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### "Analyzing the Importance of Logistics in Supply Chain Management"

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#### Abstract

The supply chain management process is the integration of the main business process and the coordination of the actions of the parts of the chain to synchronize all the activities performed during production and distribution, which adds value to the end user and eliminates all inefficient activities. Supply chain management is not only about increasing the productivity and profitability of the individual business components in the chain, but also about optimizing the entire system to achieve high quality service at an overall cost. The paper is based on the secondary data. In this paper, an attempt is being made to understand the importance of logistics in SCM and the complexities and challenges faced in implementation of Supply Chain Management.

#### 1. Introduction

The external environment in which logistics operations are conducted is influenced by changes in the market and changes in the conditions of competition. A timely and adequate response to these changes requires a systematic planning, design and reconstruction of the logistics system by any company, taking into account the current situation and evaluating potential options for its development. A new format in project logistics is actively evolving into a global format - supply chain design. It is a new type of logistics system, the management of which is called supply chain management with a view to reducing overall costs, increasing profits, improving customer service and reducing the impact of uncertainty on the system. In order to manage effectively, it is necessary to understand the concept of supply chain, their classification.



Fig. 1 Supply Chain Management

The main features of the supply chain that distinguish it from traditional freight traffic are:

1. It is a network of partner companies, not competitors.
2. The goal of the supply chain is to increase the value and profitability of all interacting companies.
3. The supply chain consists of a variety of autonomous entities.
4. In accordance with the general rules of partner strategy and tactics work in concert.

### 1.1 Logistics Chain

It is necessary to distinguish between concepts such as logistic chain and logistic channel. A logistics chain is a sequential operation of individuals and / or legal entities (manufacturers, distributors, warehouses) conducting logistics operations (value added) to divert external content from one logistics system to another (in terms of product usage) or to end customers.

It is also possible to show the supply chain more broadly or narrowly. Thus, a logistics chain is an individual and / or legal entity (supply) directly involved in bringing a particular manufacturer to customers. The doer, the mediator, the carrier has a sequential order. The logistic chain is the sequence of technical and logistic operations in any branch of production under one control. Thus, in this case the logistics chain is a subset of the logistics channel, i.e. the concept is compressed.

Logistics channel (distribution channel, sales channel, and distribution channel) is a broad concept, defined in the glossary as "a partially ordered set of customers, suppliers, intermediaries, carriers, insurance companies and other persons involved in the movement of goods." The two types of logistics are closely related. A logistics channel is a potential opportunity for consumers to choose in a market economy and once selected, it transforms into a logistics chain.

## **2. Objectives**

1. To understand the concept of logistics in supply chain management
2. To study the challenges faced in the implementation of Supply Chain Management
3. To understand the Supply chain complexities

## **3. Research Methodology**

The study is entirely based on secondary data. The researcher has referred various research journals and articles for the study.

## **4. Logistics in Supply Chain Management**

In logistics management, the concept of supply chain is important. The origin of the term "supply chain" is parallel to the term "supply chain management". Supply chains include numerous companies that promote content (finished products to the last customer); Supply chain coordinators are companies that bring products or services to market.

The supply chain consists of stages with direct or indirect involvement in the customer satisfaction process. A supply chain consists of three or more organizations (or individuals) that supply products, materials, and / or customers. It is important to note that these definitions include the end customer. Supply chain can also be defined as a network of partners that more accurately reflects reality.

A supply chain is a network of production and distribution points that involves the purchase and sale of goods by a supplier to the finished product customer. The supply chain is a network of organizations engaged in upward and downward relationships, various processes and activities that create value in the form of products and services delivered to end users. It is also important to note that several supply chains can be part of the same company at the same time.

### **4.1 Process approach in SCM**

It is a modern effective method of analyzing and modifying technical goods and financial systems. When using this method in the context of the supply chain, the following two types of processes can be identified:

1. Supply chain function (work) process
2. Supply chain design and manufacturing process.

## **5. Complexity in Supply chains in terms of structure and functioning of the system.**

The general theory of systems proceeds from the fact that any object or process (technical, economic, social, biological, physical) can be analyzed and created as a system, that is, one of the interrelated components working to achieve a goal. In order to achieve its goal, some components of an object consist of parts (elements), structures (various relationships between elements in the system), display behavior (activity or performance), interact with the external environment and achieve the result of its action, which is compared to the set goal.

### **5.1 Classification in Supply Chain**

Supply chains can also be classified depending on the number of links, there are three levels of supply chain complexity:

**a) Direct supply chain:** It consists of a focal (central) company (usually an industrial or trading firm), supplier and buyer / consumer in external and / or internal flows of products, services, finance and / or information. At the same time, as a rule, the focus company determines the structure of the supply chain and the management of relationships with business counterparts.

**b) Extended supply chain:** The expanded supply chain includes additional suppliers and second tier customers.

**c) Maximum supply chain:** It consists of the focal company and all of its parts on the left (up to the suppliers of raw materials and natural resources), which determines the resources of the focal company - on the "input" and the distribution network on the right - the tire supplier focus company tier. Customer tier | Supplier Focus Company Tier | Customer tier || Supplier Supplier Tier || Customer Customer up to 14 (individual) customers as well as logistics, institutional and other intermediaries.

Thus, the supply chain is a sequence of suppliers and customers: each customer becomes a supplier of subsequent (links below) actions, and this continues until the finished product reaches the end user.

## 6. Supply Chain Strategies for the Supply Chain Partners

1. **Competitive** is an independent relationship, the price is set based on the market forces (negotiating power) of the partners. Most markets for goods (with low prices to switch to a new supplier) or markets with a large number of small customers operate on a competitive basis. There is no point in maintaining a long-term relationship because you can find a new partner at any time without any additional cost. Accordingly, in such a situation the partners will "compete for profit" and the price will be fixed on the sign corresponding to the strength of each party. Supply chain management is not possible in such a relationship.

2. **Cooperative** - An interdependent relationship, within the framework of this relationship, new value can be created. Cooperative relationships include critical specific investments, for example, investments in general information systems; The return on such a relationship can only come in the long run. There are many pre-requisites before cooperative relationships and relationships within a managed supply chain can be considered appropriate.

3. **Team** - Dependent relationships, dominated by one side (market position, ownership structure, opportunistic behavior, etc.) and can impose their own decisions.

Any of these strategies can be implemented by any one party: buyer or seller, depending on how strong the player is, what his strategies and plans are, what the options are, and so on.

## 7. Supply Chain Management Challenges

Supply chain management is a unique process as it extends to many companies and depends on many factors. According to the annual survey of the Logistics Coordinating Council, the primary things that companies plan to handle in the

coming years include the implementation of a supply chain management system.

The main sources of problems are:

- a) Material flow (cargo, stocks, finished products)
- b) Information flow (electronic data exchange, information transfer between people)
- c) Relationships: Human factors play an important role in any organization, so relationships can provide a more lasting advantage than other assets because they cannot be copied and therefore should not be ignored. Consider the main problems that arise in supply chains.

## 8. Conclusion

The company seeks, develops and uses all logistics skills to meet the needs of its critical customers at a realistic total cost. A highly sophisticated and intelligent logistics strategy focuses on the lowest possible level of total cost or the highest level of customer service. A well-established logistics system is characterized by a quick response to emerging customer requests, built-in mechanisms for monitoring changes in operational activities, and minimal inventory requirements. In short, industries that gain strategic advantage through logistical capabilities determine the nature of competition in their industries. Successful enterprises pay close attention to the development and continuous improvement of their logistics skills.

The supply chain management process is the integration of the main business process and the coordination of the actions of the parts of the chain to synchronize all the activities performed during production and distribution, which adds value to the end user and eliminates all inefficient activities. Supply chain management is not only about increasing the productivity and profitability of the individual business components in the chain, but also about optimizing the entire system to achieve high quality service at an overall cost.

Companies need to find new ways to communicate with supply chain partners as all organizations in the supply chain need to work together on product planning, forecasting, production, distribution and distribution. In order to improve operational efficiency, a company must be viewed not only as an established structure but also as a system of interrelated business processes aimed at achieving strategic or executive objectives. Organizing a business on this basis makes it possible to solve many important tasks: reducing non-product costs and optimizing the use of resources to strategically comply with the needs of customers in a particular market segment.

By controlling, a company can more accurately describe its actions and respond quickly to changes in the external and internal environment.

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