

Inventory Management System

Background

Inventory refers to the materials that a business holds to eventually sell it to consumers to make a profit. It can be anything from raw materials, MRO goods, work in progress items to finished goods that require physical space for storage. Different types of inventories usually have different management processes. Inventory records can be lost or duplicated in the traditional scenario of various databases being controlled separately. If inventory is managed poorly, the associated carrying costs will quickly add up and begin depleting the overall supply chain value. To optimize profitability, inventory must be managed efficiently in connection to the business' competitive strategy.

Mission Statement/Objectives

- To reduce carrying costs associated with a business
- Track goods and parts throughout its entire life cycle through the supply chain from procurement cycle to customer order cycle
 - To be able to update and modify stock count as it makes its way through the cycle
 - To avoid misplacement of items and promote quick identification of products in warehouses/stores
 - To promote batch tracking (using Batch ID)
 - To minimize inventory wastage and deterioration
 - To increase the inventory turnover ratio
 - To avoid excess stock which in turn helps reduce the associated storage requirements (manage warehouses)
- To maintain a sufficient stock to meet customer demand at all times
 - To indicate when replenishment orders need to be placed (reorder point)
- To identify customer trends based on their preferences and requirements that vary on a regular basis
- To avoid replication of orders
- To securely maintain sensitive customer data
- Generate order invoices

Scope

- Ability to make short term and long term demand forecasts based on gathered data
 - Identify seasonal fluctuations in consumer demand
- Allow for a planned build-up of controlled inventory
- Focus on inventory that sells, to improve cash flow
- Calculate the minimal working capital needed for operations and sales
- Set up special storage partitions for different types of inventory