

Ideation Phase

Literature Survey

Date	19 September 2022
Team ID	PNT2022TMID03839
Project Name	Inventory Management System For Retailers
Maximum Marks	2 Marks

I. 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

II. LITERATURE SURVEY

1. Research on the Optimization of Retailer Inventory Strategy based on System Dynamics Simulation:-

This was introduced by Yang, Lin; Hou, Kaihu; Zhong, Jinyuan in the year 2012 on IEEE conference[1], they used dynamic simulation because they decided to predict the result. But this was a failure because they aren't the real thing. People may react differently when faced with situations in the real world. For example, they are more likely to panic if there is real danger. With the increase of virtual worlds, people are becoming more familiar with simulation. So it was not so efficient.

2. Inventory Management Information System Development at bprtk kemkominfo jakarta:-

This was introduced by Elvi Fetrina , Eri Rustamaji , Tatat Nuraeni ,Yusuf Durrachman in the year 2017 at IEEE conference[2]. The system was built using Rapid Application Development (RAD) and Unified Modeling Language (UML). With this system, the data is stored directly into the database so it will minimize the possibility of loss or damage data. The disadvantage is it requires lots of place and takes too much time to access. And even the efficiency is not as much as expected.

3. Study on Model of Supply Chain Inventory Management Based on System Dynamics:-

This was introduced by Feng Yang in 2009 at IEEE conference[3]. According to them all these simulations would weaken the limit of the mental model in complex systems and provide scientific supports for the final decisionmaking. But that does not happened there are other factors which was affecting with this,so this is also not as much as efficient.

4. The study for selecting the cloud service consignment performance in group decision of shared inventory resource in small-sized electronic industry:-

This was introduced by Kang, Tsai-Hua, chien ,wei, shen, sung-shiou in the year 2016 on IEEE conference[4]. They used cloud service but main disadvantage is cost efficient. Because of using cloud the cost efficient is slightly high and Security and Privacy Concerns With Some Providers. So that it may not be an useful one.

5. Development of Inventory management System:-

This was introduced by Yang Fan in the year 2010[5]. In the design of storage management system model based on multi-Agent , we use a hierarchical federation multi-Agent system organization structure and the cooperation among Agents is based on improved contract net protocol, which enhances system performance on the whole. It can carry out task allocation independently when accepting tasks. It can distinguish commodity kinds for the tasks submitted by users and look for suitable task undertakers according to the grades and names of these commodities, the process doesn't need user's intervention and it can be finished independently.

6. The application of RFID technology in the inventory management:-

This was introduced by L.june;Z.Xiaocui;L.Bingwu at 2010 in IEEE conference[6]. In this process they have applied RFID technology. After applying the RFID into the inventory management, the efficiency of inventory management gets greatly improved, the inventory levels and labour costs is reduced and the inventory management information is advanced processed. Modern logistics is based on the information technology, pays attention to the management of service, people, technology and information. Emphasized the standardization and efficiency of logistics, use relatively low cost to achieve a high level of service. RFID technology plays an important role in the process to achieve rapid, real time, standardize of collecting and processing of the logistics system.

III. REFERENCES

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