International Journal of Computational Research and Development (IJCRD)
International Peer Reviewed - Refereed Research Journal, Website: www.dvpublication.com
Impact Factor: 5.015, ISSN (Online): 2456 - 3137, Volume 11, Issue 1, January - June, 2026

REVERSE LOGISTIC MANAGEMENT IN PEPS INDUSTRIES IN COIMBATORE

D. Divya* & M. Rithick**

* Assistant Professor, Department of MBA, Sri Ramakrishna College of Arts & Science, Coimbatore, Tamil Nadu, India

** Student, Department of MBA, Sri Ramakrishna College of Arts & Science, Coimbatore, Tamil Nadu, India

Cite This Article: D. Divya & M. Rithick, "Reverse Logistic Management in Peps Industries in Coimbatore", International Journal of Computational Research and Development, Volume 11, Issue 1, January - June, Page Number 20-22, 2026.

Type of Review: Peer Reviewed as per |C|O|P|E| Guidance.

DOI: https://doi.org/10.5281/zenodo.18709032

Abstract:

The study titled "Reverse Logistic Management in Peps Industries in Coimbatore" looks at the reverse management practices used by Peps Industries, a leading mattress company in Coimbatore, Tamil Nadu. Reverse logistics is important for improving sustainability and customer satisfaction in modern supply chain systems. This study examines the efficiency and effectiveness of reverse logistics operations at Peps Industries Pvt. Ltd., focusing on two key areas: customer satisfaction and time efficiency. The research evaluates how factors like clear return policies, timely pickups, and communication practices affect customer experiences and overall performance. Findings show that transparent policies, friendly service from the pickup team, and prompt response significantly boost satisfaction. In contrast, delays and poor communication create negative perceptions. The study highlights the need for well-structured return procedures, staff training, and technology-driven tracking systems to improve efficiency. By combining operational and customer views, the research offers useful insights for creating sustainable and customer-focused reverse logistics strategies in the Indian manufacturing sector.

Key Words: Reverse Logistics, Customer Satisfaction, Time Efficiency, Peps Industries, Return Policy, Service Quality, Supply Chain Management, Sustainability.

Introduction:

In today's competitive market, driven by sustainability, reverse logistics has become crucial to supply chain success. It involves managing the flow of products from customers back to manufacturers for repair, replacement, recycling, or disposal. This process directly impacts customer satisfaction, cost efficiency, and environmental performance. With India's growing manufacturing and e-commerce sectors, the need for efficient return and replacement systems has increased. Poor handling of returns can lead to financial loss and damage to brand trust.

This study looks at Peps Industries' reverse logistics framework, especially customer satisfaction and time efficiency. It explores how clear return policies, prompt pickups, and effective communication affect the overall customer experience. The research aims to provide practical insights for improving operational efficiency and developing customer-focused reverse logistics systems.

Review of Literature:

- Anjali Harit (2025) - Development of mathematical models for supply chain management incorporating reverse logistics, emphasizing end-to-end integration of forward and reverse flows encompassing product returns, refurbishing, and resale.
- Deepak Kumar Sainy (2025) - Green Reverse Procurement and Technological Interventions in Car-Scrap Logistics: Evidence from India on How Platformization Enhances Efficiency and Reduces Leakages in Reverse Logistics Flows
- Dharmendra Kumar (2025) - Study on coordination mechanisms in the reverse supply chain, evaluating contractual and incentive-based approaches to align Original Equipment Manufacturers (OEMs), third-party logistics providers (3PLs), and refurbishers in reverse logistics operations.

Objective of the Study:

- To evaluate customer satisfaction levels regarding Peps' return and replacement process.
- To analyze the time taken for reverse logistics activities from initiation to final resolution

Statement of the Problem:

In today's competitive manufacturing world, effective reverse logistics is vital for keeping customers happy, cutting costs, and promoting sustainability. Peps Industries Pvt. Ltd., a top mattress maker in Coimbatore, faces several issues in handling returned and defective products. Mattresses are bulky, which adds to high transportation costs and complicates the return process. Even with established return policies, many customers deal with delays, unclear communication, and frustration regarding replacements and refunds. The main reasons for product returns, including manufacturing defects, mismatches, or damage during transit, have not been closely examined. This has led to ongoing inefficiencies and rising operational costs. These issues show that there is a need to closely review the current reverse logistics process, assess customer satisfaction, and analyze time efficiency. Doing so can help identify weaknesses and create cost-effective plans to improve overall performance in Peps' reverse logistics management system.

Research Methodology:

A Mixed-methods research design was adopted, integrating both quantitative and qualitative approaches. The qualitative data focuses on understanding the internal processes, policies, and managerial perspectives related to reverse logistics operations.

The quantitative data involves numerical analysis of returns, customer satisfaction scores, and turnaround times to measure the effectiveness of Peps' reverse logistics system. This combining both approaches, the study ensures an in-depth and data-driven evaluation of Peps' reverse logistics activities.

Sampling Technique:

The study used a convenience sampling technique to gather data from customers and employees of Peps Industries in Coimbatore. Customers who had returned or replaced products in the past year were included. Employees from the logistics, customer service, and operations departments took part. This approach allowed for easy access to relevant respondents within a limited time and budget. It provided balanced insights into Peps' reverse logistics performance.

Analysis:

Table Shows That Relationship between Return Policy Communication and Customer Satisfaction:

Hypotheses:

- (H_0): There is no significant relationship between clarity of return policy communication and satisfaction with the final resolution.
- (H_1): There is a significant relationship between clarity of return policy communication and satisfaction with the final resolution.

Variables	Pearson Correlation (r)	Sig. (2-tailed)	N
Clarity of return policy communication and satisfaction with the final resolution	-0.253	0.005	119

Interpretation:

There is no significant relationship between clarity of return policy communication and satisfaction with the final resolution. We can reject the null hypothesis.

Table Shows That Impact of Return Pickup Time on Customer Satisfaction:

Hypotheses:

- (H_0): There is no significant difference in customer satisfaction based on return pickup time.
- (H_1): There is a significant difference in customer satisfaction based on return pickup time.

Source	df	Mean Square	F	Sig.
Between Groups	3	11.870	7.180	< 0.001
Within Groups	115	1.653		
Total	118			

Interpretation:

There is a significant difference in customer satisfaction based on return pickup time.

Table Shows That Relationship Between Pickup Team Conduct and Customer Experience During Returns:

Hypotheses:

- (H_0): There is no significant association between pickup team professionalism and customers' overall return experience.
- (H_1): There is a significant association between pickup team professionalism and customers' overall return experience.

Test	Value	df	Sig. (2-sided)
Pearson Chi-Square	40.035	12	< .001
Likelihood Ratio	38.414	12	< .001
Linear-by-Linear Association	14.876	1	< .001
N of Valid Cases	119		

Interpretation:

There is no significant association between pickup team professionalism and customers' overall return experience. We can reject the null hypothesis.

Findings and Suggestions:

A negative correlation showed that unclear communication of the return policy reduced customer satisfaction. ANOVA results indicated that faster pickups, within 1 to 3 days, led to higher satisfaction levels. Transparency, quick responses, and polite service were key factors in customer satisfaction. Chi-square analysis revealed that pickup team behavior had a strong impact on the return experience. Faster resolution and better coordination between departments improved customer loyalty and service perception.

Improve Communication Clarity: Peps should simplify and clearly communicate its return and replacement policies through multiple channels, including the website, invoices, and customer service. Speed Up Pickup Processes: Set stricter timelines and tracking systems to make sure pickups happen within 1 to 3 days. This will improve customer satisfaction. Enhance Service Quality: Train staff to be transparent, provide timely updates, and treat customers politely during the return process. Strengthen Team Behavior and Accountability: Hold regular training sessions and performance reviews for pickup teams. This will ensure professional and friendly interactions with customers. Improve Coordination Between Departments: Encourage better teamwork between logistics, customer service, and operations to minimize delays and achieve quicker resolutions.

Conclusion:

The study found that customer satisfaction and time efficiency drive effective reverse logistics at Peps Industries Pvt. Ltd. Clear communication, quick service, and helpful staff were major factors in customer satisfaction and loyalty. Customers who received timely updates and guidance reported a more positive experience.

Time efficiency strongly impacted perceived service quality. Delays in pickups or replacements and poor coordination among departments lowered system effectiveness. Improving coordination between departments and ensuring prompt action can greatly improve the overall customer experience.

From a management perspective, using digital tools like real-time tracking, automated scheduling, and proactive communication can cut delays and increase efficiency. In addition to technology, training employees to offer professional and friendly service will build customer trust. By combining transparency, technology, and teamwork, Peps can turn its reverse logistics into a strong competitive advantage.

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