

LITERATURE SURVEY

INVENTORY MANAGEMENT SYSTEM FOR RETAILERS

TEAM LEAD -BHAWINJASPER E -713519CECS004

TEAM MEMBER -1 -SNEHA G -713519CECS041

TEAM MEMBER -2 -SADHANANDAN S -713519CECS033

TEAM MEMBER -3 -NANDHAKUMAR G -713519CECS020

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 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.

LITERATURE REVIEW:

1. A secure and efficient inventory management system for disasters

PROPOSED APPROACH:

An efficient humanitarian inventory control model and emergency logistics system plays a crucial role in maintaining reliable flow of vital supplies to the victims located in the shelters and minimizing the impacts of the unforeseen disruptions that can occur.

This system should not only allow the efficient usage and distribution of emergency supplies but should also offer the ability to be integrated with technologies such as Radio Frequency Identification Devices (RFIDs) for commodity tracking and logistics

ADVANTAGES:

- This system used RFIDs for tracking the commodity and maintaining its stocks
- model-free on-line control methodology is used to understand the efficiency and practicality of both algorithms in terms of computational times and accuracy of results.

DISADVANTAGES:

- This system just tracks the commodity and does not track whether they are satisfied or not.

2. Inventory Management Information System in Blood Transfusion Unit

PROPOSED APPROACH:

There are several blood components at the Blood Transfusion Unit to improve health services in Indonesia including Whole Blood, Packet Red Cell, Liquid Plasma, Fresh Frozen Plasma, Thrombocyte Concentrate, Kriopresipitat and Washed Erythrocyte. To provide services to consumers, this unit faces problem in the form of unbalance blood supply information and consumer demand. Consequently, management of this unit was difficult to manage the blood inventory. Aims of this study is to build an information system model using the system development life cycle approach in order to manage blood demand. Furthermore, this case adopted continuous review model to conduct the inventory policies involving safety stock, reorder point, and order quantity on each blood components. This study is able to provide benefits for Blood Transfusion Unit in order to increase service level to the customer. Further study is suggested to consider blood inventory simulation in developing several scenarios to manage blood demand.

ADVANTAGES:

- Blood bank is made online so we can easily track the availability
- Many lives had been saved.

DISADVANTAGES:

- The inventory doesn't meet the exact need.
- Many still suffer because of lack of stock.

3. A Material Management in Construction Project Using Inventory Management System

PROPOSED APPROACH:

In this project we have prepare scheme of material management in the construction industry for building project also conducting survey of industry and determine the various format for construction material management. As well as talk over the tracking system of material management in the industry and also discuss the software development for proper management

ADVANTAGES:

- Fastest construction due to management of stocks.
- Easy to maintain stock details.
- Better customer experience.

DISADVANTAGES:

- Lack of proper analysis of material need.
- Leads to loss due to excessive amount of stock materials.
- Excessive inventory can lead to poor quality goods and degradation.

4. A Cloud-Based Inventory Management System Using a Smart Trolley for Automated Billing and Theft Detection

PROPOSED APPROACH:

Currently, self-checkout counters contribute about 90% of the supermarkets worldwide. However, there is no system to provide product details while shopping to customers and monitor theft which has led to loss in supermarkets and customer dissatisfaction, respectively. Nowadays, billing is a tedious task as customers have to stand in long queues to get their products barcode scanned. This paper proposes an architecture of a smart trolley which provides an automated billing, anti-theft system, and facilitates inventory management through a web application. This is achieved on a cloud-based platform using RFID and Wi-Fi technology. The goal of this proposed smart trolley system is to provide easily scalable, economical, and technology-oriented shopping system thereby reducing queuing time, anti-theft, and labour cost. Results show that there is a 26% reduction in time spent during shopping as compared to conventional shopping methods

ADVANTAGES:

- Reduces theft and improves customer experience.
- Easy to maintain inventory.

DISADVANTAGES:

- Its practically difficult because it uses RFIDs so wrong detection is possible.
- Some customers will not prefer self-service.

5. An IoT Quality Global Enterprise Inventory Management Model for Automation and Demand Forecasting Based on Cloud

PROPOSED APPROACH:

Industrial Internet of Things (IIoT) is the applied Internet of Things (IoT) to the manufacturing industry also termed as the Industrial Internet or Industry 4.0. IIoT is the next big thing that will be revolutionizing enterprises and factories with focus on return on investment in IIoT, all machines in an enterprise as well as the factory are connected to a network and data are collected from the machines. Every machine has so many sensors attached to it, the sensor data can be sent in real time to a cloud storage system through a communication network. It helps to monitor the machines and make machines work efficiently. Data can be stored in a cloud storage service permanently; the collected data can be used for analysing the enterprise inventory management system. Useful information can be taken out of the stored data which can be used for improving the enterprise's inventory performance globally. It can help the enterprise to reduce losses and increase profits by finding where the performance of the inventory can be improved.

6. Inventory management system

PROPOSED APPROACH:

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 organization with the involvement of Technology system. This system can be used to store the details of the inventory, stock maintenance, update the inventory based on the sales details, generate sales and inventory report daily or weekly based. This project is categorized individual aspects for the sales and inventory management system. In this system we are solving different problem affecting to direct sales management and purchase management. 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 wholesaler when it is time to record. Inventory Management System is also an important means of automatically tracking large shipment. An automated Inventory Management System helps to minimize the errors while recording the stock.

DISADVANTAGES:

- This application is not suitable for those organization where there is large quantity of product and different level of warehouses

7. Inventory management system

PEOPOSED APPROACH:

The project has been developed to keep track of details regarding the equipment. The current project is a window based. To provide the basic services related to the supply of the equipment. The project will take care of all supply order.

DISADVANTAGES:

- Manual Errors at the time of entering the data can't be check, only the validation required w.r.t proposed system is checked

8. Inventory management system

PEOPOSED APPROACH:

Inventory management system is an application which is helpful for business operate. Inventory management is a challenging problem area in supply chain management. Companies need to have inventories in warehouses in order to fulfil customer demand, meanwhile these inventories have holding costs and this is frozen fund that can be lost. Therefore, the task of inventory management is to find the quantity of inventories that will fulfil the demand, avoiding overstocks. This paper presents a case study for the assembling company on inventory management. It is proposed to use inventory management in order to decrease stock levels and to apply an agent system for automation of inventory management processes. Inventory management system (IMS) use for a departmental store.

DISADVANTAGES:

- It is difficult to found records due file management system.

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