

Inventory Management System for Retailers
LITERATURE SURVEY

19Z217 – Hemavarshini B
19Z242 – Sanjay S
20Z434 – Sruthi S
20Z435 – Udhayakumaran H

1.

Paper Link: <https://www.mdpi.com/2227-9717/9/1/102>

Author: Hector D Perez, Christian D Hubbs, Can Li, Ignacio E Grossmann

Year: 2021

Title: Algorithmic Approaches to Inventory Management Optimization

Inference: This paper takes two sales scenarios for an unfulfilled demand involving a single product and the modelling and optimizing of daily replenishment requests have been implemented by deterministic linear programming, multi-stage stochastic linear programming, and reinforcement learning methods. The comparative study of the performance of the three methods on the basis of profit, service level, and inventory profiles indicate the advantages and suitability of each approach over the other.

2.

Paper Link: <https://journals.vilniustech.lt/index.php/TEDE/article/view/14427>

Author: Dragan Vukasović, Dejan Gligović, Svetlana Terzić, Željko Stević, Perica Macura

Year: 2021

Title: A Novel Fuzzy MCDM Model for Inventory Management in order to increase business efficiency

Inference: In the first model, Fuzzy full consistency Method (FUCOM) and the fuzzy Evaluation based on Distance from Average Solution (EDAS) methods have been integrated for sorting products in the inventory based on unit price, procurement costs and demand. In the second model, FUCOM and ABC analysis have been integrated for sorting inventory considering significance of criteria. The comparison has shown that these 2 novel models perform better when compared to the traditional approaches driving business efficiency.

3.

Paper Link: <https://www.irjet.net/archives/V5/i4/IRJET-V5I448.pdf>

Author: Punam Khobragade, Roshni Selokar, Rina Maraskolhe, Prof. Manjusha Talmale

Year: 2018

Title: Research paper on Inventory management system

Inference: Inventory Management System is software which is helpful for the businesses operate hardware stores, where storeowner keeps the records of sales and purchase. Generating backup data is a critical process in a project for our shopkeeper. This work can be categorized as time consuming job and need high accuracy when placing the proper materials with its quantity. The requirements from the shopkeeper to create backup inventory within limited time and in high accuracy makes us to come up with automation solution by using desktop. Research strategy can be characterized as efficient and purposive examination of actualities with a goal deciding the powerful relationship among such certainties and research between at least two wonders from the broad writing study it is much clearer to contribute specifically for the effective consummation of the venture, are impacted by stock administration framework.

4.

Paper Link:

https://www.researchgate.net/publication/352235223_Inventory_management_for_retail_companies_A_literature_review_and_current_trends#read

Author: Cinthya Vanessa Munoz Macas, Jorge Andres Espinoza Aguirre, Rodrigo Arcentales Carrion, Mario Pena

Year: 2021

Title: Inventory management for retail companies: A literature review and current trends

Inference: Retail companies have acquired significant importance within several countries due to their high economic contribution. Therefore, the need to analyze their KPIs becomes highly significant, as well as their different systems, methodologies, and tools used within inventory management and optimization. Retail companies have acquired significant importance within several countries due to their high economic contribution. Therefore, the need to analyze their KPIs becomes highly significant, as well as their different systems, methodologies, and tools used within inventory management and optimization.