Summary

In this chapter you have been introduced to the various aspects of Supply Chain Management.

- “To Make Customer worth his value, it is important to monitor sourcing, processing, warehousing, and supplying Just in time processes Ensure timely receipts & payments through a valuable supply chain that keeps both customer and supplier in sync.”

- Supply chain management (SCM) is the process of planning, implementing, and controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible. Supply chain management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point-of-origin to point-of-consumption. The term supply chain management was coined by consultant Keith Oliver, of strategy consulting firm Booz Allen Hamilton in 1982.

- Fulfillment is ensuring the right quality of customer deliverable parts for production for in the context of customer deliverables. In the context of logistics it is important to keep the cost of transporting materials as low as possible and yet to be consistent. In the context of the logistics the system can allow the company to track the exact status of the required materials.

- Production as per customer order. The production as per customer order help in ensuring production lines function smoothly. Production can run smoothly as a result of fulfillment and logistics being implemented correctly. Revenue & profit: In the context of the revenue and profit quicker distribution leads to increasing the overall profit.

- Cost of operation was seldom considered in the olden days. The costing were based on Market place material cost and processing cost. The market has moved from Sellers market to Buyers market. Supply chain management reduces the cost by increasing the inventory turnover on the shop floor.

- Co-operation along the Supply Chain. All the supply chain partners need to ensure mutual success. In the Supply chain management the suppliers also benefit from the cooperative relationship. In the supply chain management the consumers can benefit too through the higher quality goods provided at a lower cost.

Supply chain management must address the following problems:

- Distribution Network Configuration: Number and location of suppliers, production facilities, distribution centers, warehouses and customers.

- Distribution Strategy: Centralized versus decentralized, direct shipment, Cross docking, pull or push strategies, third party logistics.
Several models have been proposed for understanding the activities required to manage material movements across organizational and functional boundaries. SCOR is a supply chain management model promoted by the Supply-Chain Management Council. Another model is the SCM Model proposed by the Global Supply Chain Forum (GSCF). Supply chain activities can be grouped into strategic, tactical, and operational levels of activities.

**Strategic**

- Strategic network optimization, including the number, location, and size of warehouses, distribution centers, and facilities.
- Strategic partnership with suppliers, distributors, and customers, creating communication channels for critical information and operational improvements such as cross docking, direct shipping, and third-party logistics.

**Tactical**

- Sourcing contracts and other purchasing decisions.
- Production decisions, including contracting, locations, scheduling, and planning process definition.
- Inventory decisions, including quantity, location, and quality of inventory.
- Transportation strategy, including frequency, routes, and contracting.
- Benchmarking of all operations against competitors and implementation of best practices throughout the enterprise.
- Milestone payments.

**Operational**

- Daily production and distribution planning, including all nodes in the supply chain.
- Production scheduling for each manufacturing facility in the supply chain (minute by minute).
- Demand planning and forecasting, coordinating the demand forecast of all customers and sharing the forecast with all suppliers.
- Sourcing planning, including current inventory and forecast demand, in collaboration with all suppliers.

Successful SCM requires a change from managing individual functions to integrating activities into key supply chain processes. An example scenario: the purchasing department places orders as requirements become appropriate. Marketing, responding to customer demand, communicates with several distributors and retailers, and attempts to satisfy this demand. Shared information between supply chain partners can only be fully leveraged through process integration.

**Customer relationship management**
- Customer service management
- Demand management
- Order fulfillment
- Manufacturing flow management
- Supplier relationship management
- Product development and commercialization
- Returns management

One could suggest other key critical supply business processes combining these processes stated by Lambert such as:
- Customer service management
- Procurement
- Product development and commercialization
- Manufacturing flow management/support
- Physical distribution
- Outsourcing/partnerships
- Performance measurement
• Customer Relationship Management concerns the relationship between the organization and its customers.
• Strategic plans are developed with suppliers to support the manufacturing flow management process and development of new products.
• Customers and suppliers must be united into the product development process, thus to reduce time to market. As product life cycles shorten, the appropriate products must be developed and successfully launched in ever shorter time-schedules to remain competitive.
• The manufacturing process is produced and supplies products to the distribution channels based on past forecasts.
• In physical distribution, the customer is the final destination of a marketing channel, and the availability of the product/service is a vital part of each channel participant's marketing effort.
• Outsourcing/partnerships This is not just outsourcing the procurement of materials and components, but also outsourcing of services that traditionally have been provided in-house. The logic of this trend is that the company will increasingly focus on those activities in the value chain where it has a distinctive advantage and everything else it will outsource.
• Experts found a strong relationship from the largest arcs of supplier and customer integration to market share and profitability. By taking advantage of supplier capabilities and emphasizing a long-term supply chain perspective in customer relationships can be both correlated with firm performance.

• The SCM management components are the third element of the four-square circulation framework. The level of integration and management of a business process link is a function of the number and level, ranging from low to high, of components added to the link
• Lambert and Cooper (2000) identified the following components which are:
  - Planning and control
  - Work structure
  - Organization structure
  - Product flow facility structure
  - Information flow facility structure
  - Management methods
  - Power and leadership structure
  - Risk and reward structure
  - Culture and attitude

• For customer service management: Includes the primary level component of customer relationship management, and secondary level components such as benchmarking and order fulfillment.
• For product development and commercialization: Includes the primary level component of Product Data Management (PDM), and secondary level components such as market share, customer satisfaction, profit margins, and returns to stakeholders.
• For physical distribution, Manufacturing support and Procurement: Includes the primary level component of enterprise resource planning (ERP),
• With secondary level components such as warehouse management, material management, manufacturing planning, personnel management, and postponement (order management).
• For **performance measurement**: This includes the primary level component of logistics performance measurement, which is correlated with the information flow facility structure within the organization.
• Secondary level components may include four types of measurement such as: variation, direction, decision and policy measurements. More specifically, in accordance with these secondary level components total cost analysis (TCA), customer profitability analysis (CPA), and Asset management could be concerned as well.
• In general, information flow facility structure is regarded by two important requirements, which are a) planning and Coordination flows, and b) operational requirements.
• For **outsourcing**: This includes the primary level component of management methods and the company's cutting-edge strategy and its vital strategic objectives that the company will identify and adopt for particular strategic initiatives in key the areas of technology information, operations, manufacturing capabilities, and logistics (secondary level components).