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The Customer Return Behavior and Its Impacts on Supply Chain Management/Analyse at Vaibhav Creation

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Abstract: ***In the contemporary retail landscape, particularly within the competitive textile and garment sector, customer return behavior has transitioned from a backend logistics concern to a primary driver of supply chain volatility. This project investigates the patterns, motivations, and systemic impacts of product returns at Vaibhav Creation. By analyzing historical return data and consumer feedback, the study identifies key "return triggers"—ranging from sizing discrepancies and quality mismatches to the psychological phenomenon of "wardrobing." The research evaluates how these behaviors disrupt the traditional forward supply chain, necessitating a robust Reverse Logistics framework.***
Keywords: Reverse Logistics, Customer Behavior, Supply Chain Management, Retail Analytics, Vaibhav Creation, Inventory Management.

I. INTRODUCTION

In the modern retail landscape, customer return behavior has evolved into a primary driver of supply chain design. With online return rates reaching 30%, businesses like Vaibhav Creation face a complex surge in reverse logistics. Returns frequently stem from unmet expectations regarding size or quality, impacting every stage from warehousing to sustainability planning.Inefficient return management triggers a domino effect: rising operational costs, inventory imbalances (stockouts or overstocks), and eroded profit margins. However, a transparent, "hassle-free" return process is a powerful tool for customer retention, with 90% of shoppers likely to repurchase if the experience is seamless.This study analyzes the motivations behind returns at Vaibhav Creation and their systemic impacts. By understanding these patterns, the organization can implement robust reverse logistics—integrating refurbishing and recycling—to mitigate environmental waste, reduce carbon emissions, and transform a logistical challenge into a competitive advantage in the apparel industry.

II. REVIEW OF LITERATURE

This Literature Review highlights how customer return behavior has evolved from a simple logistics issue into a complex strategic driver. Recent research (2019–2023) identifies three core themesTechnological Integration: Studies by Zhang et al. and Choi et al. emphasize using AI and Machine Learning to predict return triggers like fit and quality before shipment.Operational Complexity: Researchers like Wirtz and Wagner analyze the "omni- channel" challenge, where returning online purchases to physical stores creates inventory and visibility hurdles.Sustainability & Profitability: De Maestri and Mann explore the "hidden costs" of convenience, balancing lenient return policies that drive sales against the environmental impact and logistical drain of reverse flows.

III. OBJECTIVES OF THE STUDY

The objectives of the study on customer return behavior and its impact on supply chain management at **Vaibhav Creation** are as follows:

1) To analyze customer return behavior To examine the patterns, frequency, and trends of product returns in order to understand customer return practices.
2) To identify the major causes of product returns To determine the key factors such as quality issues, size mismatch, defects, or delivery errors that contribute to returns.
3) To evaluate the impact of returns on supply chain performance To assess how customer returns affect inventory management, warehousing, logistics, and overall operational efficiency.

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IV. RESEARCH METHODOLOGY

This study utilizes a descriptive research design to analyze return behavior at Vaibhav Creation. Using random sampling ($N=80$), primary data from surveys and secondary company records are evaluated. Hypotheses regarding efficiency and satisfaction are tested using Chi-Square, ANOVA, Correlation, and t-Tests to provide data-driven supply chain insights.

V. DATA ANALYSIS & RESULTS

1) *Contacting Customer Support Before Return.This table analyzes whether proactive communication occurs before a reverse logistics process is initiated.*

Contact Support	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	47	57%	57%	57%
No	36	43%	43%	100%
Total	83	100%	100%	

- Analysis & Interpretation: The data reveals that 57% of respondents (47 individuals) contact customer support before initiating a return. This majority suggests that customers seek clarification or troubleshooting before committing to the return process. However, 43% initiate returns independently, indicating either a very user-friendly automated system or a lack of desire for intervention. For Vaibhav Creation, the high contact rate highlights a critical "intervention window" where support staff could potentially prevent a return by resolving customer issues through guidance.

2) *Duration to Receive Refund or Replacement.This section measures the efficiency of the reverse supply chain lead time.*

Duration	Frequency	Percent	Valid Percent	Cumulative Percent
4 – 7 Days	43	52%	52%	52%
More than a week	17	20%	20%	72%
Within 3 Days	16	19%	19%	91%
Still Waiting	04	05%	05%	96%
Not Applicable	03	04%	04%	100%

- Analysis & Interpretation: The largest segment of respondents (52%) received their refund or replacement within 4 to 7 days. While only 19% experienced a rapid turnaround (within 3 days), a concerning 25% (combined "More than a week" and "Still Waiting") faced delays. In the garment industry, long refund cycles tie up customer capital and can discourage repeat purchases. Reducing the 52% majority into the "Within 3 Days" category should be a primary operational goal.

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3) Interest in Re-purchasing After Return Experience.This uses a Likert Scale (1–5) to measure post-return brand loyalty.

Interest Level	Frequency	Percent	Valid Percent	Cumulative Percent
1 (Very Low)	0	0%	0%	0%
2 (Low)	04	5.2%	5.2%	5.2%
3 (Neutral)	27	32.3%	32.3%	37.5%
4 (High)	46	55.2%	55.2%	92.7%
5 (Very High)	06	7.3%	7.3%	100%

- Analysis & Interpretation: The results are highly positive, with 55.2% expressing a high intent to purchase again. This proves that a return is not the "end" of a customer relationship; rather, if handled correctly, it maintains trust. With over 92% of respondents falling into the Neutral to High interest categories, Vaibhav Creation's return process appears to be a retention tool rather than a deterrent.

4) Satisfaction Based on Website/Catalog Information.This measures the gap between digital expectation and physical reality.

Satisfaction Level	Frequency	Percent	Valid Percent	Cumulative Percent
Exceeded Expectation	38	46%	46%	46%
Met Expectation	21	25.2%	25.2%	71.2%
Slightly Below	15	18%	18%	89.2%
Far Below	09	10.8%	10.8%	100%

- Analysis & Interpretation: While 71.2% of customers found the product matched or exceeded the website description, nearly 29% felt the product was below expectations. In the apparel sector, this "Expectation Gap" is the #1 driver of returns. These 24 dissatisfied respondents likely represent the core of the return volume, suggesting a need for better photography or more accurate size charts.

VI. FINDINGS

Vaibhav Creation’s consumer base is predominantly male (67.5%), highly educated, and aged 25–45. While quality satisfaction is high, returns are primarily driven by "changed minds" (49.3%) and sizing issues (18%) rather than defects. Findings suggest that improving product description accuracy, sizing guides, and delivery tracking is essential. Enhancing return policy transparency and adopting personalized communication, particularly via phone and email, will significantly reduce return rates and bolster long-term customer trust.

VII. SUGGESTIONS

To optimize Vaibhav Creation’s supply chain, management should implement precise sizing guides and high- resolution imagery to minimize "change of mind" returns. Enhancing policy transparency and utilizing predictive analytics for reverse logistics will reduce operational costs. Streamlining communication through SMS and email further ensures customer clarity, ultimately boosting efficiency and retention

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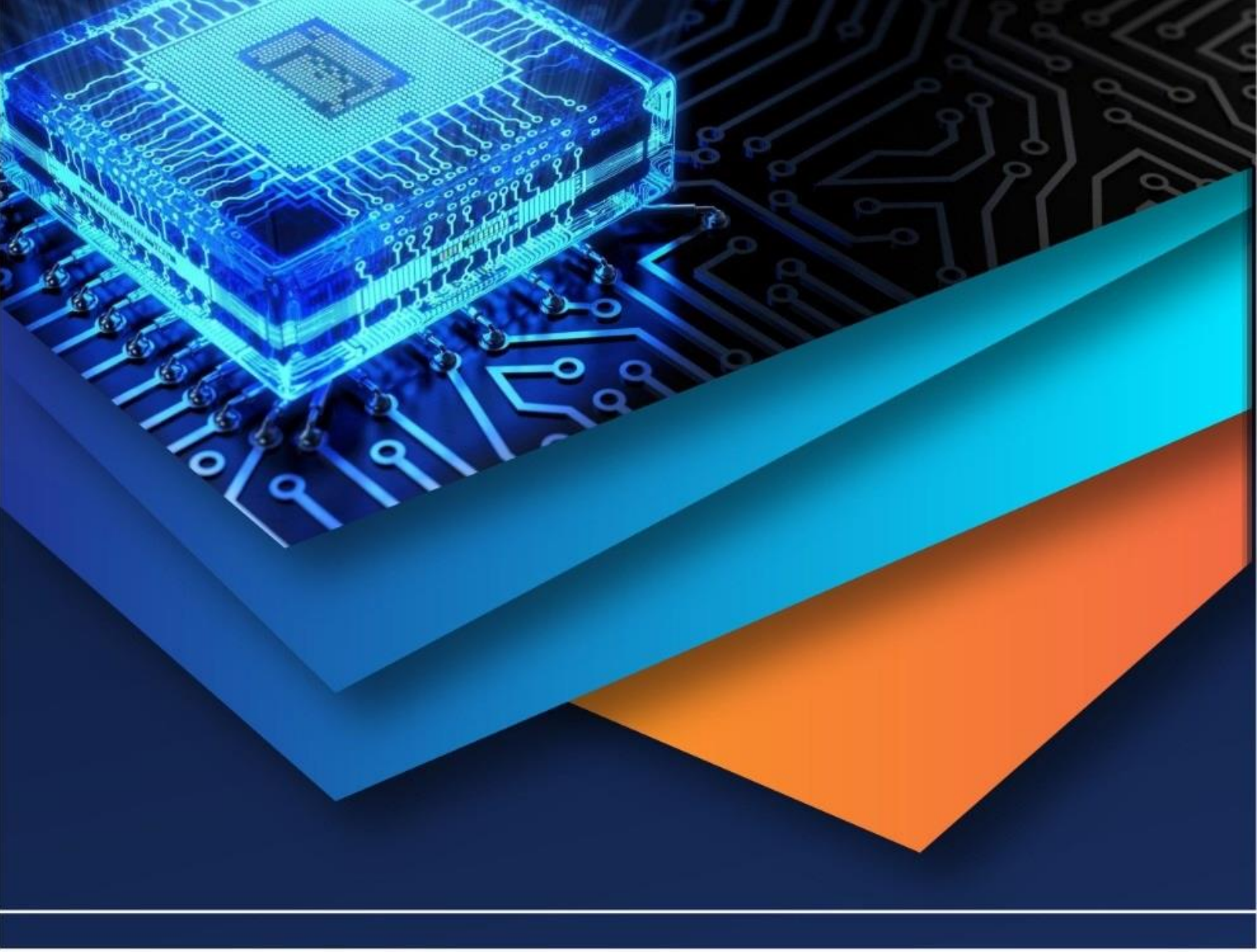
VIII. CONCLUSION

Product returns at Vaibhav Creation, driven primarily by mismatched expectations and sizing, significantly strain reverse logistics and profitability. To ensure operational stability, the company must shift from reactive handling to proactive prevention. Prioritizing accurate product representation, clear communication, and efficient inventory management will reduce costs and build a more resilient, cost-effective supply chain

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