

# [The inventory system](https://assignbuster.com/the-inventory-system/)

Inventory is one of the most important in monitoring a stock that take place in business activity. The inventory system does the entire task in computing the value with inventory (cost and quality) and handling data or information. Inventory System maintains an orderly flow of supplies, raw materials, or finished goods through an office shop/factory because of items in any inventory. Represents cost, they need to be controlled. The purpose of inventory system for management are to keep inventory levels and cost at desire minimums while maintaining to proper safeguards over materials to places and people who need them.

Inventory review refers to the time interval between counting inventories. Periodic review systems have a set schedule for conducting an inventory count. Transactional review systems update the inventory count after each transaction. Periodic review is less resource intensive but more prone to creating shortages and inventory discrepancies while transactional review is more accurate but requires more resources. Inventory costs can be broken into several categories: the actual cost of the inventoried product, the cost of storage and the cost of unmet demand if inventory is not available to fill orders.

Additional costs include transportation and ordering costs incurred when replenishing inventory. Each of these costs is unique to individual businesses and can vary widely. (Warren R. Planret, 2002) Inventory means goods and materials, or those goods and materials themselves, held available in stock by a business. This word is also used for a list of the contents of a household and for a list for testamentary purposes of the possessions of someone who has died. In accounting, inventory is considered an asset.

Inventory proportionality is the goal of demand-driven inventory management. The primary optimal outcome is to have the same number of days' (or hours', etc. ) worth of inventory on hand across all products so that the time of run out of all products would be simultaneous. In such a case, there is no " excess inventory," that is, inventory that would be left over of another product when the first product runs out. Excess inventory is sub-optimal because the money spent to obtain it could have been utilized better elsewhere, i. . to the product that just ran out.

The secondary goal of inventory proportionality is inventory minimization. By integrating accurate demand forecasting with inventory management, replenishment inventories can be scheduled to arrive just in time to replenish the product destined to run out first, while at the same time balancing out the inventory supply of all products to make their inventories more proportional, and thereby closer to achieving the primary goal.

Accurate demand forecasting also allows the desired inventory proportions to be dynamic by determining expected sales out into the future; this allows for inventory to be in proportion to expected short-term sales or consumption rather than to past averages, a much more accurate and optimal outcome. (en. wikipedia. org) The technique of inventory proportionality is most appropriate for inventories that remain unseen by the consumer.

As opposed to " keep full" systems where a retail consumer would like to see full shelves of the product they are buying so as not to think they are buying something old, unwanted or stale; and differentiated from the " trigger point" systems where product is reordered when it hits a certain level; inventory proportionality is used effectively by just-in-time manufacturing processes and retail applications where the product is hidden from view. In most manufacturing companies the annual usage value of Maintenance, Repair and Operating (MRO) supplies is less than ten percent of the direct materials required of production.

Utilities and transportation companies recognize the absolute necessity of high inventory service levels of MRO supplies to maintain their equipment and provide uninterrupted service to their customer. Yet, neither utilities and transportation companies, nor manufacturing companies have made full use of tools, which are available today to provide maximum customer service with minimum investment in inventories. Established accounting practices of expensing many MRO supplies upon receipt and not maintaining a record of quantities of hand, further contribute to a lack of emphasis on effective inventory management.

An in-depth analysis of the existing system of inventory management of MRO items is the first step. In conducting such a survey, consideration must be given to the application of the tools and techniques, which are available today for cost-effective inventory management of MRO items. Typical inventory segment are: machine and equipment, preventive maintenance supplies; other machine and equipment maintenance and repair parts; tools; maintenance supplies; office supplies; etc. The purpose of establishing inventory segments is to develop applicable management policies and controls, which pertain to each specific segment.

It is so important to establish separate segments for machine and equipment repair parts, which are regularly as a result of scheduled preventive maintenance, and those parts, which are maintained in stock in case of equipment failure. All inventory system required that each item be identified by its own item number (i. e. part number, stock number, etc. ). Many companies have assigned their own number to MRO item. Accountability for effective inventory management of MRO item must be clearly defined. Since vendors supply nearly all MRO item, the MRO purchasing function should be fully integrated with the inventory management function.

Stockless purchasing where the vendor carries. The block of the inventory and the full use of maintenance agreement are prime examples of the need for such integration. The distribution by value (ABC) Analysis will identify those items where sample inventory level, protected by high safety stocks, can be maintained with minimum inventory investment. The assignment of priority codes to identify the critical availability requirement of each MRO item is also of utmost importance. There are items which regardless of cost or anticipated demand must be available immediately.

Others must be available within a day or so on. The user, the maintenance technician responsible for maintaining the equipment and using the item should establish these priority codes. It should be the user who should be consulted in determining the appropriate inventory level for such items. A time- phased order point system is the best type of MRO items, since it reflects scheduled deliveries by due date and projecting availability. The time- phased order point system is in fact on MRP (Material Requirements Planning) system.

It uses MRP logic it accepts the independent demand of each MRO items instead of the gross requirements derived from a bill of material explosion. Most software packages contain all the data elements you need for effective management MRO items. An added plus for using the MRP system in the time-phased order point application is the capability of the MRP system to handle requirements for preventive maintenance program. Transactions should be batched-processed with each inventory record being updated at the end of each day.

Inventory system should be run weekly or more frequently and should separate on a management by exception basis, issuing order action, expedite action, and reschedule action notices. Of paramount importance is inventory record accuracy. An effective cycle counting program should be in place and result in a high degree of inventory record accuracy. (Henry H. Jordan, 2002) Manually conducting a physical inventory can be a time consuming activity that any business can only afford to done once a year. Hardly any area of business management is more tedious, more costly than inventory control.

Because of this, the resulting write-off is often financially significant. The institution’s current system is done manually but has an aim to compete other computerized companies through improving and attaining the quality of work. The automation of their system would be a great advantage for the institution; it would increase speed, reduce errors, improve the quality of work and burdens of work will be then lessen. Taking inventory is the single most important exercise an organization can perform. In measuring its one-year exposure to inventory, the whole process constitutes corporate wide.

This process entails itemizing all software (proprietary and vendor supplied) hardware, network, database, files languages utilities object. The inventory should give a comprehensive view with an enterprise mechanism for receiving, storing, translating and transmitting data. Without an inventor, an organization will not be able to assess the dimensions and cost of the company within a year. Although software can help in determining where millennium problem is in application, this process requires sometimes.