

Supply chain management in manufacturing industry

[Business](#), [Management](#)



SCM is about the process from supplier to manufacturer to wholesaler to retailer and lastly to consumer, it included transfer of materials, information and finances. SCM is about integrating all this among and within the companies. The ultimate goal of any effective SCM system is to decrease inventory and with an assumption that products are produced when needed.

Supply chain management flows can be divided into three main flows:

- The product flow
- The information flow
- The finances flow.

The product flow comprises the movement of goods from a supplier to a customer, as well as any customer service and needs. The information flow involves transmitting orders and updating the status of delivery. The financial flow consists of credit terms, payment schedules, and consignment and title ownership arrangements.

Today SCM acts as a critical backbone to business organizations because of its effective market coverage, making products available at location and recognizing them which hold key revenues. Very simply stated, when a product is introduced in the market and advertised, the entire market in the country and all the sales counters need to have the product where the customer can buy and take delivery. Any malfunction in the product not being available at the correct time can result in the drop in customer interest and mismanagement in demand. Transportation network design and management assume importance to support sales and marketing strategy.

Inventory control and inventory visibility are two very critical elements in any operations for these are the cost drivers and directly impact the bottom lines on the balance sheet. Inventory means value and is an asset to the company. Every business has a standard for inventory turnaround that is optimum for the business. Inventory turnaround refers to the number of times the inventory is sold and replaced over a period of twelve months. The health of the inventory turn relates to the health of business.

In a global scenario, the finished goods inventory is held at many locations and there are distribution centres, managed by third parties. A lot of inventory is also there in the pipeline in transportation, besides the inventory with distributors and retail stocking points. Since any loss of inventory anywhere in the supply chain would result in loss of value, effective control of inventory and visibility of inventory gains importance as a key factor of SCM function.

Manufacturing industry refers to those industries which involve in the manufacturing and processing of items and indulge in either creation of new commodities or in value addition. The manufacturing industry accounts for a significant share of the industrial sector in developed countries. The final products can either serve as a finished good for sale to customers or as intermediate goods used in the production process.

SCM is a methodical approach to managing the distribution of goods from fabricators of raw materials, through manufacturers and eventually down to end users or consumers.

SCM affects the manufacturing companies in a variety of ways, including the availability of inputs needed for production processes, costs and profitability of manufactured items, company infrastructure and ways in which companies interact with their suppliers and customers. Nowadays it has become important for manager and entrepreneurs in industry to understand the way in which supply chain management affects manufacturer from daily operational perspective and also from strategic viewpoint.

Reliability of inputs: Effective SCM can ensure that raw materials steadily arrive at production facilities on time. A poor management supply chain, on the other hand, can bring production to a standstill. Without reliable delivery of inputs, assembly lines can lie dormant while employees have no work to perform, which could leave a company unable to fulfil time-sensitive orders. If the supply chain breaks down before inputs arrive, a manufacturer can be forced to procure materials from alternative sources quickly, possibly resulting in higher prices and lower profitability.

Distribution Costs: Lowering distribution costs is a major function of supply chain management. With a cost-efficient supply chain, manufacturers can reduce overhead and direct sales costs at the same time. Savvy manufacturers use technologically advanced routing and navigation systems for drivers, fuel-efficient vehicles, cost-efficient purchasing and order-processing systems and strict handling procedures to lower supply-chain costs and boost overall profitability.

Company Infrastructure: Manufacturing managers seek to find the perfect balance of fully-owned distribution systems and contractor services. Building in-house distribution systems can be quite costly when vehicles and vehicle repair, fuel and labour costs are taken into account, but this option allows a company full control over its outgoing supply chain. Relying on contractors can be significantly more affordable, but carries the risk of giving up control of distribution processes once goods leave a factory or plant. Distribution-system decisions affect a range of managerial decisions, such as how much to invest in distribution infrastructure, or how closely to work with transportation contractors.

Supplier and Customer Integration: Modern manufacturers squeeze every ounce of efficiency they can out of production processes to remain competitive in the global marketplace. Continuous quality improvement programs such as Six Sigma introduce changes to supply-chain dynamics that require greater collaboration with customers and suppliers than ever before. Manufacturers utilizing a just-in-time ordering system, or serving customers who do, must integrate ordering and order-processing systems directly with other companies' systems via virtual networks. In a just-in-time supply chain, orders are processed automatically between computers at both suppliers' and customers' facilities, one of which places immediate orders based on electronically tracked inventory levels, and the other of which instantly processes payment and queues new orders to be delivered, all without any human interaction.