

A Study on Warehousing and Inventory Management Challenges

S. Alagu Maharaja Palani¹ and Mr. A. Prasanth²

Research Student, School of Management Studies¹

Research Guide & Professor, School of Management Studies²

Hindusthan College of Science and Technology Coimbatore, Tamilnadu

Abstract: *Efficient warehousing and inventory management are critical components of a streamlined supply chain, particularly in fast-paced manufacturing sectors. This study investigates the persistent challenges affecting inventory control and warehouse operations, focusing on factors such as space constraints, manual tracking, stock discrepancies, and inadequate system integration. Primary data collected from logistics and procurement staff revealed that a majority still rely on manual inventory systems, leading to frequent stockouts, overstocking, and inefficiencies in material handling. Furthermore, poor layout design and limited adoption of automation have compounded space utilization issues. Statistical analysis confirmed significant correlations between warehouse design and inventory accuracy. The study emphasizes the need for adopting warehouse management systems (WMS), improving layout planning, enhancing staff training, and leveraging technology for real-time tracking. By addressing these issues, businesses can reduce operational costs, improve productivity, and ensure better responsiveness to market demand..*

Keywords: Inventory Management, Warehousing Efficiency, Logistics Challenges, Supply Chain Optimization, Stock Control Systems, Warehouse Layout Design

Objectives:

1. To evaluate the current warehousing practices and identify inefficiencies in space utilization, layout design, and storage systems.
2. To assess the effectiveness and accuracy of existing inventory tracking methods and their impact on operational performance.
3. To examine the frequency and causes of inventory discrepancies, including stockouts, overstocking, and stock mismatches.
4. To analyze the relationship between warehouse infrastructure and the overall efficiency of material handling processes.
5. To investigate the role of staff training and audit practices in maintaining inventory accuracy and warehouse productivity.
6. To explore the potential of adopting automated systems and digital tools to enhance inventory visibility and control.
7. To propose strategic improvements aimed at reducing inventory-related delays and enhancing responsiveness to market demand.

