

Supply Chain Management

Supply chain management is the **management** of the flow of goods and services and includes all processes that transform raw materials into final products. It involves the active streamlining of a business's **supply**-side activities to maximize customer value and gain a competitive advantage in the marketplace.

SCM represents an effort by suppliers to develop and implement supply chains that are as efficient and economical as possible. [Supply chains](#) cover everything from production to product development to the information systems needed to direct these undertakings.

In SCM, the [supply chain manager](#) coordinates the [logistics](#) of all aspects of the supply chain which consists of five parts:

- The plan or strategy
- The source (of raw materials or services)
- Manufacturing (focused on productivity and efficiency)
- Delivery and logistics
- The return system (for defective or unwanted products)

Supply Chains

A supply chain is the connected network of individuals, organizations, resources, activities, and technologies involved in the manufacture and sale of a product or service. A supply chain starts with the delivery of raw materials from a supplier to a manufacturer and ends with the delivery of the finished product or service to the end consumer.

SCM oversees each touchpoint of a company's product or service, from initial creation to the final sale. With so many places along the supply chain that can add value through efficiencies or lose value through increased expenses, proper SCM can increase revenues, decrease costs, and impact a company's bottom line.

Benefits of supply chain management

Supply chain management creates a number of benefits that translate to higher profits, better brand image and greater competitive advantage. These include the following:

- better ability to predict and meet customer demand;
- better supply chain visibility, risk management and predictive capabilities;
- fewer process inefficiencies and less product waste;
- improvements in quality;
- increased sustainability, both from a societal and an environmental standpoint;
- lower overhead;
- improvements in cash flow; and
- more efficient logistics.

Five stages of supply chain management

Supply chain management can be broadly categorized into five steps or areas:

Plan. Using supply chain analytics and materials management features in ERP systems, organizations create strategic plans to meet customer demand for product and avoid a bullwhip effect.

*The bullwhip effect is a distribution channel phenomenon in which demand forecasts yield supply chain inefficiencies. It refers to increasing swings in inventory in response to shifts in consumer demand as one moves further up the supply chain.

Source. Organizations identify and select vendors that can supply materials in a streamlined and efficient way according to agreements. Supply chain collaboration starts at this stage and is important throughout the supply chain management process.

Make. In this stage, products are manufactured. It includes scheduling the production, testing, ensuring compliance requirements are followed, packing, storage and release. Multiple machines are likely to be involved, especially for larger companies, and these increasingly use technologies such as IoT and AI to work more efficiently.

Deliver. The delivery stage pertains to logistics and focuses on getting finished goods to consumers, in whatever manner of transportation is needed. As the Amazon effect has grown, especially as a result COVID-19, more focus is on doorstep delivery. Greater emphasis is now also on supply chain leaders working more closely with customer service. Inventory management and warehouse management systems are especially crucial at this stage.

Return. The return stage includes all product returns, including defective products and products that will no longer be supported. This stage also includes elements from other stages, including inventory and transportation management.

Example of SCM

The most basic version of a supply chain includes a company, its suppliers and the customers of that company. An example would be: raw material producer, manufacturer, distributor, retailer and retail customer.

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