

Supply Chain Management

Procurement

Procurement and purchasing are similar terms. Purchasing is the process of locating a supplier, buying, negotiating, and ensuring delivery. Procurement on the other hand is a much broader term that includes purchasing. It also includes storing, transporting, receiving, inspecting incoming materials/supplies, and salvaging items. Proactive procurement is a process reflected in five outputs:

- Quality
- Cost
- Time
- Technology
- Continuity of the supply

The Product Flow

The product flow in supply chain management involves the conveyance of goods, products, and services from the supplier to the customer. This process also includes all back end processes as well as returns. Sometimes returns are also grouped as an activity under reverse supply chains. The product flow can be one of the following:

- Basic Supply Chain
- Extended Supply Chain
- Ultimate Supply Chain

Basic supply and extended supply are quite simple and linear. They essentially include a supplier(s), a focal firm, and customer(s). However, Ultimate Supply Chains are more complex and are more like networks rather than pipelines. In addition to the same groups that basic chains have, they also include third party firms and all other entities from the initial supplier to the end customer.



Inventory Calculator

An inventory calculator measures the inventory turnover rate. Inventory calculations provide supply chain managers important data for setting inventory levels. Inventory calculators help determine the rate inventory items are sold and replaced in a specific period of time, such as a year. Inventory calculations can also help supply chain managers determine the quality of goods and set benchmarks. The calculation for inventory turnover is:

$$\text{Turnover} = \text{Cost of goods}/\text{Average inventory}$$

Managers can use the above calculation to determine the average days in inventory using the calculation below:

$$\text{Average days in inventory} = 365/\text{Inventory turnover}$$