**LITERATURE SURVAY**

**INVENTORY MANAGEMENT FOR RETAILERS**

**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. 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. Managing inventory to create higher inventory turnover and just in time delivery practices is one of the most important processes for online retailers. Flexible systems that respond to customer demand and inventory uncertainties are most important in e-commerce.

**LITERATURE REVIEW**

**PAPER 1: Cloud-Based Inventory System for Effective Management of Under and Over-stock Hazards**

**Published year:** June 2021

**Author:** Rashidah Olanrewaju

**Journal name**: 8th International Conference on Computer and Communication Engineering (ICCCE)

**Summary**: Inventory can be defined as the goods and materials used by the organization for the sake of manufacturing and sales, including the items to support all the processes. A good inventory system management can increase the efficiency of operations, reduce cost, and maximize profit. Hence, led to the automation of all the manual tasks and finally please the customer of the organization. The cloud-based computerized inventory system is proposed with the integration of a barcode scanner to replace the usage of manual and paper based systems. The interface is developed using Hypertext Mark-up Language, JavaScript, and Cascading Style Sheet while the backend database is coded. It is undeniable that the manual inventory system needs to be changed to an automated inventory system that can reduce the time taken, reduce human error, and improve the efficiency of the inventory using My Structured Query Language.

**PAPER 2: Inventory management for retail companies: A literature review and current trends**

**Published year:** 2021

**Author:** Cinthya Vanessa Muñoz Macas, Jorge Andrés Espinoza Aguirre, Rodrigo Arcentales-Carrión, Mario Peña

**Journal Name:** IEEE International Conference on Information Systems and Software Technologies (ICI2ST)

**SUMMARY:** This article's objective is to examine and summarise a large body of literature on inventory management that includes numerous definitions and key ideas for the retail industry. To identify the primary trends and indicators of inventory management in Small and Medium-sized Enterprises, a systematic literature study was conducted (SMEs). The five-year study period between 2015 and 2019 focuses solely on the retail industry. The main findings of this study include the top inventory control and management models, the Key Performance Indicators (KPIs) for managing them correctly, and the advantages and difficulties of selecting or implementing an effective system. According to this research, there are 22 crucial inventory management KPIs that must be taken into account when shops assess their inventories. Ten main indicators were established from them, including inventory level, actual inventory and its connection to the business' information system, shortage or shortage frequency, frequency of product reordering or replenishment, service level, replacement frequency, product availability, inventory excess, number of items on the shelf, and level of income or profit. These indications enable the business to monitor stock levels, manage them effectively, and present a high level of customer service and product availability.

**PAPER 3: The inventory management system for automobile spare parts in a central warehouse**

**Published Year:** 2008

**AUTHOR NAME:** S.G. Li, X. Kuo

**Journal Name:** Li, S. G., and X. Kuo. "The inventory management system for automobile spare parts in a central warehouse." Expert Systems with Applications 34.2 (2008): 1144-1153.

**SUMMARY:** Because of the complex structure of spare parts supply chain, the conventional approaches, which do not consider the relationships between decision factors globally, cannot achieve the optimal performance. Therefore, this paper aims to develop an enhanced fuzzy neural network (EFNN) based decision support system for managing automobile spares inventory in a central warehouse. In this system, the EFNN is utilized for forecasting the demand for spare parts. However, without considering relevant domain knowledge, traditional neural networks are found to be suffered from the problem of low accuracy of forecasting unseen examples. Therefore, in our EFNN, the following improvement is made: First, it assigns connection weights based on the fuzzy analytic hierarchy process (AHP) method without painstakingly turning them. Second, by generating and refining activation functions according to genetic algorithm, our EFNN can provide comprehensive and accurate activation functions and fit a wider range of nonlinear models.

**PAPER 4: Inventory management performance in machine tool SMEs: What factors do influence them?**

**Published YEAR:** 2010

**Author Name:** R. Pillai

**JOURNAL NAME:**” Journal of Industrial Engineering and Management”, vol.3, No.3, pp.542-560, 2010.

**SUMMARY:** small and Medium Enterprises (SMEs) are one of the principal driving forces in the development of an economy because of its significant contribution in terms of number of enterprises, employment, output and exports in most developing as well as developed countries. But SMEs, particularly in developing countries like India, face constraints in key areas such as technology, finance, marketing and human resources. It is observed from literature that pursuing appropriate IM practice is one of the ways of acquiring competitiveness among others, by effectively managing and minimizing inventory investment. Inventory management can therefore be one of the crucial determinants of competitiveness as well as operational performance of SMEs in inventory intensive manufacturing industries. The key issue is whether Indian SMEs pursue better IM practices with an intension to reduce their inventory cost and enhance their competitiveness