# DPBS(PG) College, Anoopshahr

## BCA II Semester

## Subject: Financial Accounting & Management

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### Inventory management

Inventory management is the supervision of non-capitalized assets, or inventory, and stock items. As a component of supply chain management, inventory management supervises the flow of goods from manufacturers to warehouses and from these facilities to point of sale. A key function of inventory management is to keep a detailed record of each new or returned product as it enters or leaves a warehouse or point of sale.

Organizations from small to large businesses can make use of inventory management to manage their flow of goods. There are numerous inventory management techniques, and using the correct one can lead to providing the correct goods, at the correct amount, place and time.

Inventory control is a separate area of inventory management that is concerned with minimizing the total cost of inventory while maximizing the ability to provide customers with products in a timely manner. In some countries, the two terms are used as synonyms.

**The inventory management process**

Inventory management is a complex process, particularly for larger organizations, but the basics are essentially the same regardless of the organization's size or type. In inventory management, goods are delivered in the receiving area of a warehouse, typically in the form of raw materials or components and are put into stock areas or shelves.

Compared to larger organizations with more physical space, in smaller companies, the goods may go directly to the stock area instead of a receiving location. If the business is a wholesale distributor, the goods may be finished products rather than raw materials or components. Unfinished goods are then pulled from the stock areas and moved to production facilities where they are made into finished goods. The finished goods may be returned to stock areas where they are held prior to shipment, or they may be shipped directly to customers.

Inventory management uses a variety of data to keep track of the goods as they move through the process, including lot numbers, serial numbers, cost of goods, quantity of goods and the dates when they move through the process.

**Inventory management software systems**

Inventory management software systems generally began as simple spreadsheets that track the quantities of goods in a warehouse but have become more complex since. Inventory management software can now go several layers deep and integrate with accounting and ERP systems. The systems keep track of goods in inventory, sometimes across several warehouse locations. Inventory management software can also be used to calculate costs so that accounting systems always have an accurate assessment of the value of the goods.

Some inventory management software systems are designed for large enterprises and can be heavily customized for the particular requirements of an organization. Large systems were traditionally run on premises, but are now also deployed in public cloud, private cloud and hybrid cloud environments. Small and midsize companies typically don't need such complex and costly systems, and they often rely on stand-alone inventory management products, generally through SaaS applications.

**Inventory management techniques**

Inventory management uses several methodologies to keep the right amount of goods on hand to fulfill customer demand and operate profitably. This task is particularly complex when organizations need to deal with thousands of stock-keeping units (SKUs) that can span multiple warehouses. The methodologies include:

- **Stock review** it is the simplest inventory management methodology and is generally more appealing to smaller businesses. Stock review involves a regular analysis of stock on hand versus projected future needs. It primarily uses manual effort, although there can be automated stock review to define a minimum stock level that then enables regular inventory inspections and reordering of supplies to meet the minimum levels. Stock review can provide a measure of control over the inventory management process, but it can be labor-intensive and prone to errors.

- **Just-in-time (JIT) methodology:** in this methodology products arrive as they are ordered by customers, and which is based on analyzing customer behavior. This approach involves researching buying patterns, seasonal demand and location-based factors that present an accurate picture of what goods are needed at certain times and places. The advantage of JIT is that customer demand can be met without needing to keep quantities of products on hand, but the risks include misreading the market demand or having distribution problems with suppliers, which can lead to out-of-stock issues.
- **ABC analysis methodology:** it classifies inventory into three categories that represent the inventory values and cost significance of the goods. Category A represents high-value and low-quantity goods; category B represents moderate-value and moderate-quantity goods; and category C represents low-value and high-quantity goods. Each category can be managed separately by an inventory management system. It's important to know which items are the best sellers to keep quantities of buffer stock on hand. For example, more expensive category A items may take longer to sell, but they may not need to be kept in large quantities. One of the advantages of ABC analysis is that it provides better control over high-value goods, but a disadvantage is that it can require a considerable amount of resources to continually analyze the inventory levels of all the categories.