Literature survey

Inventory management system for retailers

Rob Grmek[1]2011 we investigate possible solutions for alleviating retail manufacturers of logistical concerns by using inexpensive cell phones with WAP and WiFi capabilities, low resolution digital cameras, and opensource applications for web hosts in the cloud to store and process business information. The proposed inventory tracking system prototype is aimed at the company's agents whose responsibilities are to track and manage the retailer's merchandise as it flows between suppliers and consumers. This means to use inexpensive options in terms of both hardware and software, and services in the cloud for data processing and storage as well as to automate the process of physically tracking inventory so less time is spent on this particular task. Such a system with further development can also address business critical question of monitoring sales personnel adherence to the assigned sales routes, collection of other information from the retail outlets There are several areas where the proposed solution can be used: on-shelf availability check and inventory calculation orders taking retail audit and by consumer protection rights agencies. From the technical point of view the goal is to investigate the available open source solutions so they may be integrated with a new proposed system for business utilization.

Panutsaya Rujakom[2] 2022 A retail store management system is a retail store that uses stock management and orders through the basket by adding a function to classify products from images to facilitate customers and create competitive efficiency for traditional retailers. Product classification is used to improve the performance of traditional retailers by classifying products within a modern retail store by using deep learning on product images to create a model for mobile applications. The best model is selected by comparing the results from learning .Then, mobile applications have developed by using the best model to support product management for modern retailers. In a mobile application for modern retail management, there are users consisting of retailers and customers, whose functions include stock arrangement, shopping cart arrangement, and product classification. A mobile application is developed by implementing Flutter with the Dart language. It is a cross-platform mobile application development tool that uses Firestore as a database on the Firebase cloud.

Gaur, Fisher and Raman [3] (2005) In their study examined firm-level inventory behavior among retailing companies. They took a sample on 311 public-listed retail firms for years 1987–2000 for investigate relationship on stock turnover about gross margin, capital intensity , sales surprise. All observed that stock aggregate turnover for retailing company was positively related to capital intensity with sales surprise while inversely related gross margins.

S. Singh [4] (2006) Analysed stock control exercises on single fertilizer company named IFFCO. He statistically examined stock level according consumption, sales as well as other variables along growth on these variables with inventory patterns. He concluded increments in components of stocks lead to increment in the proportion on stock in current assets. The special attention was made in stores with spares for calculate excess purchases resulting Pradeep singh (2008) In his study made an attempt to investigate stock with working capital managing Indian Farmers Fertilizer Cooperative Limited (IFFCO) / National Fertilizer Limited (NFL). He concluded that overall position of the working fund of IFFCO / NFL is satisfactory. But there arises need for imrovement in stocking as situation of IFFCO. Although stock were not properly utilized as well as maintained bay IFFCO during investigation period. Also managing organization of NFL surely try to properly utilize stock with try to care stock according to requirements. So that liquidity will not interrupt.

Annalisa Milella[5](2020) Conventional store audits based on physical inspection of shelves are labor-intensive and do not provide reliable assessment. A novel framework for automated shelf monitoring, using a consumer-grade depth sensor. The aim is to develop a low-cost embedded system for early detection of out-of-stock situations with particular regard to perishable goods stored in countertop shelves, refrigerated counters, baskets or crates. The proposed solution exploits 3D point cloud reconstruction and modelling techniques, including surface fitting and occupancy grids, to

estimate product availability, based on the comparison between a reference model of the shelf and its current status. No a priori knowledge about the product type is required, while the shelf reference model is automatically learnt based on an initial training stage. The output of the system can be used to generate alerts for store managers, as well as to continuously update product availability estimates for automated stock ordering and replenishment and for e-commerce apps.

Ákos Leiter[6] 2019 More and more telecommunication networks have started to use the power of network function virtualization (NFV) and software defined networking (SDN) concepts. Also, new requirements are emerging such as providing low latency by moving services as close as possible to the end-users. Multi-access Edge Computing (MEC) addresses these challenges but requires huge investments. Lots of new (edge) sites should be installed worldwide. To decrease the cost of investments service providers (SP) may share their infrastructure. This paper uses a centralized approach to create fair prices with resource management capabilities where market dynamics prevail. Stock market trading strategies are evaluated as resource management algorithms and a cost estimation is also presented.

Srinivas Rao Kasisomayajula [7] (2014) His research title based on the" Inventory Management in Commercial Vehicle Industry in India". There were five sample firms had preferred for study. The study concluded that all the units in the commercial vehicle industry have significant relationship between Inventory and Sales. Proper management of inventory is important to maintain and improve the health of an organization. Efficient management of inventories will improve the profitability of the organization.

Soni [8] (2012) Made an in depth study of practices followed in regard to inventory management in the engineering goods industry in Punjab. The analysis used a sample of 11 companies for a period five years, that is, 2004–2009 and was done using panel data set. The adequate and timely flow of inventory determines the success of an industry. She concluded that size of inventory enhanced marginally over the period as compared to a hike in current assets and net working capital. Inventories constituted half of the working capital which was due to overstocking of inventory as a result of low inventory turnover especially for finished goods and raw materials. Rise in sales and favourable market conditions lead to a rise in inventory levels. It was also inferred that sales increased more as compared to inventory.

Anish Maharjan[9] 2016 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 categorize 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 resolving around consumer goods. Without proper inventory control, a large retail store may runout 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 on important means of automatically tracking large shipment. An automated Inventory Management System helps to minimize the errors while recording the stock

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