Abstract

Retail inventory management is the systematic technique a business implements to ensure that there is enough product stock in store, and in other retail chain areas such as a warehouse, to meet customer demand. Retail managers know the pain of having insufficient inventory in store, the waiting time for reordering stocks, and the possibility of product spoilage and loss. This is why integrating the right retail inventory management process is important to achieve smooth retail operations.

Retailers that handle perishable inventory will need to take extra steps. For example, when a retailer such as a grocery store is caught selling an expired product, they'll have to pay a fine and face legal and compliance issues. This will also have a detrimental effect on the business' image and reputation. Retailers that stock perishable goods can utilize accessories to monitor product quality and quantity. Usage of some sensors can retrieve real-time data on temperature, humidity, gasses and air particles present, air pressure, and other factors in the area where retail goods are stored.

A good retail inventory management system will save your business from poor retail performance and extra costs.

Introduction

Retail inventory management is the process of ensuring you carry merchandise that shoppers want, with neither too little nor too much on hand. By managing inventory, retailers meet customer demand without running out of stock or carrying excess supply.

In practice, effective retail inventory management results in lower costs and a better understanding of sales patterns. Retail inventory management tools and methods give retailers more information with which to run their businesses, including product locations, quantities of each product type, which stock sells well and which doesn't, by location and sales channel, profit margin by style, model, product line or item, ideal amount of inventory to have in back stock and storage, how many products to reorder and how often, when to discontinue a product, how changing seasons affect sales.

Retail inventory management works by creating systems to log products, receive them into inventory, track changes when sales occur, manage the flow of goods from purchasing to final sale and check stock counts.

The information from these systems helps you achieve the benefits of retail inventory management, such as lower costs and higher profit margins. [9][10]

Best Practices

Stay ahead of potential low retail inventory by following these tips:

- **Track retail inventory efficiently** – This can be done by using a digital inventory checklist tool to ensure all areas of inventory are covered. The retail inventory checklist can track store items and its quantity, record labels, product SKU, images of the product, and etc. Users can customize the inventory checklist to fit their needs.
- **Track where inventory is located or stored** – Improve retail visibility by tracking where an item is located in the store and also in a warehouse. This saves time on retrieving the product for a customer and also replenishing product stocks for store shelves. Warehouse managers would be able to fulfil reorder requests from the retail store in a timely manner.
- **Maintain accurate product inventory** – Employees would be able to use their time on other store tasks instead of retrieving and putting back

inventory due to inaccurate store inventory. One way this can be done is for retail managers to install tools such as cameras to see the store in all areas and be able to convey to the employees when to restock the shelves. Another tool to accurately track product stock is employing a digital retail inventory management system.

- **Keep a record of defective stocks** – Defective products are a loss. Track defective items by using a retail audit to not only record but also check whether there is a trend in the data that can be used to improve retail inventory processes and lessen product defects and spoilage.
- **Adjust inventory cycles appropriately** – Overstocking can cost store space and also lead to product waste and loss. As time goes on, the retail manager should be able to create better inventory decisions to prevent over stocking products in the store. One of these inventory decisions is deciding on when to replenish inventory. If the retail manager was able to do the previous 4 tips, they should have enough data to ensure that the store has enough inventory. [12][13]

Available solutions and its drawbacks

Good inventory management ensures that a business has the right stock level to meet customer demand while also avoiding excessive levels of stock that can tie up valuable resources. Several different methods can be used to manage inventory, including:

- First-in, first-out (FIFO)
- Last-in, first-out (LIFO)
- Economic order quantity (EOQ)
- Just-in-time (JIT)

First-in, first-out (FIFO) in retail inventory management:

First-in, first-out (FIFO) is a retail inventory management system in which the first items to arrive are also the first items to be sold.

This system is often used in perishable goods industries, such as grocery stores, where it is important to keep track of expiration dates. FIFO can also be used in non-perishable goods industries, such as clothing stores, to ensure that older inventory is sold before newer inventory arrives. There are several benefits to using a FIFO system:

- It helps avoid stockouts of popular items since the newest products are always being made available first
- It can help reduce waste and dead stock since outdated products are less likely to sit on shelves for long periods without being sold
- It can help businesses avoid inventory shortages and provide better inventory control over costs under certain circumstances[14]

Drawbacks of FIFO system:

- It may not be the best option for products where freshness is not a priority — since older items are often disposed of before they expire, this can lead to unnecessary waste
- In high demand or low supply periods, newer inventory may sell faster than needed and force businesses to restock more frequently than necessary
- This system does not account for trends and predictions that could impact how quickly different products sell and may not always be ideal for all businesses

There are several live inventory management systems available to businesses, and the best option will vary depending on the products being sold, the size of the business, and other factors.

First-in, first-out (FIFO) is a popular option for many businesses, but it is not always the best choice. Carefully consider all options before choosing an inventory management system to ensure that it is the best fit for your business.

Last-in, first-out (LIFO) in retail inventory management:

Last-in, first-out (LIFO) is a method that accounts for inventory that records the most recently produced items as sold first.

This method is often used in retail stores and other businesses because it helps reduce the burden of accounting for rapidly changing inventories. When using LIFO retail inventory management, businesses keep track of each inventory item’s cost price and sell price. The business then sells its newest stock at the lowest prices and gradually increases selling prices up until it has sold off old stock that has reached its lower limits. [14]

There are several benefits associated with using LIFO retail inventory management, including:

- Quickly reducing the amount of work involved in managing rapidly changing inventory levels
- Allowing businesses to offer lower prices on popular or high-demand items
- Helping businesses keep track of their inventory carrying costs more easily and accurately

Drawbacks of LIFO system:

- Potential difficulties in adjusting selling prices due to rapidly changing market trends
- Risk of low profits if selling prices aren’t able to be increased quickly enough when new stock is added to the inventory

Overall, many businesses find that LIFO retail inventory management benefits far outweigh its potential drawbacks, so it remains an important tool for managing a growing and changing inventory.

Economic order quantity (EOQ) in retail inventory management:

In retail inventory management, economic order quantity (EOQ) is the order quantity a company should make for its inventory given:

- Production cost
- Demand rate
- Other variables

The goal of EOQ is to minimize the total cost of inventory, including both the cost of holding inventory and the cost of ordering new inventory.

To calculate EOQ, companies need to know their annual demand, lead time, carrying costs, and ordering costs. Once these variables are known, the EOQ formula can be used to determine the optimal order quantity.

The EOQ formula is:

$$\mathbf{EOQ = \sqrt{(2*D*C/H)}}$$

where:

D = Annual demand

C = Ordering cost

H = Holding cost

The EOQ formula can be used to minimize the total cost of inventory, which is the sum of the holding cost and the ordering cost. [14]

Drawbacks of EOQ system:

To find the minimum total inventory cost, companies need to optimize their ordering quantity and order frequency. The EOQ model is a helpful tool for retail inventory management, but it has some limitations:

- It assumes that demand is constant, which may not be realistic
- It assumes that lead time and carrying costs are known and constant, which also may not be realistic
- It does not consider other factors such as transportation costs or taxes

Just in time (JIT) in retail inventory management:

Just-in-time (JIT) retail inventory management is a method of managing goods and raw materials in your retail store and shop floor.

JIT relies on the principle that suppliers should receive goods just in time to fulfill an order. In other words, retailers only receive goods when they need them and never more than what is necessary to fill current orders.

There are several benefits to using a JIT approach to inventory management. First, it can help you reduce wasteful spending on storage space or equipment for holding excessive amounts of stock. In addition, JIT allows for faster delivery times for customers and decreased costs associated with lost sales due to out-of-stock items. [14]

Bottom Line

Retail store inventory management is critical to efficient operations and effective cash management. It is important that you develop procedures to manage your inventory accurately and effectively. The best method for a particular business will depend on:

- The type of goods being stocked
- The level of customer demand

- The resources available to the business

To make sure that inventory is managed effectively, businesses need to have systems and processes in place to track stock levels and keep accurate records — this can be done manually or with the help of specialized purchase order software.

Good retail inventory management is essential to the success of any retail business. By putting in place effective systems and processes, businesses can ensure that they have the right level of stock to meet customer demand while also avoiding excessive levels of stock that can tie up valuable resources. [11]

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