What Is Inventory Management?

Inventory management is a step in the supply chain where inventory and stock quantities are tracked in and out of your warehouse.

The goal of inventory management systems is to know where your inventory is at any given time and how much of it you have in order to manage inventory levels correctly.

Some companies may opt to scan in inventory via a barcode scanner to increase efficiency along pick routes and accuracy.

Unlike an [ERP system](https://www.bigcommerce.com/blog/erp-integrations/), an inventory management system focuses on one supply chain process. They often come with the ability to integrate with other software systems – point of sale, channel management, [shipping](https://www.bigcommerce.com/blog/ecommerce-shipping/) – so you can build a personalized integration stack to the needs of your unique business.

Why Is Inventory Management Important

Inventory management is the fundamental building block to longevity. When your inventory is properly organized, the rest of your supply-chain management will fall into place. Without it, you risk a litany of mistakes like mis-shipments, out of stocks, overstocks, mis-picks, and so on.

[Proper warehouse management](https://www.bigcommerce.com/blog/ecommerce-warehousing/) is key. Mis-picks result from incorrect paper pick lists, disorganized shelf labels, or just a messy warehouse in general. Mis-shipments are a direct result of mis-picks at the beginning of the inventory process, and are also a result of a lack in quality control procedures.

Out of stocks and overstocks occur when a company uses manual methods to place orders without having a full grasp on the state of their inventory. This is a not a good predictor for inventory forecasting and results in too much stock or too little.

All of these mistakes will not only cost you money, but also cost you in wasted labor spent correcting the mistakes later. When you don’t implement management tools, your risk of human error mistakes goes up by the minute. And your customer reviews and loyalty take a negative hit as well.

Inventory Management Techniques

That being said, inventory management is only as powerful as the way you use it.

It’s well worth the extra time and money to have inventory management set up by the experts who made the software. Work with them to make sure you’re utilizing the proper techniques and features to get the most bang for your buck.

Let’s take a look at some inventory-control techniques you may choose to utilize in your own warehouse.

1. Economic order quantity.

Economic order quantity, or EOQ, is a formula for the ideal order quantity a company needs to purchase for its inventory with a set of variables like total costs of production, demand rate, and other factors.

The overall goal of EOQ is to minimize related costs. The formula is used to identify the greatest number of product units to order to minimize buying. The formula also takes the number of units in the delivery of and storing of inventory unit costs. This helps free up tied cash in inventory for most companies.

2. Minimum order quantity.

On the supplier side, minimum order quantity (MOQ) is the smallest amount of set stock a supplier is willing to sell. If retailers are unable to purchase the MOQ of a product, the supplier won’t sell it to you.

For example, inventory items that cost more to produce typically have a smaller MOQ as opposed to cheaper items that are easier and more cost effective to make.

3. ABC analysis.

This inventory categorization technique splits subjects into three categories to identify items that have a heavy impact on overall inventory cost.

* Category A serves as your most valuable products that contribute the most to overall profit.
* Category B is the products that fall somewhere in between the most and least valuable.
* Category C is for the small transactions that are vital for overall profit but don’t matter much individually to the company altogether.

4. Just-in-time inventory management.

Just-in-time (JIT) inventory management is a technique that arranges raw material orders from suppliers in direct connection with production schedules.

JIT is a great way to reduce inventory costs. Companies receive inventory on an as-needed basis instead of ordering too much and risking dead stock. Dead stock is inventory that was never sold or used by customers before being removed from sale status.

5. Safety stock inventory.

Safety stock inventory management is extra inventory being ordered beyond expected demand. This technique is used to prevent stockouts typically caused by incorrect forecasting or unforeseen changes in customer demand.

7. FIFO and LIFO.

LIFO and FIFO are methods to determine the cost of inventory. FIFO, or First in, First out, assumes the older inventory is sold first. FIFO is a great way to keep inventory fresh.

LIFO, or Last-in, First-out, assumes the newer inventory is typically sold first. LIFO helps prevent inventory from going bad.

8. Reorder point formula.

The [reorder point formula](https://www.skubana.com/blog/optimize-inventory-level-reorder-point?) is an inventory management technique that’s based on a business’s own purchase and sales cycles that varies on a per-product basis. A reorder point is usually higher than a safety stock number to factor in lead time.

9. Batch tracking.

Batch tracking is a quality control inventory management technique wherein users can group and monitor a set of stock with similar traits. This method helps to track the expiration of inventory or trace defective items back to their original batch.

10. Consignment inventory.

If you’re thinking about your local consignment store here, you’re exactly right. Consignment inventory is a business deal when a consigner (vendor or wholesaler) agrees to give a consignee (retailer like your favorite consignment store) their goods without the consignee paying for the inventory upfront. The consigner offering the inventory still owns the goods and the consignee pays for them only when they sell.

11. Perpetual inventory management.

Perpetual inventory management is simply counting inventory as soon as it arrives. It’s the most basic inventory management technique and can be recorded manually on pen and paper or a spreadsheet.

12. Dropshipping.

[Dropshipping](https://outgrow.co/blog/run-profitable-dropshipping-business) is an inventory management fulfillment method in which a store doesn’t actually keep the products it sells in stock. When a store makes a sale, instead of picking it from their own inventory, they purchase the item from a third party and have it shipped to the consumer. The seller never sees our touches the product itself.

13. Lean Manufacturing.

Lean is a broad set of management practices that can be applied to any business practice. It’s goal is to improve efficiency by eliminating waste and any non value-adding activities from daily business.

14. Six Sigma.

Six Sigma is a brand of teaching that gives companies tools to improve the performance of their business (increase profits) and decrease the growth of excess inventory.

15. Lean Six Sigma.

Lean Six Sigma enhances the tools of Six Sigma, but instead focuses more on increasing word standardization and the flow of business.

16. Demand forecasting.

Demand forecasting should become a familiar inventory management technique to retailers. Demand forecasting is based on historical sales data to formulate an estimate of the expected forecast of customer demand. Essentially, it’s an estimate of the goods and services a company expects customers to purchase in the future.

17. Cross-docking.

Cross-docking is an inventory management technique whereby an incoming truck unloads materials directly into outbound trucks to create a JIT shipping process. There is little or no storage in between deliveries.

**Successful Example of Inventory Management :**

**Inventory Management Cooperation with Suppliers**

Over the decade, **Walmart** has become the world’s largest retailer with the highest sales per square foot.

This retail giant stocks products made in more than 70 countries, operates more than 11,000 stores in 27 countries around the world and manages an average of $32 billion in inventory.

**Walmart** uses innovative technology to track inventory and restock their shelves, thus allowing the retail chain to cut costs.

Strategically, the idea is to minimize links in the supply chain, sharing information with suppliers, and linking purchasing to sales in a more direct way.

The technical backbone of **Walmart’s** supply chain innovation is inventory management software, which allows implementing automated re-ordering and cross docking and other inventory tactics.

Cross-docking is the centerpiece of **Walmart’s** strategy to replenish inventory efficiently. It means products are loaded from inbound or outbound truck trailers right away without extra storage.

Suppliers and manufacturers within **Walmart’s** supply chain synchronize their demand projections under a collaborative planning, inventory forecasting, and stock replenishment scheme.

The network of global suppliers, warehouses, and retail stores has been described as behaving almost like a single firm.