

Inventory Management System for Retailers

Problem Statement:

Inventories are necessary for sales, which generate profits, and poor management of inventories results in excess inventory, resulting in a lower return on capital invested, affecting the cash conversion cycle. The approximate cost to hold inventory is very high, so maintaining excessive levels of inventories can ruin the company, as they have to reduce prices and absorb losses, and if missing could reduce sales, now maintain inventory levels according to sales forecasts. The problem faced by the company is they do not have any systematic system to record and keep their inventory data. It is difficult for the admin to record the inventory data quickly and safely because they only keep it in the logbook and not properly organized.

This project is aimed at developing a desktop-based application named Inventory Management System for managing the inventory system of any organization. The Inventory Management System (IMS) refers to the system and processes to manage the stock of an organization with the involvement of a Technology system. This system can be used to store the details of the inventory, stock maintenance, update the inventory based on the sales details, and generate inventory reports weekly or monthly based. This project is categorize individual aspects of the inventory management system. An inventory Management System is important to ensure quality control in businesses that handle transactions revolving around consumer goods. Without proper inventory control, a large retail store may run out of stock on an important item. A good inventory management system will alert the retailer when it is time to record. An automated Inventory Management System helps to minimize errors while recording the stock.

1. Who does the problem affect?

Bad inventory management can cost your company tremendous amounts of time, money, and, ultimately, its chances of success. It can heavily impact any business' organizational performance, leaving it with lackluster profit margins and elevated overhead expenses as a result. If this is how improper inventory practices and protocols affect massive corporations, it might be easy for us to

imagine how the same mistakes could affect the business. These mistakes have led to many manufacturers closing their doors, and have left others struggling amid seas of debt and organizational challenges.

2. What are the boundaries of the problem?

The boundaries of the problem are that when a retailer can only able to view his/her own stock details but can't view other retailers' stock details. The retailer should take full responsibility regarding the updation of the stock details if any of the stock details are updated improperly, then admin can't correct the changes, the retailer can only able change his/her own stock details.

3. What is the issue?

The problem faced is there is no systematic system to record and keep their inventory data. It is difficult for the admin to record the inventory data quickly and safely because they only keep it in the logbook and are not properly organized. some of the other issues are Consistent stockouts High amount of obsolete inventory, High amount of working capital, High cost of storage, Spreadsheet data-entry errors, Loss of customers.

4. When does the issue occur?

Customer demand is constantly shifting. Keeping too much could result in obsolete inventory you're unable to sell, while keeping too little could leave you unable to fulfill customer orders. Order strategies for core items, as well as technology to create and execute an inventory plan, can help compensate for changing demand. Global supply chains shift daily, placing a burden on your inventory planning and management operations. When departments are apathetic about sharing information, it makes identifying inventory trends and finding ways to improve much more difficult.

5. Where is the issue occurring?

Inventory management controls at the warehouse is labor-intensive and involve several steps, including receiving and put away, picking, packing, and shipping. The challenge is to perform all these tasks in the most efficient way possible. Efficiently managing space is an intimidating task. Planning and designing warehouse spaces with inventory management platforms helps you better control the timing of new stock deliveries. It can account for important factors, such as available space.

6. Why is it important that we fix the problem?

The importance to fix the problem is inventory management cannot be stressed enough, especially for ECommerce and online retail brands. Accurate inventory tracking allows brands to fulfill orders timely and accurately. Inventory management in businesses must grow as the company expands. With a strategic plan in place that optimizes the process of overseeing and managing inventory, including real-time data on inventory conditions and levels, companies can achieve inventory management benefits. Striking a balance between the demand and supply is extremely crucial for businesses, thus, inventory management provides aid in better planning and ordering of stock items.