

Introduction to Supply Chain Management

1.

i.

Improve customer relationships and service.

Reduce indirect and direct labour cost.

Improve productivity and business operation.

Enhanced supplier collaboration.

Improve inventory management.

Enhance delivery service and minimalized delays.

Increase revenue or ROI.

Enhance decision making speed and strategy.

Reduce warehouse and transportation cost.

Improve product and service quality.

Provide security for investors.

The intended benefits of supply chain management are a reduction of the bullwhip effect, better buyer/supplier relationships, better quality, lower costs, better customer service, higher demand, and more profits.

ii.

production

inventory

location

transportation

information

iii.

Modern supply chain partnerships are much different. Today, partnerships encourage sharing and collaboration from the design phase to the delivery phase. Nowadays, partners see each other as a chain of customers connected by their goal of pleasing the final end-customer. While cost is still an important aspect of creating value for the customer, today's supply chains also focus on the importance of higher quality, more customization, and swift delivery service. It is for this reason that modern partnerships focus on collaboration from the moment they begin to design a product until the product's life cycle has run its course. Modern partnerships often include a small number of partners who understand the value of long-term contracts that value quality, speed, and flexibility as much, if not more, than cost.

In the past, supply chain partnerships did not really exist. Supply chains were seen as a series of independent organizations that were looked on to perform their core competencies for the sake of their downstream partners. Firms in the past did not seek to share information. Instead, buyers of supplies and services were usually reduced to bargain hunters. Traditional relationships were also characterized by a large number of partners and short-term contracts. In some cases, firms seeking more supply chain control formed conglomerates.

iv.

All of the raw materials, work in process (WIP), and finished goods within the supply chain. Inventory policies can dramatically alter a supply chain's efficiency and responsiveness.

Activities employed in maintaining the optimum number or amount of each inventory item.

The objective of inventory management is to provide uninterrupted production, sales, and/or customer-service levels at the minimum cost. Since for many companies inventory is the largest item in the current assets category, inventory problems can and do contribute to losses or even business failures. Also called inventory control.

v.

Data and analysis regarding inventory, transportation, facilities, and customers throughout the supply chain. It is potentially the biggest driver since it affects all the other drivers. Information connects various supply chain stages and allows them to coordinate activities. Information is crucial to the daily operations of each stage of the supply chain. An information system can enable a firm to get a high variety of customized products to customers rapidly. An information system can enable a firm to understand changing consumer needs more.

Information is utilized for two purposes in organization's supply chain: Coordinating daily activities related to the functioning of the other four supply chain drivers: production; inventory; location; and transportation. The companies in a supply chain use available data on product supply and demand to decide on weekly production schedules, inventory levels, transportation routes, and stocking locations.

Forecasting and planning to anticipate and meet future demands. Available information is used to make tactical forecasts to guide the setting of monthly and quarterly production schedules and timetables. Information is also used for strategic forecasts to guide decisions about whether to build new facilities, enter a new market, or exit an existing market.

Within an individual company the trade-off between responsiveness and efficiency involves weighing the benefits that good information can provide against the cost of acquiring that information. Abundant, accurate information can enable very efficient operating decisions and

better forecasts but the cost of building and installing systems to deliver this information can be very high. Within the supply chain as a whole, the responsiveness versus efficiency trade-off that companies make is one of deciding how much information to share with the other companies and how much information to keep private. The more information about product supply, customer demand, market forecasts, and production schedules that companies share with each other, the more responsive everyone can be. Balancing this openness however, are the concerns that each company has about revealing information that could be used against it by a competitor. The potential costs associated with increased competition can hurt the profitability of a company.

vi.

1.Cycle Inventory

2.Safety Inventory

3.Seasonal Inventory

2.

Location refers to the geographical setting of supply chain facilities. It also includes the decisions related to which activities should be performed in each facility. The responsiveness versus efficiency trade-off here is the decision whether to centralize activities in fewer locations to gain economies of scale and efficiency, or to decentralize activities in many locations close to customers and suppliers in order for operations to be more responsive. When making location decisions, managers need to consider a range of factors that relate to a given location including the cost of facilities, the cost of labour, skills available in the workforce, infrastructure conditions, taxes and tariffs, and proximity to suppliers and customers. Location decisions tend to be very strategic decisions because they commit large amounts of

money to long-term plans. Location decisions have strong impacts on the cost and performance characteristics of a supply chain. Once the size, number, and location of facilities are determined, that also defines the number of possible paths through which products can flow on the way to the final customer. Location decisions reflect a company's basic strategy for building and delivering its products to market.

3.

Producers or manufacturers are organizations that make a product. This includes companies that are producers of raw materials and companies that are producers of finished goods. Producers of finished goods use the raw materials and subassemblies made by other producers to create their products.

Distributors are companies that take inventory in bulk from producers and deliver a bundle of related product lines to customers. Distributors are also known as wholesalers. They typically sell to other businesses and they sell products in larger quantities than an individual consumer would usually buy. Distributors buffer the producers from fluctuations in product demand by stocking inventory and doing much of the sales work to find and service customers.

Retailers stock inventory and sell in smaller quantities to the general public. This organization also closely tracks the preferences and demands of the customers that it sells to. It advertises to its customers and often uses some combination of price, product selection, service, and convenience as the primary draw to attract customers for the products it sells. Discount department stores attract customers using price and wide product selection.

