (2008) studied the role of classification systems and goods coding, supply chain integration, and the necessity of using a comprehensive classification system
and coding. The results showed that supply chain includes all activities related to the process from changing goods into the raw material stage (mining) to delivery to the final consumer as well as information flows associated with them. Price, quality, flexibility of the members, and transparency are the most important criteria for evaluating the performance of a supply chain.

Karimi et al. (2009) “development and explanation of a configuration for classifying supply chains using resource-based approach in automotive industries.” In this study, the views of automotive industry experts in five supply chain related to Daimler, Fiat, Iran Khodro in five supply chains related to Daimler, Fiat, Iran Khodro, Saipa, Center of Bahman Motors were used. As a result, three types of supply chains based on supply chain capabilities based on supply chain capabilities and environmental factors were determined: Supply chains without waste, customer-centric supply chains, and innovative supply chain.

Gunasekaran et al. (2001) developed a framework to assess the performance of the area of strategic, tactical, and operational levels of supply chain. The framework basically deals with the supplier, delivery, customer service, and inventory and logistics costs.

In this study, an analytical framework for supply-chain performance evaluation is offered (Estampe et al., 2013).

4. METHODOLOGY

This study is applied based on purpose, because the proposed tool is used in an administrative way in an organization and practically assesses the organization (Delaware, 1999, p. 28). Regarding data collection, it is cross-correlation and field. Among the various tools of data collection, such as observation, questionnaire, and interview and referring to documents, in this research, questionnaire is used to collect data.

4.1. Population, Sample Size and Sampling Method The population is a set of people or units that have at least one common trait (Azar and Momeni, 2004). The population of this research includes managers and supervisors, senior officials and experts of NoshinCo, who are about 1200 people. The sample size, due to population size being known and with the help of Morgan table for sending questionnaires is 250 people. Sampling method is simple random sampling.

4.2. Analysis of the Data

4.2.1. Reliability

The tool’s ability to maintain its reliability over time (despite the unacceptable conditions of test control and the condition of the respondents) confirmed the stability and low variability. There are two ways to test reliability: Test-retest reliability and compatibility reliability (Sekaran, 2002).

In this study, component compatibility test is used to measure the consistency of response with all elements of the measurement device. Cronbach’s alpha coefficient is the most popular reliability test for compatibility.

4.2.2. Cronbach’s alpha

To calculate the internal consistency of the tools including questionnaires, Cronbach’s alpha coefficient is used. Cronbach’s alpha coefficient indicates that questions and answers overlap and the respondents have answered carefully and with awareness. For tests with research purposes, the reliability of higher than 0.7 is suitable. The reliability of the first questionnaire is 0.869 and the second is 0.790 that given its being higher than 0.7, it is an acceptable digits (Momeni, Statistical Analysis Using SPSS, 2007).

4.2.3. Normal test results (Kolmogorov–Smirnov [KS]), the relationships related to the variable in supply chain

KS test is used to verify the claims made about the distribution of a variable about data distribution. To investigate claims of normal distribution of variable of the relations in supply chain, we act as follows:

$H_0$: Data distribution of the relationships is normal in supply chain.

$H_1$: Data distribution of the relationships is not normal in supply chain.

Table 1 presents frequency, mean, standard deviation, absolute value of the maximum deviation, maximum positive deviation, negative deviation statistic, and Z value. As (sig.) is greater than 5%, so $H_0$ is accepted and data-distribution of the relationship is normal in supply chain (Table 1).

4.2.4. The results of normal test (KS) data on the performance of distributors

KS test is used to verify the claims made about the distribution of a variable. To investigate claims of normal distribution of the distribution of data of distributors, we act as follows:

$H_0$: Data distribution of the distributors is normal.

$H_1$: Data distribution of the distributors is not normal.

Table 2 presents frequency, mean, standard deviation, absolute value of the maximum deviation, maximum positive deviation, negative deviation statistic, and Z value. As (sig.) is greater than 5%, so $H_0$ is accepted and performance distribution of the distributors is normal.

5. RESULTS

In this study, to test the hypothesis due to normality of data, Pearson correlation coefficient was used. To examine the claims
of the relationship between supply chain and performance of distributors of Pearson correlation, we act as follows:

\[ H_0: P = 0 \] there is no significant relationship.

\[ H_1: P \neq 0 \] there is a significant relationship.

The Table 3 shows Pearson correlation coefficient output data and the number of sig. (significant) and as sig. is <0.05, \( H_0 \) is rejected, and there is a significant correlation between the variables (correlation coefficient for 250 data is 0.560) and research hypotheses is accepted. Then there is a significant relationship between the relationship in supply chain and the performance of distributors in NoshinCo.

### 6. CONCLUSION

The hypothesis that was the existence of a significant relationship between supply chain and the performance of distributors of NoshinCo was confirmed. The results of our investigation showed the existence of the relationship between supply chain relationships and the performance of distributors who are part of the supply chain company. The meaning of the relationships in the supply chain is the relationships between the components of the supply chain from suppliers of raw materials, supplies, and parts until the final consumer at the end of the supply chain.

The meaning of the performance of the distributors is the quality of products distribution and by one member of distribution chain that is the distributors the company’s products. By the features in the supply chain is the distribution of company products. For industrial companies, the last part of the supply chain that is distribution and sale is of great importance due to its direct relationship with the profit, so they seek to improve the performance of their distributors at the end of the supply chain at any costs. Considering the results, NoshinCo and all industrial companies should pay attention to the relationship in supply chain to improve the performance of their distributors.

### REFERENCES

Abbasiraei, A., Kamalabadi, E.N. (2008), The role of classification and coding of goods in the supply chain integration and the need for a comprehensive system of classification and coding. Institute for Trade Studies and Research, 12(48), 133-163.


