Supply chain Management  
What is supply chain management ?

A supply chain management is a combined network of individual , organization ,resourcse activites and technoloiges involved in the manufacturing and sale of product or services.

It starts from raw material to supply and end with delivery product to the customer

It is management of the flow of goods,data and finances related to a product or services from the procurement of raw materils to the delivery of the product at its final destination

It refers to the handling of all opertions that relate to building a product of supply chain is to get foods produced and distributed as quickly and efficiently .

Supply chain management flows

Supplier -> producer->customer

Primary cash flow

Acc to olvier and webber

Scm is the process of planning implementing and controlling the operation of the supply chain with the purpose of satisfying the customer's requirement as efficiently as possible.

Objective of SCM

To improve Efficiency

To mimizie the time

To decrease Transportation cost

To Decrease the Warhouseing cost

To Enhance Customer satisfaction

To Maintain Customer good customer relationship and co-ordination

Function of SCM

Acquiring (

Business operations

Transportation and logistics

Mangement of Resourcse

Workflow of Information

**Decision phase of supply chain management**

The decision phase of supply chain management is divided into three levels:

1. Supply chain Strategy or design(long-term)
   1. Focus: **Strategic decision that defines the supply chain structure for the next several years**
   2. Key Decision
      1. Location of production facilities, warehouses and distribution centers
      2. Selection of supplier and outsourcing vs in-house production
      3. Transportation modes and network design
      4. IT systems and infrastructure of managing the supply chain
2. Supply chain planning or tactic (Mid-term)
   1. Focus: **Tactical decision over the next quarter or a year to optimize supply chain performance**
   2. Key decisions:
      1. Demand Forecasting and Inventory Management
      2. Procurement and Supplier Management Strategies
      3. Production Scheduling and Capacity Planning
      4. Distribution planning and allocation of resources
      5. Risk management and contingency planning
3. Supply chain operation (short-term)
   1. Focus**: Executing operational policies effectively for daily operations**
   2. Key decision
      1. Order processing and fulfillment
      2. Managing logistics and transportation
      3. Warehouse operation and inventory control
      4. Customer services and returns Handling
      5. Real-time adjustments based on the demand fluctuation

Unit 3.4

**Process View of a supply chain**

The process view of the supply chain provides a structured way to analyze how materials, information, and finances flow across the supply chain.

1. Cycle View of Supply chain
   1. The cycle view breaks down the supply chain into a series of cycles ,each representing interactions between different stages . It helps in defining operational processes and responsibilities between supply chain entities
   2. Key Supply chain cycles
      1. Customer order cycle (Customer <-> Retailer)
         1. Customer places an order
         2. Order fulfillment processing
         3. Delivery and payment processing
      2. Replenishment Cycle(Retailer <-> Distributor)
         1. Retailer requests restocking
         2. Distributors process the order
         3. Shipment and invoicing
      3. Manufacturing Cycle (Distributor <-> Manufacture)
         1. Manufacturing receives production orders
         2. Raw Materials Procurement
         3. Production, packaging, and storage
      4. Procurement Cycle (Manufacturer <-> Supplier)
         1. Supplier receives raw material order
         2. Materials production and shipment
         3. Quality check and inventory Management

**Advantages of Cycle View**

Clearly defines roles and responsibilities

Helps in improving efficiency at each stage

Userful for optimizing lead times and reducing dela

1. Push / Pull view of a supply chain
   1. The push/pull view catog

**-Cycle view and push/pull view**

**How much to produce?**

The manufacture can produce the product the basic two types   
1. Based on Customer Demand

2. Based On Forecasted Sales/Demand

**Pull system in SCM**

*Customer -> order->retailer Automatically replenish stock*

*Distributor automatically replenish warehouse of the manufacturer*

*In a pull-based supply chain, produrement production and distribtuioon are demand-friven rather than based on predications*

*Goods are produced in the amount and time needed ,*

*Pull system are often preferred in situation where there is limited demand for as specific*

*Product or when the cost of managing excess inventory outweighs the benefits of having a surplus of product in stock*

**Push System in SCM**

Manufacture Forecast sales/Demand

Based on forecast order given to supplier

Supplier Supply Raw Material to manufacturer as per sale forecast

Supplied to Retailer as per Forecast

Customer Purchases what is on shelves