

SCM Summary notes

Section 1: Strategy, Products, and Capacity

Chapter 1: Introduction

Operations and supply chain management involves

- Product design
- Purchasing
- Manufacturing
- Service operations
- Logistics
- Distribution

Success depends upon

- Strategy
- Processes to deliver products and services
- Analytics to support the decisions needed to manage the firm

DM is either qualitative or quantitative

Operations and supply chain management: the design, operation and improvement of the systems that create and deliver the firm's primary products and services.

- Involves the integration of strategic processes to implement the strategy and analytics to support the ongoing decisions needed to manage the firm
- Clear management responsibilities
 - o functional field of business
 - o concerned with the management of the entire system that produces a product or delivers a service.
- Series of transformation processes.
- Networks constructed- each part controlled by different companies E.g. producer, manufacturer, retailer.
- Materials transported using transportation providers. E.g. trucks and ships.
- For successful transaction, all of these steps need to be coordinated and operated to keep costs low and to minimize waste.
- OSCM manages all of these individual processes as effectively as possible

Operations: the manufacturing and service processes that are used to transform the resources employed by a firm into products desired by customers.

- Products → Produce physical product e.g. automobile or computer
- Services → Produce intangible product e.g. call center
- Planning to use these processes involves analysing capacity, labour and material needs overtime.

Supply chain: the processes that move information and material to and from the manufacturing and service processes of the firm.

- Logistics processes
 - Storage processes
 - Delivery to the consumer- end customer- right product, right time, right location
- Things are made using operations processes
 - Things are moved and stored using supply chain processes
 - Supply Chain Management is the integrated management of operations and supply chain processes
 - Try to select the best materials and hiring the greatest talent.

Process: one or more activities that transform inputs into outputs.

- Operations and supply chain processes can be conveniently categorised.
- Different companies are positioned in different places in the supply chain, but within the context of their position requires the 5 process activities.

Processing Activities

1. **Planning** – processes needed to **operate** an existing supply chain
2. **Sourcing** – selection of suppliers that will **deliver** the goods and services needed to create the firm's product
3. **Making** – **producing** the major product or service
4. **Delivering** – **logistics** processes such as selecting carriers, coordinating the movement of goods and information, and collecting payments from customers

5. **Returning** – receiving worn-out, **excess**, and/or **defective** products back from customers
- Goods are a tangible output of processes that has physical dimensions
 - Service are an intangible processes that cannot be weighed or measured.
 - o Cannot be patented
 - o Interaction with the customer
 - o Heterogeneous
 - o Perishable and time dependent
 - Services processes tend to be highly variable and time dependent compared to goods-producing services.

Product-service bundling: when a firm builds service activities into its product offerings to create additional value for the customer.

- The service evolves from a focus on enhancing the product's performance to developing systems and product modifications that support the company's move up the "value stream" into new markets.
- OSCM people specialise in managing the production of goods and services.
- Jobs are hands-on, and require working with others and figuring out the best way to do things.

Efficiency: Doing something at the lowest possible cost; doing the things right (to reduce wastage)

Effectiveness: Doing the things that will create the most value for your customer; doing the right thing (to deliver value to the customers)

Value: The attractiveness of a product relative to its cost

- **Quality/ Price**