



Nakhon Pathom Rajabhat University



Chapter 2

Principle of Supply Chain Management

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Outlines

- Definition of Supply chain management
 - Importance of Supply chain in economy and organization
 - Role of the Logistics industry in the supply chain
 - Supply chain system planning
 - Role of Logistics in supply chain management
 - Exercises
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Definition of Supply chain management

Supply chain management is “the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers.”

Importance of Supply chain in economy and organization



✌️ The role of the Supply chain in the economy

Supply chain management sets the foundation for economic growth by enabling the exchange of goods between businesses and consumers. Its impact on economic growth is possible because of the entities involved in the supply chain.



✌️ The role of the Supply chain in the economy (con't)

(1) Materials processors : This includes companies that process raw materials, such as metal, rubber, and wood, from natural resources.





✌ The role of the Supply chain in the economy (con't)

(2) Producers/Manufacturers : These are the companies that create the products available for sale, turning raw materials into products for consumer use such as glass processors, and automobile manufacturers.





✌️ The role of the Supply chain in the economy (con't)

(3) Transportation companies : Examples of transportation companies include freighter, container ship, and trucking companies. At this point in the supply chain, the products arrive at another site with one purpose : to distribute the product to retailers.





✌ The role of the Supply chain in the economy (con't)

(4) Retailers : At the tail end of the supply chain are the retailers who sell products directly to consumers in shopping centers, stores, and online.





The role of the Supply chain in the organization



(1) Reduced operating cost : Retailers and manufacturers rely directly on Supply chain management to reduce operating costs as Dell computers took orders from customers and retailers worldwide, building their specifications and sending the products to them. Supply chain management saved more than 10 million dollars. Dell didn't have computers lying without use and retailers had no computers lying in warehouses.





✌ The role of the Supply chain in the organization (con't)

(2) Effective customer service : A organization's sole purpose is to meet customers' needs. Supply chain management manages customer service to ensure demands are met. When a call is placed to your organization about a product, customer service reaches out to SCM to ask or investigate what customers want. Customer service 24/7 accessibility is partly dependent on Supply chain management. SCM ensures proper and on-time delivery.



✌ The role of the Supply chain in the organization (con't)

(3) Increasing quality product : Supply chain management increases product quality at customers' request and in a highly competitive market. Services and products must be durable and reliable.



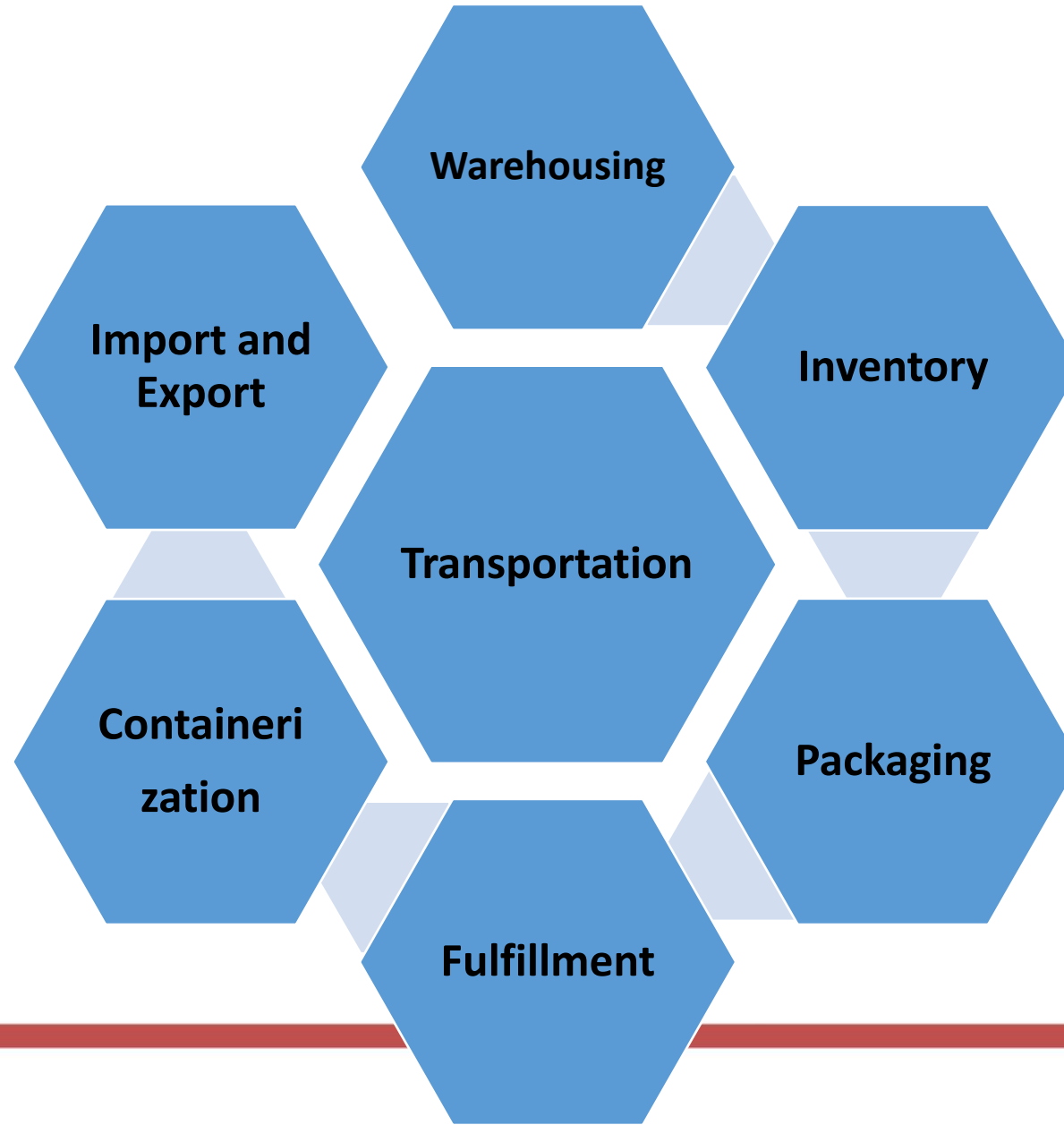


Role of the Logistics industry in the supply chain

☞ The Logistics industry implies a broader spectrum and refers to the whole 'flow' management. This includes not only the transportation and delivery of goods but also the storage, handling, inventory, packaging, and various other aspects throughout the supply chain.



Role of the Logistics industry in the supply chain (con't)





Supply chain system planning

Supply chain system planning is the process of anticipating demand and planning materials and components to meet that demand, along with production, marketing, distribution, and sales.



Supply chain system planning (con't)

Five key elements of supply chain system planning i.e.

- **Supply planning**
- **Production planning**
- **Demand planning**
- **Operations planning**
- **Sales planning**





Supply chain system planning (con't)

Supply planning : The first part of the process is managing the physical supply of goods or services. The objective of this step is to balance material supplies with consumer demands to maximize revenue while meeting market needs.





Supply chain system planning (con't)

Production planning : The next part of the planning process involves the production and manufacturing processes within an organization. This step analyzes the resource allocation of employees, raw materials, and production capabilities.





Supply chain system planning (con't)

Demand planning : Demand planning involves forecasting consumer needs to ensure that the company can meet those requirements. Accurate demand planning can help companies forecast revenue, align inventory requirements and enhance company profits.





Supply chain system planning (con't)

Operations planning : This step helps companies develop specific operational processes to improve their supply chain effectiveness. This step might determine logistics scheduling operations, production timelines, and gap analysis requirements.





Supply chain system planning (con't)

Sales planning : This portion of the planning process can help companies determine actual sales goals and other crucial supply chain drivers that influence sales. The goal of this step is to consider sales, marketing, demand management, production, inventory management, new product introduction, and how it affects the overall supply chain.

Role of Logistics in supply chain management



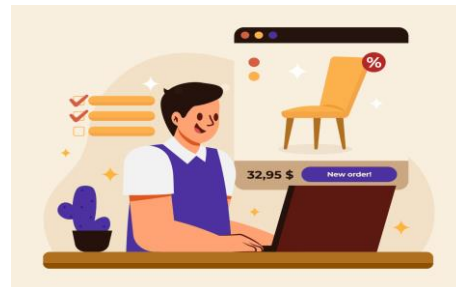
The 10 major roles of logistics in the supply chain i.e.

- Order processing
- Warehouse management
- Inventory management
- Transportation
- Packaging
- Demand forecasting
- Quick response
- Material handling
- Fleet management
- Information and control



Role of Logistics in supply chain management (con't)

Order processing : The major role of logistics in the supply chain begins with order processing as the company accepts the order from the customer. A well-managed logistics ecosystem ensures that the orders are properly prepared, packaged, and delivered products to the destination.



Role of Logistics in supply chain management (con't)



Warehouse management : Managing and storing the inventory is a major process of the warehouse management system because it safeguards the goods which are to be distributed to the customers. It plays a huge role in the supply chain as it is the centralized location that stores all the inventory, whether it is raw materials or finished goods.



Role of Logistics in supply chain management (con't)

Inventory management : It is important to maintain sufficient level inventories for fulfilling customer demands. It helps organizations monitor inventory records for restocking and predicting the demand for goods, ensuring safety, and so on.





Role of Logistics in supply chain management (con't)

Transportation : The act of transporting the goods throughout a company's supply chain efficiently is the most important role of logistics management. It involves automated routing and route optimization that tremendously saves costs and determines the success of supply chain management.





Role of Logistics in supply chain management (con't)

Packaging : During transport and handling, the products or goods can be subjected to breakage or spillage so good packaging is necessary to prevent any kind of mishap. Having the right logistics packaging is majorly important for a well-packaged product that can prevent your product from any kind of damage, deterioration, and tampering.





Role of Logistics in supply chain management (con't)

Demand forecasting : It is an effective way to anticipate the requirement for products or goods in the supply chain management process. The scheduling and planning of processes are important to manage the uncontrollable conditions or circumstances of the market.





Role of Logistics in supply chain management (con't)

Quick response : One of the most important roles of logistics is to resolve the customer query in the shortest time. It enables fleet owners to manage the supply chain for meeting consumer demands.





Role of Logistics in supply chain management (con't)

Material handling : Logistics companies must store and protect the materials throughout the process of manufacturing, warehousing, and distribution. Handling the materials efficiently can ensure that the products or goods are reaching safely to the customers with ever-rising shipping costs.





Role of Logistics in supply chain management (con't)

Fleet management : Tracking and monitoring commercial vehicles with GPS is an important function of logistics as it manages costs and improves the maintenance of fleets. It enhances the safety of the drivers and fleets by providing real-time visibility to businesses.





Role of Logistics in supply chain management (con't)

Information and control : Data-driven logistics operations are fundamental processes of supply chain operations. It is essential to monitor and manage the operations to make better decisions.



Exercises Chapter 2



Question 1 : What is the meaning of Supply chain management ?

Question 2 : What is the role of the Logistics industry in the supply chain ?

Question 3 : What are the key elements of supply chain system planning ?

Question 4 : What are the major roles of logistics in supply chain management ?



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