

A Study on Warehouse Management and Its Three-Dimensional Factors at Falcon India Lines PVT LTD

TAMIZHARASAN.C B.TECH (IT)

MBA (Systems & Operations) Student., Reg No: 43410389

School of Management Studies,

Satyabama Institute of Science and Technology, Chennai, Tamil Nadu, India.

MS M JAYASEELY M.Com ,M.A., M.Ed.,M.Phil.,(Ph.D)

Assistant Professor,

School of Management Studies,

Satyabama Institute of Science and Technology, Chennai, Tamil Nadu, India.

Abstract

Warehouse management plays a critical role in ensuring operational efficiency and supply chain effectiveness. This study focuses on Falcon India Lines Pvt. Ltd., exploring how Quality, Facility, and Functioning—the three key dimensions—impact warehouse efficiency. Using quantitative methods and statistical analysis tools like ANOVA and Chi-Square, the study evaluates warehouse infrastructure, employee satisfaction, and logistical challenges. The findings provide strategic recommendations for enhancing warehouse performance.

Keywords

Warehouse Management, Supply Chain, Employee Engagement, Logistics, ANOVA, Chi-Square, Inventory Management

Introduction

The warehousing sector is vital to logistics, serving as a crucial link between production and consumption. At Falcon India Lines Pvt Ltd, warehouse operations are closely tied to delivery efficiency and customer satisfaction. This study evaluates warehouse management performance in Chennai by examining Quality, Facility, and Functioning dimensions.

Objectives of the Study

- To examine the profile of warehouse employees at Falcon India Lines Pvt. Ltd.
- To elaborate the three-dimensional factors of warehouse: Quality, Facility, and Functioning.
- To analyze the relationship between employee profiles and warehouse factors.
- To recommend improvements for better warehouse practices.

Scope of the Study

The scope includes a comprehensive analysis of warehousing practices at Falcon India Lines Pvt. Ltd., Chennai. Theoretical and empirical frameworks are combined using employee surveys and literature review. The study highlights operational challenges and optimization strategies applicable to similar logistics organizations.

Review of Literature

Various researchers have explored the efficiency and challenges in warehouse management. Sneha Vishnu More (2024) identified warehouse complexity as a critical factor affecting planning and control. Gursharan Kaur and Dr. N K Batra (2023) emphasized warehousing's support role in logistics. Other works highlight the integration of green practices, RFID technology, and performance measurement tools that contribute to logistics excellence. These studies reinforce the relevance of quality infrastructure, trained manpower, and technology integration in warehouse performance.

Research Methodology

The study follows a quantitative research design. Primary data was collected via structured questionnaires from 128 respondents. Secondary data included academic journals, company documents, and industry reports. Statistical tools such as Percentage Analysis, Chi-Square, and ANOVA were used to interpret data.

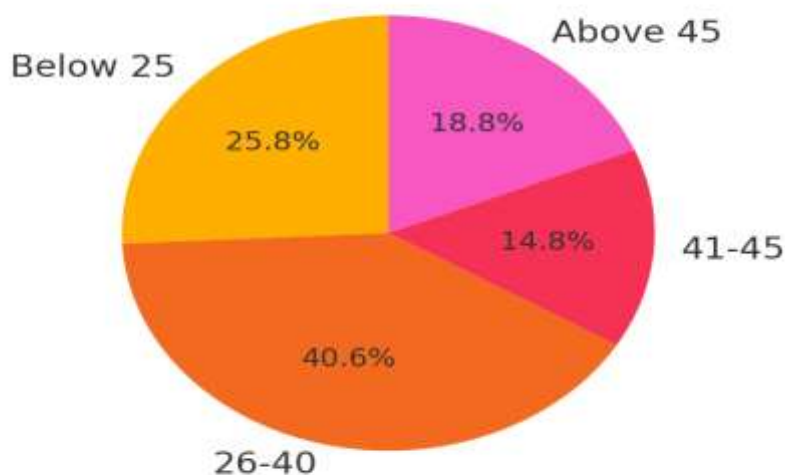
Types of Data Collection

Primary Data: Collected through direct surveys and employee interviews.
Secondary Data: Derived from organizational reports, literature, and online sources.

Data Analysis with Statistical Tools and Visual Analysis

The data collected was analyzed using percentage analysis, Chi-Square tests, and ANOVA to explore the relationships between demographic variables and warehouse quality perceptions. For instance, ANOVA results showed a significant relationship between education and perceived warehouse quality. The chart below illustrates the age distribution of the respondents.

Age Distribution of Respondents



Suggestions of the Study

- Invest in automated storage and retrieval systems (AS/RS) to enhance efficiency.
- Conduct regular training programs for employees on inventory and safety protocols.
- Implement warehouse management software for real-time tracking and reporting.
- Optimize storage layout to reduce material handling time.

Conclusion

The study highlights the importance of effective warehouse management in optimizing logistics operations at Falcon India Lines Pvt. Ltd. Key influencing factors include infrastructure quality, functional workflows, and employee satisfaction. By addressing identified challenges, the organization can enhance service quality, reduce errors, and maintain competitiveness in the logistics industry.

References

- Sneha Vishnu More (2024), Study on Warehouse Efficiency
- Gursharan Kaur and Dr. N. K. Batra (2023), Warehousing in Logistics
- Norlinda Mohd Rozar et al. (2019), Green Supply Chain Practices
- Khai Loon Lee and Zulkifli Mohamed Udin (2014), Global Supply Chain Capabilities
- Primary data collected from 128 respondents at Falcon India Lines Pvt. Ltd.