

## **Problem Statement**

### **Given Problem Statement:**

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 on which to run their businesses. Applications have been developed to help retailers track and manage stocks related to their own products. The System will ask retailers to create their accounts by providing essential details. Retailers can access their accounts by logging into the application.

Once retailers successfully log in to the application they can update their inventory details, also users will be able to add new stock by submitting essential details related to the stock. They can view details of the current inventory. The System will automatically send an email alert to the retailers if there is no stock found in their accounts. So that they can order new stock.

### **Problems and Solutions:**

#### **1. Inconsistent Tracking:**

Using manual inventory tracking procedures across different software and spreadsheets is time-consuming, redundant and vulnerable to errors. Even small businesses can benefit from a centralized inventory tracking system that includes accounting features.

#### **Solution - Centralized Tracking:**

Consider upgrading to tracking software that provides automated features for re-ordering and procurement. Inventory management platforms provide centralized, cloud-based databases for accurate, automatic inventory updates and real-time data backup.

#### **2. Warehouse Efficiency:**

Inventory management controls at the warehouse are labor-intensive and involve several steps, including receiving and putaway, picking, packing, and shipping. The challenge is to perform all these tasks in the most efficient way possible.

#### **Solution - Transparent Performance:**

Measure and report warehouse performance metrics like inventory turnover, customer satisfaction, and order processing speed to overcome warehouse inefficiencies. Share this data with employees and suppliers.

### **3. Inaccurate Data:**

You need to know, at any given moment, exactly what inventory you have. Gone are the days when inventory could be counted once a year with an all-hands-on-deck approach.

### **Solution - Stock Auditing:**

Frequent stock auditing processes, like daily cycle counting, reduce human error and provide more accurate, up-to-date inventory data for managing cash flow. Organize audits by category and cycle count smaller inventory samples on a predictable schedule for more accurate financial data.

### **4. Changing Demand:**

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 and technology to create and execute an inventory plan can help compensate for changing demand.

### **Solution - Demand Forecasting:**

Some inventory management platforms include demand forecasting tools. This feature integrates with accounting and sales data to help you predict demand and schedule orders based on shifting customer preferences, material availability or seasonal trends.

### **5. Limited Visibility:**

When your inventory is hard to identify or locate in the warehouse, it leads to incomplete, inaccurate, or delayed shipments. Receiving and finding the right stock is vital to efficient warehouse operations and positive customer experiences.

### **Solution - Add Imagery:**

Add images with product descriptions in your inventory database to improve purchasing and receiving processes, enhance accuracy and prevent misplaced inventory.

### **6. Supply Chain Complexity:**

Global supply chains shift daily, burdening your inventory planning and management operations. The manufacturers and wholesale distributors that dictate when, where, and how your inventory ships require flexibility and offer unpredictable lead times.

### **Solution - Measure Service Levels:**

Monitor and track supplier data, such as shipment errors, damaged or defective products, and missed delivery appointments. Measure your supplier's performance to find and fix supply chain disruptions, reduce complexity and streamline logistics.

### **7. Evolving Packaging:**

Compostable packaging—or removing packaging altogether—to reduce waste presents new obstacles for warehouse design and storage. It may even mean new equipment or shorter shelf life for some items.

**Solution - Classify Inventory:**

Create inventory classifications to manage changing trends, such as packaging initiatives to reduce plastic waste. Categorize stock by packaging type, dimensions and product. Use this information to control shipping costs and storage location better.