Supply chain drivers - Role and relevance

Learning objectives

- Understand the role of drivers in supply chain performance, their components, and their influence on competition by linking business and supply chain strategies
- Understand the definition of drivers—namely, facilities, transportation, inventory, sourcing, pricing, and information—and their importance in supply chain management
- Gain an insight into each driver and the strategic focus, and the competitive force relevant for a chosen focus and a driver
- Comprehend the likely decision-making situations with respect to a driver and competitive Force
- Understand the trade-offs in designing supply chain networks
- Gain an insight into the elements influencing the selection of a specific configuration
- Understand the opportunities and challenges in reconfiguration and in providing flexibility

Supply chain drivers importance

- Supply chain drivers enable a balance between responsiveness to the customer and efficiency in supply chain that allows the company to be competitive in its chosen strategic arena
- Supply chain strategy need to be in sync with functional strategies such as product, marketing, and finance, and competitive strategy

Supply chain drivers

- Facilities
- Inventory
- Transportation
- Sourcing
- Pricing
- Information

Role of facilities in SCM

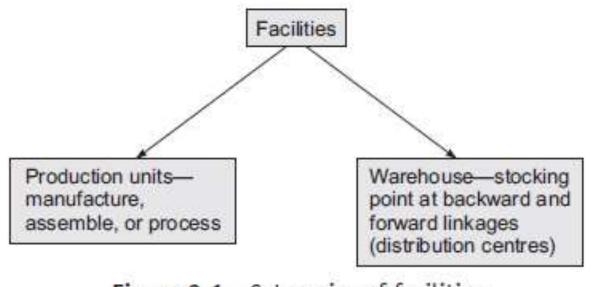


Figure 3.1 Categories of facilities

Facilities importance varies

- The importance of facilities in the supply chain varies, depending upon the focal organization's
 - industry structure
 - Practice
 - nature of goods
 - buyer characteristics and
 - strategic intent

Key facility decisions

- Key facility decisions, whether it be a manufacturing or warehousing facility, would include
 - Location
 - capacity sizing
 - operations methodology

Role of inventory in SCM

- Inventory plays a key role in supply chain as demand and supply often tend to mismatch
- By the sheer character of production and value creation, inventory in supply chain is required

Inventory role varies

- A company's competitive leadership could be impacted in certain industries because of effective inventory management practices
- Inventory as a force in competition is also influenced by business cycles and the need of a firm to adjust inventory, facility management, and production in response to movement in business cycles

Inventory and PLC

- Inventory management policies are interwoven with stages of the product lifecycle
 - Introductory stage
 - Growth stage
 - Maturity stage
 - Declining stage

Components of inventory

- Cycle inventory
 - is the average amount of inventory used to satisfy the demand between receipts of shipments
- Seasonal inventory
 - refers to beefing up or slashing inventory for peak and slack seasons respectively, based on experience and predictability
- Safety inventory.
 - is a build-up to counter uncertainty in demand

Role of transportation in SCM

- Movement of goods across the supply network to the ultimate customer is an important value creating activity
- The choice of transportation is driven not only by efficiency and responsiveness but also by a host of other factors within the framework of decision making

Transportation associations

- Supply chain efficiency and effectiveness can also be achieved by borrowing the industry's best practices.
- For example, **the transport operators** in India have strong associations that constantly endeavour to improve their services.
 - They have a strong network to exchange information and optimize resource utilization
 - Positively affect the overall economy of business that contributes to cost efficiency in transportation.

Key transportation decisions

- Selection of transportation mode and
- Designing a transportation network

Role of information in SCM

- Visibility, which is one of the key features of supply chain, is possible only with right **information** tracking, dissemination, and collaboration based on the same.
- Collaboration fails if information is not transparent
- Information technology changes the industry structure and fundamentals of competition with the application of new generation technology and process speed

Role of sourcing in SCM

- Sourcing refers to
 - selecting a vendor
 - engineering and configuring the product along with vendors
 - strategic investment for committing the vendor as a competitive differentiator and single vendor
 - proprietary commitment on resource and technology

Key sourcing decisions

- Supplier scoring and assessment
- Supplier selection and contract negotiation
- Design collaboration
- Procurement
- Sourcing planning and analysis including scope of outsourcing vis-à-vis
- Manufacturing internally

Role of pricing in SCM

- An efficient supply chain means to move the right product, at the right time, right place, right quantity, and right quality to the right customer at the right price for every one in the supply chain network
- Price is one of the drivers of supply chain network irrespective of whether the focus is on efficiency or responsiveness.
- The other drivers influence and are influenced by the price factor

Key notes on pricing

- Economists have given various theories on how price fixation happens in markets and how non price factors can influence business.
- All non-price factors can be expressed in terms of cost and price.
- These are customer service driven factors where the customer is willing to pay a premium for a desired level of service

Balancing drivers and strategic focus

Endogenous factors

- Facilities including warehouses
- Inventory policy
- Delivery network
- Transportation
- Information
- Pricing

Exogenous factors

- Product portfolio
- Budget allocation
- Market focus
- Brand strategy
- Strength of channel partners

Supply chain configuration is driven by the strategic focus of a firm on the supply chain horizon with respect to responsiveness and cost efficiency

Trade offs in supply chain design

- Demand and supply conditions
- Negotiating power of suppliers
- Negotiating power of buyers
- Innovations and competitive behaviour
- Resources
- Technology
- Government policies
- Changing structure of logistics service providers