



Impact of Reverse Logistics Service Quality on Customer Switching Intention: A Consumer Study of Flipkart (Ekart Logistics) Users in Hyderabad

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Abstract – Reverse logistics has become an important part of e-commerce by providing customers with product return services, pickup, refunds, clear policies, and tracking. This study titled “Impact of Reverse Logistics Service Quality on Customer Switching Intention: A Consumer Study of Flipkart (Ekart Logistics) Users in Hyderabad” was conducted to understand consumers’ perceptions of reverse logistics service quality and examine its relationship with customer switching intention. The study is based on primary data collected from 131 Flipkart users in Hyderabad through a questionnaire prepared using Google Forms. A descriptive research design and convenience sampling method were adopted. The collected data were organized and analyzed using Microsoft Excel and Microsoft Power BI. Frequency and percentage analysis, mean scores, graphical representation, Pearson correlation, and multiple regression analysis were used to interpret the responses. The findings show that the overall perception of Reverse Logistics Service Quality had a mean score of 3.88 out of 5. Among the six dimensions, Return Process Convenience received the highest mean score of 3.94, while Customer Support/Resolution received the lowest mean score of 3.81. All six dimensions showed positive and statistically significant relationships with Customer Switching Intention, with correlation values ranging from 0.327 to 0.469. Customer Support/Resolution showed the highest correlation ($r = 0.469$). The regression model explained approximately 28.8% of the variation in Customer Switching Intention. Customer Support/Resolution was the only dimension statistically significant in the regression analysis ($B = 0.222$, $p = 0.026$). The study suggests that Flipkart should improve customer support and issue resolution, clarify return policies, strengthen communication and tracking, ensure timely return pickups, and process refunds efficiently. The study provides insights into customers’ perceptions of reverse logistics service quality and its relationship with switching intention.

Keywords - Reverse Logistics, Flipkart, Ekart Logistics, Customer Switching Intention, Return Process Convenience, Return Pickup Timeliness, Refund Processing Time, Return Policy Clarity, Return Communication and Tracking, Customer Support/Resolution

I. INTRODUCTION

The present study is titled “Impact of Reverse Logistics Service Quality on Customer Switching Intention: A Consumer Study of Flipkart (Ekart Logistics) Users in Hyderabad.” The study focuses on understanding customers’ perceptions of reverse logistics service quality and examining its relationship with their intention to switch from Flipkart to another e-commerce platform.

Reverse logistics refers to the process of managing products after they have been delivered to customers, including product returns, return pickup, refund processing, return policies, tracking, and customer support. In e-commerce, the customer experience does not end with product delivery. The return and refund process also plays an important role in shaping customers’ overall perceptions of the platform.

Flipkart is one of the major e-commerce platforms in India. Its logistics ecosystem includes Ekart, which supports various logistics and delivery operations. Customers may evaluate their shopping experience based

not only on product quality and delivery but also on the convenience and reliability of return-related services.

The study examines six dimensions of reverse logistics service quality: Return Process Convenience, Return Pickup Timeliness, Refund Processing Time, Return Policy Clarity, Return Communication and Tracking, and Customer Support/Resolution.

These dimensions are considered in relation to Customer Switching Intention, which refers to customers’ stated willingness or consideration to move from Flipkart to another e-commerce platform.

The study uses primary data collected from 131 Flipkart users in Hyderabad through a structured questionnaire. The responses were analysed using Microsoft Excel and Microsoft Power BI.

Mean analysis, percentage analysis, Pearson correlation, and multiple regression were used to understand customer perceptions and examine the statistical relationships between the selected variables.



Reverse Logistics in E-Commerce

Reverse logistics is an important part of e-commerce operations because customers may need to return products for several reasons, including receiving damaged or incorrect products, receiving items that do not meet their expectations, or finding that a product is unsuitable for their needs.

The reverse logistics process may involve submitting a return request, understanding the applicable return policy, scheduling a pickup, handing over the product, tracking the return, processing the refund, and contacting customer support when an issue occurs.

A convenient return process can make it easier for customers to complete a return request. Timely pickup and refund processing can reduce uncertainty, while clear policies and accurate tracking information can help customers understand the progress of their return. Effective customer support can also help resolve problems encountered during the process.

Therefore, reverse logistics is not only an operational activity but also an important part of the post-purchase customer experience. Examining customers' perceptions of these services helps identify areas that may require improvement.

E-Commerce in India

The Indian e-commerce industry has developed significantly with increasing internet access, smartphone usage, digital payment facilities, and consumer preference for online shopping. Customers can purchase products from different categories without visiting physical stores, making online shopping convenient and accessible.

Major e-commerce platforms compete through product availability, pricing, delivery services, payment facilities, technology, and customer experience. Since customers can choose between alternative platforms, providing reliable post-purchase services is also important.

Product returns, refunds, replacements, and complaint resolution are important elements of the overall online shopping experience. Customers may consider their experience with these services when evaluating whether to continue using a platform or explore alternatives.

1. Study Variables

The study examines Reverse Logistics Service Quality through six dimensions and investigates their statistical relationships with Customer Switching Intention.

The independent variables are the six dimensions of reverse logistics service quality. Customer Switching Intention is the dependent variable.

Independent Variables

Return Process Convenience

Return Process Convenience refers to how easily customers can understand and complete the product return process. Customers generally expect return requests to be simple to submit and instructions to be clear.

A complicated return procedure may create inconvenience and dissatisfaction. Examining this dimension helps understand customers' perceptions of the accessibility and simplicity of re-turn-related services.

Return Pickup Timeliness

Return Pickup Timeliness refers to whether a returned product is collected within the promised or expected time. Customers expect pickup arrangements to be convenient and completed without unnecessary delays.

Delays in collecting returned products may create uncertainty and affect the overall return experience. This dimension examines customers' perceptions of the timeliness and reliability of return pickups.

Refund Processing Time

Refund Processing Time refers to the time taken to process and credit a refund after a product has been returned, according to the applicable process.

Customers expect refunds to be processed correctly and within the communicated timeframe. Delayed refunds or uncertainty regarding refund status may create dissatisfaction. This dimension examines customers' perceptions of refund processing and related service reliability.

Return Policy Clarity

Return Policy Clarity refers to how easily customers can understand the rules and conditions associated with product returns. These may include return eligibility, applicable timelines, conditions, and the steps required to complete a return.

Clear policies can help customers understand their options and avoid confusion. This dimension examines whether customers perceive return-related information as understandable and transparent.

Return Communication and Tracking

Return Communication and Tracking refers to the updates and tracking information provided during different stages of the return process.

Customers may expect timely information about return requests, pickup arrangements, the progress of returned products, and refund status. Accurate and understandable



communication can help customers remain informed about their returns.

This dimension examines customers' perceptions of the availability, accuracy, and timeliness of return-related information.

Customer Support/Resolution

Customer Support/Resolution refers to the assistance provided when customers experience problems during the return process. Customers may need support regarding return eligibility, pickup delays, refund issues, tracking information, or other return-related concerns. Effective support should help customers understand the issue and obtain an appropriate resolution. This dimension examines customers' perceptions of the assistance available for resolving return-related problems.

2. Dependent Variable

Customer Switching Intention

Customer Switching Intention refers to a customer's stated willingness or consideration to move from one e-commerce platform to another. In this study, it refers specifically to Flipkart users' intention to consider alternative platforms in relation to their return-service experiences. Customers may evaluate an e-commerce platform based on several aspects, including the convenience of returning products, pickup timeliness, refund processing, policy clarity, communication, and customer support. Experiences with these services may be associated with customers' future platform preferences.

The study examines Customer Switching Intention in relation to the six dimensions of reverse logistics service quality.

Pearson correlation analysis is used to assess the direction and strength of the relationships, while multiple regression analysis examines the dimensions together in relation to switching intention.

The findings are interpreted as statistical relationships and predictive associations. Since the study uses cross-sectional survey data, the results do not independently establish cause-and-effect relationships.

Background of the Study

The growth of digital technology has changed how consumers purchase products and interact with businesses. E-commerce platforms allow customers to compare products, make payments online, and receive purchases at their doorstep. However, customers may sometimes need to return products because of damage, incorrect items, suitability issues, or differences between expectations and the products received.

In such situations, the return process becomes an important part of the customer experience. Customers may evaluate the platform based on how easily they can submit a return request, how quickly the product is collected, how clearly the return policy is explained, and how efficiently the refund is processed.

Flipkart provides customers with online shopping and return-related services across different product categories. Ekart is associated with Flipkart's logistics operations and supports logistics and delivery activities. The overall return experience may involve coordination between customers, the platform, sellers, pickup personnel, logistics operations, and refund processes.

The six dimensions considered in this study represent important aspects of reverse logistics service quality. Return Process Convenience concerns the simplicity of the process. Return Pickup Timeliness concerns the timing of product collection. Refund Processing Time concerns the processing of refunds. Return Policy Clarity concerns customers' understanding of return conditions. Return Communication and Tracking concerns the availability of return-related updates. Customer Support/Resolution concerns the assistance available when problems occur. Customer Switching Intention is also important in a competitive e-commerce environment

because consumers may consider alternative platforms when evaluating their shopping experiences. Understanding how return-service perceptions are statistically related to switching intention can provide useful information about the customer experience.

The present study focuses on Flipkart users in Hyderabad and uses primary survey data from 131 respondents. Microsoft Excel and Microsoft Power BI were used to organize, analyze, and present the collected data. Descriptive statistics, mean scores, correlation analysis, and multiple regression were used to examine the selected variables.

The study aims to identify customers' perceptions of the six reverse logistics service dimensions and examine their relationships with Customer Switching Intention. The findings can help identify areas that may deserve managerial attention when reviewing return procedures, refund communication, pickup coordination, policy clarity, tracking, and customer support.

3. Problem Statement and Objectives

Statement of the Problem

The growth of e-commerce has increased customer access to products, online payments, and doorstep delivery. However, product returns and refunds remain important parts of the online shopping experience. Customers may



encounter difficulties such as complicated return procedures, delayed pickups, slow refunds, unclear policies, inaccurate tracking information, or in-effective customer support.

Customers also have access to alternative e-commerce platforms. Their experiences with return and refund services may therefore be associated with their intention to continue using Flipkart or consider another platform.

Although return-related services are important to the post-purchase experience, it is necessary to examine how customers perceive the different dimensions of reverse logistics service quality and how these perceptions relate to Customer Switching Intention.

Therefore, the present study examines reverse logistics service quality among Flipkart users in Hyderabad. It assesses customer perceptions of six service dimensions and analyses their statistical relationships with Customer Switching Intention using primary survey data.

Objectives of the Study

- To assess consumers' perceptions of reverse logistics service quality in Flipkart e-commerce.
- To identify the key dimensions of reverse logistics service quality experienced by Flipkart consumers.
- To examine the relationship between reverse logistics service-quality dimensions and Customer Switching Intention among Flipkart consumers.

4. Scope and Significance of the Study Scope of the Study

The study focuses on reverse logistics service quality and Customer Switching Intention among Flipkart users in Hyderabad. Its scope includes the following areas:

- Geographical Scope: The study is confined to Flipkart users in Hyderabad, Telangana.
- Service Scope: It covers product returns, return pickup, refund processing, return policies, return communication and tracking, and customer support and resolution.
- Dimensions of the Study: Reverse logistics service quality is examined through six dimensions: Return Process Convenience, Return Pickup Timeliness, Refund Processing Time, Return Policy Clarity, Return Communication and Tracking, and Customer Support/Resolution.
- Customer Behaviour: The study examines Customer Switching Intention in relation to respondents' perceptions of return-related services.
- Data and Analytical Scope: The study uses primary data collected through a structured questionnaire from 131 respondents. Microsoft Excel and Microsoft Power BI were used for analysis and presentation. Frequency and percentage analysis, mean scores, graphical

representation, Pearson correlation, and multiple regression were used to address the research objectives.

The study is based on respondents' self-reported experiences and perceptions. It does not directly audit Flipkart's or Ekart's internal operational records or confidential reverse logistics processes. The findings should not be treated as representative of all Flipkart customers across India.

Significance of the Study

Significance to E-Commerce Platforms: The study provides insights into customer perceptions of return-related services and may help e-commerce platforms identify areas for reviewing their return procedures, refund processes, communication, and customer support.

Significance to Flipkart: The findings may help identify which dimensions of reverse logistics service quality receive relatively higher or lower customer ratings and how the dimensions are statistically associated with Customer Switching Intention.

Significance to Customers: The study highlights the importance of convenient return procedures, timely pickup, understandable policies, clear tracking information, efficient refunds, and appropriate customer support in the post-purchase experience.

Significance to Researchers and Academicians: The study contributes to the discussion of reverse logistics service quality and customer behaviour in e-commerce. It may provide a reference for further research on return management, post-purchase services, and switching intention.

Need for the Study

The competitive nature of e-commerce makes it important to understand customers' experiences beyond product selection and delivery. Return and refund services can form an important part of customers' overall evaluation of a platform.

There is a need to examine different dimensions of reverse logistics service quality together rather than considering only one aspect of the return process. Understanding customer perceptions of convenience, pickup timeliness, refund processing, policy clarity, communication and tracking, and customer support can help identify areas for further investigation and improvement.

This study was undertaken to assess these six dimensions among Flipkart users in Hyderabad and examine their statistical relationships with Customer Switching Intention. The results can provide customer-based insights



that may support service evaluation and managerial decision-making.

Overall, the study offers a structured examination of reverse logistics service quality and Customer Switching Intention within the selected geographical and research context.

II. LITERATURE REVIEW

1. The Present Study considered following closely associated articles and Journals which are available online

Nguyen et al. (2025): Impacts of E-Reverse Logistics Service Quality on Repurchase Intention in Vietnam's E-Commerce Market

The study examined the relationship between e-reverse logistics service quality, customer satisfaction, trust, and repurchase intention in Vietnam's e-commerce market. It highlighted the importance of an efficient product-return process in building customer confidence and encouraging repeat purchases. The study is relevant to the present research because it connects the quality of return services with customer behavioural intentions. Although the study focused on repurchase intention, the present study examines customer switching intention in the context of Flipkart users in Hyderabad.

Tran et al. (2025): Roles of Logistics Service Quality in Shaping Generation Z Customers' Repurchase Intention and Electronic Word-of-Mouth

The study investigated the relationship between logistics service quality, repurchase intention, and electronic word-of-mouth among Generation Z consumers. It emphasized the importance of reliable logistics services in shaping customer experiences and future behavioural intentions. The study provides a useful background for understanding how logistics-related experiences may be associated with customers' decisions to continue using an online shopping platform or consider alternatives.

Zhang et al. (2025): An Empirical Study on Logistic Service Quality, Customer Satisfaction and Cross-Border Repurchase Intention

The study examined the relationship between logistics service quality, customer satisfaction, and repurchase intention in cross-border e-commerce. It highlighted the importance of logistics performance in the overall customer experience and subsequent purchasing decisions. The study is relevant because reverse logistics forms part of the broader logistics experience, particularly when customers need to return products or obtain refunds. The present study extends this area of investigation by

examining six reverse logistics service dimensions in relation to customer switching intention.

Smith et al. (2024): Do Reverse Logistics Practices Enhance Customer Satisfaction in the E-Commerce Industry? A Systematic Literature Review

The study reviewed research concerning reverse logistics practices and customer satisfaction in e-commerce. The review highlighted return management, refund processing, and customer support as important aspects of the post-purchase experience. Efficient handling of returned products can help reduce customer inconvenience and improve perceptions of service reliability. This study provides a relevant foundation for examining return process convenience, refund processing time, and customer support as dimensions of reverse logistics service quality.

Li et al. (2024): Influence of JD Platform Return Reverse Logistics Service Quality on Customers' Repurchase Intention

The study examined reverse logistics service quality in the context of the JD e-commerce platform and its relationship with customers' repurchase intention. It is relevant to the present research because it focuses specifically on return-related service quality rather than only on the initial delivery experience. The study provides a comparative background for understanding how customers evaluate product-return services and how these evaluations may be associated with future platform choices.

Pham et al. (2024): Impact of Reverse Logistics on Customer Satisfaction: Research on E-Commerce Platforms in Vietnam

The study focused on reverse logistics and customer satisfaction in e-commerce platforms in Vietnam. It considered the importance of return-related services in shaping customers' evaluations of their online shopping experiences. The study is relevant because it highlights the need to examine post-purchase processes as part of service quality. The present research applies a similar broad context to Flipkart users in Hyderabad but considers customer switching intention as its main behavioural outcome.

Miller et al. (2024): Efficiency in Return Management: Impacts on Customer Loyalty

The study examined return management efficiency and its relationship with customer loyalty. Return management is an important component of reverse logistics because it involves the coordination of return requests, collection,



processing, and resolution. Efficient handling of these activities may contribute to a more satisfactory post-purchase experience. The study provides background for investigating return process convenience and pickup timeliness in the present research.

Wang et al. (2024): Transparency in Reverse Logistics: Its Effect on Post-Purchase Confidence

The study examined transparency in reverse logistics and its relationship with customers' confidence after purchasing products online. Clear information and updates can help customers understand the status of a return and the steps involved in obtaining a refund or replacement. This is relevant to the present study's dimensions of Return Policy Clarity and Return Communication and Tracking. The present research examines customers' perceptions of these dimensions and their statistical relationships with switching intention.

Gap Identification through Structured Review of Literature

Summary of the Review of Literature

The reviewed studies provide a foundation for understanding the importance of logistics service quality, return management, refund processing, service transparency, and customer support in e-commerce. Previous research has considered outcomes such as customer satisfaction, trust, repurchase intention, and loyalty. These concepts are related to the broader customer experience but are not identical to customer switching intention.

The present study focuses specifically on six dimensions of reverse logistics service quality: Return Process Convenience, Return Pickup Timeliness, Refund Processing Time, Return Policy Clarity, Return Communication and Tracking, and Customer Support/Resolution. These dimensions are examined in relation to Customer Switching Intention among Flipkart users in Hyderabad.

2. Industry / Business Analysis

Overview of the Indian E-Commerce Industry

The Indian e-commerce industry has developed with the growth of internet access, smartphone usage, digital payment systems, and online shopping. Customers can purchase products from different categories through digital platforms and receive their orders at their preferred locations. Competition among e-commerce companies includes product availability, pricing, delivery performance, payment facilities, and customer service.

The online shopping experience also includes post-purchase activities. Customers may need to return products, request replacements, receive refunds, or seek

assistance when a problem occurs. Consequently, return and refund services form an important part of the overall customer experience.

Flipkart and Its Logistics Operations

Flipkart is an e-commerce platform that provides customers with access to products across several categories. Its logistics ecosystem supports activities associated with order fulfilment and delivery. Ekart is associated with Flipkart's logistics operations.

The customer's experience of a return may involve several stages, including submitting a return request, receiving instructions, arranging a pickup where applicable, tracking the return, processing the refund, and contacting customer support when necessary. The customer may evaluate the return experience based on how convenient, timely, clear, and reliable these activities appear.

The present study focuses on customers' perceptions of reverse logistics services associated with Flipkart. It does not directly audit the internal operational performance of Flipkart or Ekart.

Importance of Reverse Logistics in E-Commerce

Reverse logistics refers to the movement and management of products from customers back through the supply chain for return, replacement, inspection, recovery, or other appropriate handling. In e-commerce, reverse logistics becomes relevant when customers need to return products after delivery.

The return experience may affect customers' perceptions of a platform because customers expect return instructions to be understandable, pickups to occur within the communicated timeframe, refunds to be processed appropriately, and problems to be resolved effectively.

An inconvenient or confusing return process may create uncertainty for customers. In contrast, clear communication and effective handling of return-related issues can support a more reliable post-purchase experience. For this reason, reverse logistics service quality deserves attention alongside traditional logistics activities such as order processing and delivery.

Reverse Logistics Service Quality Dimensions

The present study examines six dimensions of reverse logistics service quality.

- **Return Process Convenience:** This dimension concerns the ease with which customers can initiate and complete a product return.
- **Return Pickup Timeliness:** This dimension concerns whether returned products are collected within the expected or communicated timeframe.



- **Refund Processing Time:** This dimension concerns the time taken to process refunds according to the applicable return procedure.
- **Return Policy Clarity:** This dimension concerns how easily customers understand return eligibility, conditions, and procedures.
- **Return Communication and Tracking:** This dimension concerns the availability and clarity of updates about return requests, pickup arrangements, and refund status.
- **Customer Support/Resolution:** This dimension concerns the assistance customers receive when encountering return-related problems and the effectiveness of the resulting resolution.

Together, these dimensions provide a structured way to examine customer perceptions of the reverse logistics experience.

Reverse Logistics Service Quality and Customer Switching Intention

Customers may evaluate an e-commerce platform through both the purchasing process and the services provided after a purchase. A return experience that is difficult, delayed, or confusing may influence how customers perceive the platform. Customers also have access to competing e-commerce platforms and may consider alternatives when evaluating their shopping experiences. Customer Switching Intention refers to customers stated willingness or consideration of moving from one platform to another. It is different from actual switching behaviour because a customer may consider switching without ultimately changing platforms.

The present study examines the statistical relationships between six dimensions of reverse logistics service quality and Customer Switching Intention among Flipkart users in Hyderabad. The findings may help identify which dimensions deserve attention when reviewing return-related services.

3. Research / Business Gap

The review of literature indicates that previous studies have examined logistics service quality, reverse logistics practices, return management, customer satisfaction, customer trust, repurchase intention, and customer loyalty. However, the present study addresses a specific research context involving reverse logistics service quality and customer switching intention among Flipkart users in Hyderabad.

Platform-Specific Research Gap

Previous studies have examined reverse logistics and logistics service quality across different e-commerce platforms and markets. However, the present study focuses specifically on Flipkart users and their perceptions of

reverse logistics service quality. This provides a platform-specific context for examining the selected service dimensions and customer switching intention.

Geographical Research Gap

The studies reviewed include research conducted in different national and market contexts. Their findings may not directly represent the experiences of Flipkart users in Hyderabad. Therefore, the present study examines customer perceptions within the selected geographical area and provides evidence based on responses collected from local users.

Variable-Related Research Gap

Much of the related literature examines customer satisfaction, trust, repurchase intention, and customer loyalty. Although these variables are important for understanding customer behaviour, they are not identical to customer switching intention. The present study specifically examines switching intention in relation to reverse logistics service quality.

Dimension-Related Research Gap

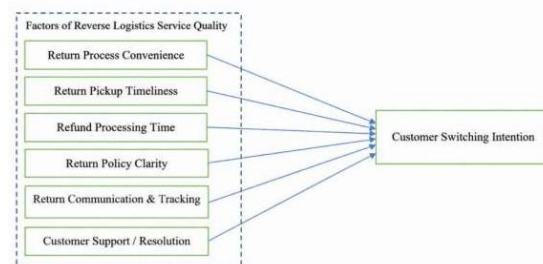
Reverse logistics includes several service dimensions, but these are not always examined together in a single platform-specific study. The present study considers six dimensions: Return Process Convenience, Return Pickup Timeliness, Refund Processing Time, Return Policy Clarity, Return Communication and Tracking, and Customer Support/Resolution. Examining these dimensions together provides a structured understanding of customers' perceptions and their individual statistical relationships with switching intention.

Business and Managerial Gap

E-commerce businesses need customer-based information to understand which aspects of the return experience require attention. The present study uses survey data and statistical analysis to assess customers' ratings of the six service-quality dimensions and examine their relationships with switching intention. The findings may provide useful insights for reviewing return procedures, pickup coordination, refund communication, policy clarity, tracking information, and customer support.

4. Theoretical / Conceptual Framework

CONCEPTUAL FRAMEWORK





III. RESEARCH METHODOLOGY

1. Research Design

The present study adopts a descriptive research design to analyse reverse logistics service quality and its relationship with customer switching intention among Flipkart users in Hyderabad.

Descriptive research is appropriate because it helps in understanding customers' perceptions and experiences regarding the product return process. The study examines six dimensions of reverse logistics service quality: Return Process Convenience, Return Pickup Timeliness, Re-fund Processing Time, Return Policy Clarity, Return Communication and Tracking, and Customer Support/Resolution. It also examines the relationship between these dimensions and customer switching intention.

The study follows a quantitative approach because the information collected through the structured questionnaire is converted into numerical values for statistical analysis. This approach helps the researcher measure customer perceptions, compare the different dimensions of reverse logistics service quality, and examine their relationships with customer switching intention.

The study uses a cross-sectional research design, as the data were collected from respondents during a specific period. The research focuses on analysing customers' reported experiences and perceptions without manipulating any variables.

2. Data Sources and Sampling Primary Data

Primary data were collected directly from 131 respondents who had used Flipkart and had experience with its product return process. The data were collected through a structured questionnaire prepared using Google Forms.

The questionnaire gathered information about respondents' demographic profiles, Flipkart shopping frequency, experiences with the product return process, perceptions of reverse logistics service quality, and customer switching intention. These responses formed the main basis for the analysis and interpretation of the study.

Secondary Data

Secondary data were obtained from relevant research articles, review papers, academic publications, and other relevant sources related to reverse logistics, logistics service quality, customer behaviour, e-commerce, and customer switching intention.

These sources helped the researcher understand the concepts related to the study, review previous research,

develop the theoretical background, and identify the research gap.

Sampling Method

The study employed the Convenience Sampling Method, which is a non-probability sampling technique. Under this method, respondents are selected based on their accessibility and willingness to participate in the research. Convenience sampling was chosen because it enabled the researcher to collect responses from Flipkart users who had experience with the product return process within the available time and resources.

The respondents included individuals from different age groups, genders, and occupational backgrounds. Their responses were used to understand customer perceptions of reverse logistics service quality and customer switching intention.

Sample Size

The final sample size for the study consists of 131 respondents.

The respondents were individuals who had used Flipkart and had experience with returning products. The responses collected from these participants were analysed to understand their perceptions of the different dimensions of reverse logistics service quality and their relationship with customer switching intention.

The demographic profile of the respondents includes age, gender, occupation, and Flipkart shopping frequency

Respondent Selection

Respondents were selected based on their experience using Flipkart and its product return services. Their experience was relevant to evaluating return process convenience, pickup timeliness, refund processing time, return policy clarity, return communication and tracking, and customer support or resolution.

The respondents were requested to provide their opinions based on their experiences with Flipkart. Their responses were collected through the Google Forms questionnaire and used

3. Data Collection and Analysis

The data for the study were collected through a structured questionnaire prepared using Google Forms. The questionnaire included demographic questions, Flipkart usage-related questions, and statements concerning reverse logistics service quality and customer switching intention.

The questionnaire covered the following dimensions:

- Return Process Convenience (RPC)
- Return Pickup Timeliness (RPT)
- Refund Processing Time (RFT)



- Return Policy Clarity (RPLC)
- Return Communication and Tracking (RCTR)
- Customer Support/Resolution
- Customer Switching Intention

The Google Forms questionnaire was shared with Flipkart users through online platforms. The responses received from the 131 respondents were organised and prepared for analysis.

Data Analysis Tools and Techniques

The collected data were organised, processed, and analysed using Microsoft Excel and Microsoft Power BI.

Microsoft Excel

Microsoft Excel was used to organise and process the collected data. It supported data coding, tabulation, frequency and percentage calculations, mean analysis, correlation analysis, multiple regression analysis, and the preparation of tables and charts.

The mean was calculated to understand the average responses for the selected study dimensions. The formula used to calculate the mean is:

$$\text{Mean} = \frac{\text{Sum of all observations}}{\text{Number of observations}}$$

Microsoft Power BI

Microsoft Power BI was used to develop interactive dashboards and visualisations to present the findings of the study. It helped display respondent profiles, compare the mean scores of the six reverse logistics service-quality dimensions, and present the results in a clear and understandable format.

The following analytical techniques were used in the study:

Frequency and Percentage Analysis

Frequency and percentage analysis were used to examine the demographic profile of the respondents and the distribution of their responses.

Mean Analysis

Mean analysis was used to assess respondents' perceptions of the six reverse logistics service-quality dimensions and to understand the overall response levels for the study variables.

Graphical Representation

Charts, tables, and dashboard visualisations were used to present the collected data and analytical findings in a clear and structured manner.

Pearson Correlation Analysis

Pearson correlation analysis was used to examine the direction and strength of the relationships between the six reverse logistics service-quality dimensions and customer switching intention. The correlation coefficient indicates whether the variables are positively or negatively associated and the strength of their linear relationship.

Pearson Correlation Formula

$$r = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{[n \sum X^2 - (\sum X)^2][n \sum Y^2 - (\sum Y)^2]}}$$

Multiple Regression Analysis

Multiple regression analysis was used to examine the combined relationship between the six reverse logistics service-quality dimensions and customer switching intention. This technique also helped assess the individual statistical contribution of each dimension while considering the other dimensions in the model.

The results obtained from these analytical techniques were interpreted in relation to the research objectives and the responses collected from the 131 respondents.

4. Limitations of the Study

The study has the following limitations:

- **Geographical Limitation:** The study is limited to Flipkart users in Hyderabad who participated in the survey. Therefore, the findings may not represent all Flipkart customers across India.
- **Self-Reported Data:** The study relies on responses provided by the participants. Their answers may be influenced by personal opinions, individual experiences, memory, or response bias.
- **Sampling Limitation:** The study uses convenience sampling, a non-probability sampling technique. Therefore, the findings may not be generalisable to the entire population of Flipkart users.
- **Limited Study Dimensions:** The research focuses on six dimensions of reverse logistics service quality: Return Process Convenience, Return Pickup Timeliness, Refund Processing Time, Return Policy Clarity, Return Communication and Tracking, and Customer Support/Resolution. Other factors, such as product price, product quality, brand image, forward delivery experience, and application usability, are not the main focus of the study.
- **Sample Size and Time Period:** The study is based on 131 respondents and was conducted within a specific period. A larger sample and data collected across different periods may provide a broader understanding of customer perceptions.
- **Perception-Based Assessment:** The study examines customers' perceptions of reverse logistics service quality rather than directly measuring Flipkart's or Ekart's internal operational performance. Therefore,



the findings should not be interpreted as a complete assessment of their internal logistics operations.

- **Limited Platform Comparison:** The study focuses on Flipkart users in Hyderabad and does not include a detailed comparative analysis of other e-commerce platforms.
- **Relationship Rather Than Causation:** The study uses survey data and statistical analysis to examine relationships between reverse logistics service-quality dimensions and customer switching intention. The findings identify associations between the variables but do not establish that one variable directly causes changes in another.

IV. DATA ANALYSIS, FINDINGS AND DISCUSSION

1. Data Analysis and Results Data Analysis Route Map

4. DATA ANALYSIS

Demographic Questions

1. Name
2. Age
3. Gender
4. Occupation
5. How frequently do you shop on Flipkart?

STUDY SPECIFIC

Objective 1 - To assess consumers' perceptions of reverse logistics service quality in e-commerce.

6. The return process was easy to understand.
7. Submitting a return request was simple.
8. The return instructions were easy to follow.
9. The return pickup was completed within the promised time.
10. The pickup was scheduled at a convenient time.
11. The pickup process was completed without unnecessary delays.
12. My refund was processed within the expected time.
13. The refund amount credited was accurate.
14. I was satisfied with the refund processing time.
15. Flipkart's return policy was clear and easy to understand.
16. The return policy helped me complete my return without confusion.
17. I received timely updates regarding my return.
18. The return tracking information was accurate.
19. I was informed about every stage of the return process.
20. My return-related issue was resolved efficiently.

Objective 2 - To identify the key dimensions of reverse logistics service quality experienced by Flipkart consumers.

- 6-8. Return process convenience
- 9-11. Return pickup timeliness
- 12-14. Refund processing time
15. Return policy clarity
- 16-18. Return communication & tracking
- 19-20. Customer support during returns

Objective 3 - To examine the effect of reverse logistics service quality on customer switching intention.

21. A poor return experience would make me consider switching to another e-commerce platform.
22. I would prefer another e-commerce platform if its return process is better than Flipkart's.
23. An efficient return process encourages me to continue shopping on Flipkart.
24. Which aspect of Flipkart's return process needs the most improvement?



Demographic Questions

Gender

Table 1 – Gender

Gender	Responses	Percentage
Male	56	42.7%
Female	75	57.3%
Prefer not say	0	0.0%
Total	131	100%

Pie Chart-Gender

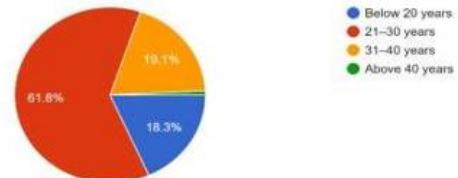
Interpretation

The pie chart shows the gender distribution of the 131 respondents. 57.3% of the respondents are female, while

42.7% are male. There are no respondents who selected "Prefer not to say."

4.1 Pie Chart-Gender

Age
131 responses



The distribution shows a slightly higher representation of female respondents compared to male respondents. This indicates that the study includes responses from both male and female Flipkart customers and provides insights into their perceptions of Flipkart's return and reverse logistics services.

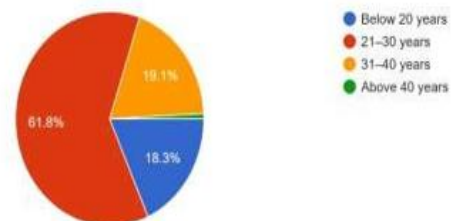
Age

Table 2 – Age

Age	Responses	Percentage
Below 20 years	24	18.3%
21-30 years	81	61.8%
31-40 years	25	19.1%
Above 40 years	1	0.8%
Total	131	100%

Pie Chart-Age

Age
131 responses



Interpretation

The pie chart shows the age-wise distribution of the 131 respondents. The majority of respondents (61.8%) belong to the 21-30 years age group, followed by 19.1% from the 31-40 years age group and 18.3% below 20 years. Only 0.8% of respondents are above 40 years.

This indicates that the study is mainly represented by respondents in the 21-30 years age group. Therefore, the findings largely reflect the perceptions and experiences of younger Flipkart customers regarding the return process and reverse logistics service quality.

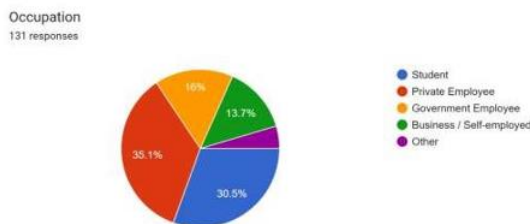


Occupation

Table 3- Occupation

Occupation	Responses	Percentage
Student	40	30.5%
Private Employee	46	35.1%
Government Employee	21	16.0%
Business / Self-employed	18	13.7%
Other	06	4.6%
Total	131	100%

Pie Chart- Occupation



Interpretation

The pie chart shows the occupational distribution of the 131 respondents. The largest group (35.1%) consists of private employees, followed by 30.5% students. About 16.0% are government employees, while 13.7% are business/self-employed respondents. The remaining 4.6% belong to other occupations.

This indicates that the study is mainly represented by private employees and students. The responses therefore reflect the experiences and perceptions of different occupational groups regarding Flipkart's return process and reverse logistics service quality.

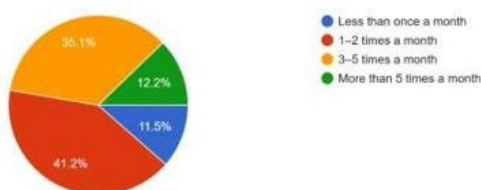
Frequency of Shopping on Flipkart

Table 4- Frequency of Shopping on Flipkart

Frequency	Responses	Percentage
Less than once a month	15	11.5%
1–2 times a month	54	41.2%
3–5 times a month	46	35.1%
More than 5 times a month	16	12.2%
Total	131	100%

Pie Chart – Frequency

How frequently do you shop on Flipkart?
131 responses



Interpretation – Frequency

The pie chart shows the frequency of Flipkart shopping among the 131 respondents. The largest group (41.2%) shops on Flipkart 1–2 times a month, followed by 35.1% who shop 3–5 times a month. About 12.2% shop more than 5 times a month, while 11.5% shop less than once a month.

This indicates that most respondents are regular Flipkart customers, with 76.3% shopping on Flipkart at least 1–2 times a month. Therefore, the respondents have regular experience with the platform, which provides a useful basis for examining their perceptions of Flipkart's return process and reverse logistics service quality.

Analysis of Reverse Logistics Service Quality

To assess consumers' perceptions of reverse logistics service quality in Flipkart e-commerce.

Table 5: Mean Scores of Reverse Logistics Service Quality Dimensions

S.no	Dimension	Mean
1	Return Process Convenience (RPC)	3.9
2	Return Pickup Timeliness (RPT)	3.9
3	Refund Processing Time (RFT)	3.9
4	Return Policy Clarity (RPLC)	3.8
5	Return Communication & Tracking (RCTR)	3.8
6	Customer Support/Resolution (CSI)	3.8

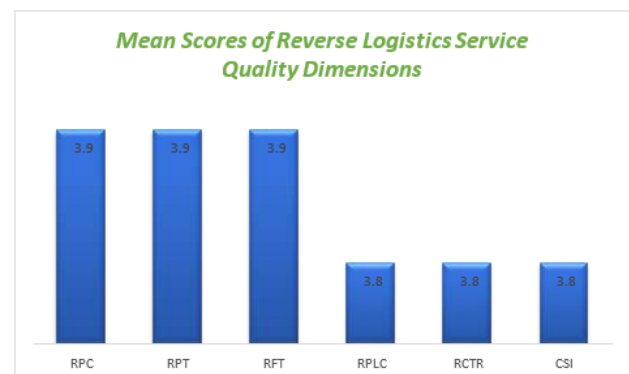


Figure 4.5 Mean Scores of Reverse Logistics Service Quality Dimensions

Interpretation

The results show that respondents generally had a high perception of Flipkart's reverse logistics service quality across all six dimensions. Return Process Convenience, Return Pickup

Timeliness, and Refund Processing Time recorded a mean score of 3.9 each. Return Policy Clarity, Return Communication and Tracking, and Customer Support/Resolution recorded a mean score of 3.8 each. Based on the adopted five-point mean interpretation scale,

all six di-mensions fall under the High category. This indicates that the respondents generally perceived Flipkart's return-related services positively across the dimensions measured in the study.

To identify the key dimensions of reverse logistics service quality experienced by Flip-kart consumers.

Table 6 Ranking of Reverse Logistics Service Quality Dimensions

S.NO	Dimension	Mean	Rank
1	Rptc	3.94	1
2	Rpt	3.93	2
3	Rft	3.93	2
4	Rplc	3.84	4
5	Rctr	3.82	5
6	Csi	3.82	6



Figure 4.6 Ranking of Reverse Logistics Service Quality Dimensions Based on Mean Scores

Interpretation

The analysis shows that Return Process Convenience received the highest mean score of 3.94, ranking first among the six dimensions. Refund Processing Time ranked second with a mean of 3.93, followed by Return Pickup Timeliness in third place with a mean of 3.93. Return Policy Clarity ranked fourth with 3.84, while Return Communication and Tracking ranked fifth with 3.82. Customer Support/Resolution received the lowest mean score of 3.81, ranking sixth. Overall, the results indicate that respondents rated all six dimensions at a high level. However, Customer Support/Resolution and Return Communication and Tracking received comparatively lower mean scores, indicating areas that may require further attention.

To examine the effect of reverse logistics service quality on customer switching intention among Flipkart consumers

Pearson Correlation Formula

$$r = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{[n \sum X^2 - (\sum X)^2][n \sum Y^2 - (\sum Y)^2]}}$$

Table 7: Correlation Between Reverse Logistics Service Quality Dimensions and Customer Switching Intention

S.No	Dimension	Pearson Correlation (r)	p-value
1	Return Process Convenience (RPC)	0.343	<0.001
2	Return Pickup Timeliness (RPT)	0.327	<0.001
3	Refund Processing Time (RFT)	0.401	<0.001
4	Return Policy (RPLC)	0.464	<0.001
5	Return Communication & Tracking (RCTR)	0.466	<0.001
6	Customer Support/Resolution (CSI)	0.469	<0.001

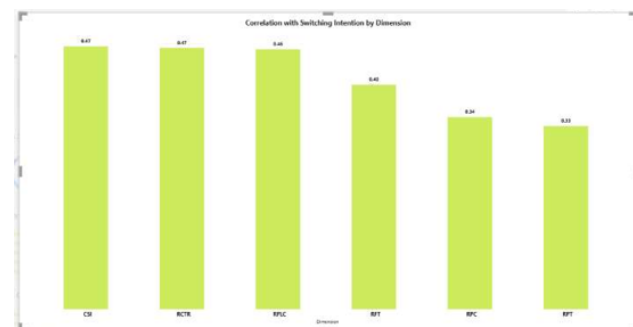


Figure 4.7 – Correlation with Switching Intention by Dimension

Interpretation

The correlation analysis shows a positive and statistically significant relationship between all six reverse logistics service quality dimensions and customer switching intention ($p < 0.001$). Customer Support/Resolution has the highest correlation ($r = 0.469$), followed by Return Communication and Tracking ($r = 0.466$) and Return Policy Clarity ($r = 0.464$). Refund Processing Time ($r = 0.401$), Return Process Convenience ($r = 0.343$), and Return Pickup Timeliness ($r = 0.327$) also show positive correlations.

These findings indicate that higher scores on the service quality dimensions are associated with higher scores on the measured switching-intention variable among the 131 respondents. However, correlation does not establish



causation, and the results should not be interpreted as proof that service quality reduces switching intention.

Multiple Regression Analysis

Table 8: Multiple Regression Model Summary

Model Statistic	Value
Multiple R	0.537
R Square	0.288
Adjusted R Square	0.254
Standard Error	0.639
Observations	131

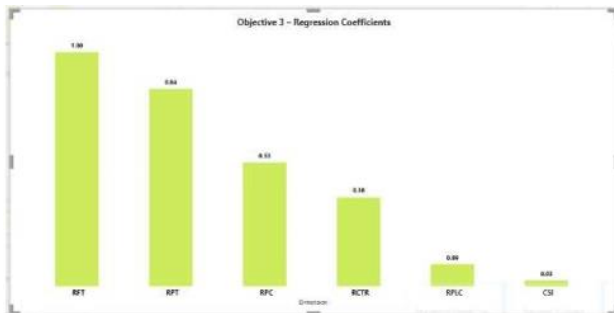


Figure 4.8 – Objective 3: Regression Coefficients

Interpretation

The multiple regression analysis produced a Multiple R value of 0.537. The R Square value of 0.288 indicates that the six reverse logistics service quality dimensions collectively explain approximately 28.8% of the variation in customer switching intention among the respondents. The Adjusted R Square value of 0.254 indicates that approximately 25.4% of the variation is explained after adjusting for the number of predictors included in the model.

ANOVA Overall Regression Model

Table 9: ANOVA Results of the Overall Regression Model

Source	Df	F	Significance
Regression	6	3.864	<0.001
Residual	124		
Total	131		

Interpretation

The ANOVA results show that the overall regression model is statistically significant, with an F-value of 3.864 and Significance F of $p < 0.001$. This indicates that the six reverse logistics service quality dimensions, when considered together, provide a statistically significant model for customer switching intention in the sample.

Table 10: Regression Coefficients of Reverse Logistics Service Quality Dimensions

Dimension	B	t-value	p-value
Return Process Convenience (RPC)	0.073	0.6320	0.527
Return Pickup Timeliness (RPT)	0.024	0.205	0.841
Refund Processing Time (RFT)	0.001	0.004	0.997
Return Policy Clarity (RPLC)	0.182	1.685	0.094
Return Communication & Tracking (RCTR)	0.113	0.884	0.378
Customer (CSI)	0.222	2.295	0.026

Dependent Variable: Customer Switching Intention (SWI_Mean)

Sample size: 131

Interpretation

The multiple regression analysis shows that the overall model is statistically significant ($F = 3.864$, $p < 0.001$). The R Square value of 0.288 indicates that the six reverse logistics service quality dimensions collectively explain 28.81% of the variation in customer switching intention.

Among the six dimensions, Customer Support/Resolution is the only statistically significant predictor at the 5% significance level ($B = 0.222$, $p = 0.026$). The other five dimensions do not show statistically significant individual effects at the 5% level.

These results indicate an association within the study sample and do not establish causation. The positive coefficient for Customer Support/Resolution indicates a positive relationship with the measured switching-intention score, not a reduction in switching intention.

SUMMARY OUTPUT									
Regression Statistics									
Multiple R	0.536758613								
R Square	0.288109809								
Adjusted R Square	0.253663509								
Standard Error	0.639218744								
Observations	131								
ANOVA									
	df	SS	MS	F	Significance F				
Regression	6	20.50528095	3.41754824	8.364027852	1.28005E-07				
Residual	124	50.66647478	0.408600603						
Total	130	71.17175573							
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%	
Intercept	1.517029699	0.401147171	3.781728525	0.00024097	0.72304708	2.311012318	0.72304708	2.311012318	
RPC_Mean	0.073296392	0.115513692	0.634525581	0.526906831	-0.155337561	0.301930345	-0.155337561	0.301930345	
RPT_Mean	0.023979353	0.118913068	0.201654483	0.840517288	-0.211382918	0.25941624	-0.211382918	0.25941624	
RFT_Mean	0.000518403	0.127799439	0.004056376	0.996770008	-0.252432486	0.253469291	-0.252432486	0.253469291	
RPLC_Mean	0.181661327	0.107776957	1.685530314	0.094401208	-0.03165946	0.394982115	-0.03165946	0.394982115	
RCTR_Mean	0.112793035	0.127570858	0.884159883	0.378321027	-0.139705428	0.365291498	-0.139705428	0.365291498	
CSI_Mean	0.221643793	0.098102149	2.259316382	0.025609673	0.02747216	0.415815426	0.02747216	0.415815426	

Figure 4.9 Regression Coefficients of Reverse Logistics Service Quality Dimensions

3.4 Regression Coefficients

Overall Finding

The analysis indicates that reverse logistics service quality is significantly associated with customer switching intention among the respondents. The overall regression model is statistically significant and explains 28.8% of the variation in customer switching intention. Among the six dimensions examined, Customer Support/Resolution is statistically significant at the 5% level, while the other five dimensions are not statistically significant individually in the multiple regression model. The findings therefore indicate that the dimensions of reverse logistics service quality are collectively relevant to customer switching intention, while their individual contributions differ within the regression model.

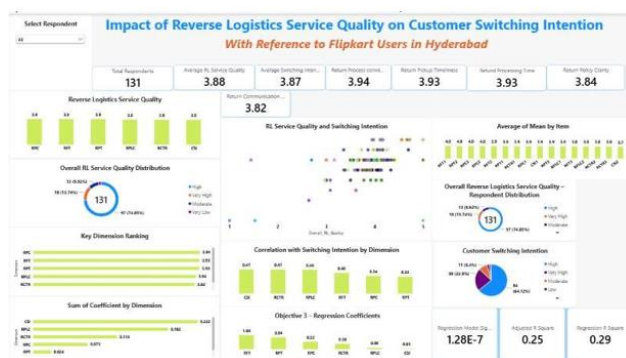


Figure 4.10 Power BI Dashboard of Reverse Logistics Service Quality and Customer Switching Intention

Interpretation

Total Respondents

Result: 131 respondents

Interpretation

The dashboard shows that a total of 131 respondents participated in the study. These respondents provided information about their experiences and perceptions of Flipkart's reverse logistics service quality and customer switching intention. The responses were used for further analysis of the return process, service-quality dimensions, and customer switching intention.

Average Reverse Logistics Service Quality Result: 3.88 out of 5

Interpretation

The average Reverse Logistics Service Quality score is 3.88 out of 5, indicating a high level of perceived service quality among the respondents. The result shows that respondents generally had a positive perception of Flipkart's return and reverse logistics services.

Average Customer Switching Intention Result: 3.87 out of 5

Interpretation

The average Customer Switching Intention score is 3.87 out of 5. This represents the average response recorded for

the measured switching-intention variable among the respondents.

Return Process Convenience Result: 3.94 out of 5 Interpretation

Return Process Convenience recorded the highest mean score of 3.94 among the six reverse logistics service-quality dimensions. This indicates that respondents generally rated the convenience of Flipkart's return process positively.

Return Pickup Timeliness Result: 3.93 out of 5 Interpretation

Return Pickup Timeliness recorded a mean score of 3.93 out of 5, indicating a high level of perceived service quality. The result shows that respondents generally rated the timeliness of the return pickup process positively.

Refund Processing Time Result: 3.93 out of 5 Interpretation

Refund Processing Time recorded a mean score of 3.93 out of 5. This indicates that respondents generally had a positive perception of the refund processing process.

Return Policy Clarity Result: 3.84 out of 5 Interpretation

Return Policy Clarity recorded a mean score of 3.84 out of 5, indicating a high level of perceived service quality. The result suggests that respondents generally viewed Flipkart's return policies positively.

Return Communication and Tracking Result: 3.82 out of 5

Interpretation

Return Communication and Tracking recorded a mean score of 3.82 out of 5. This indicates that respondents generally rated return-related communication and tracking positively, although the score was comparatively lower than those of the first four dimensions.

Customer Support/Resolution

Result: 3.81 out of 5

Interpretation

Customer Support/Resolution recorded a mean score of 3.81 out of 5, the lowest among the six dimensions. Although the score falls within the High category, it indicates an area that may require further attention to improve customers' experiences with return-related queries and complaints.

Correlation Between Reverse Logistics Service Quality Dimensions and Customer Switching Intention

Result

- Return Process Convenience: 0.343
- Return Pickup Timeliness: 0.327
- Refund Processing Time: 0.401



- Return Policy Clarity: 0.464
- Return Communication and Tracking: 0.466
- Customer Support/Resolution: 0.469

Interpretation

The correlation analysis shows positive and statistically significant relationships between all six reverse logistics service-quality dimensions and Customer Switching Intention ($p < 0.001$). Customer Support/Resolution recorded the highest correlation of 0.469, followed by Return Communication and Tracking at 0.466 and Return Policy Clarity at 0.464. These results indicate positive associations between the measured variables.

Multiple Regression Analysis Result

- Multiple R: 0.537
- R Square: 0.288
- Adjusted R Square: 0.254
- Standard Error: 0.639
- Observations: 131

Interpretation

The regression analysis shows an R Square value of 0.288, indicating that the six reverse logistics service-quality dimensions collectively explain approximately 28.8% of the variation in Customer Switching Intention. The Adjusted R Square value is 0.254, indicating that approximately 25.4% of the variation is explained after adjusting for the number of predictors included in the model.

Regression Coefficients Result

Customer Support/Resolution recorded a regression coefficient of 0.222 with a p-value of 0.026.

Interpretation

Customer Support/Resolution was the only dimension with a statistically significant individual regression coefficient at the 5% significance level. The other five dimensions were not individually significant at this level. The positive coefficient indicates a positive association with the measured Customer Switching Intention score and does not establish causation.

Overall Dashboard Finding

The dashboard shows that the overall Reverse Logistics Service Quality score was 3.88 out of 5, while Customer Switching Intention recorded a mean score of 3.87 out of 5. Return Process Convenience received the highest mean score of 3.94, while Customer Support/Resolution received the lowest score of 3.81. All six dimensions showed positive and statistically significant correlations with Customer Switching Intention. The regression model explained approximately 28.8% of the variation in Customer Switching Intention.

Findings and Discussion Findings

- The study found that the overall Reverse Logistics Service Quality score was 3.88 out of 5, indicating a high level of perceived service quality among the 131 respondents.
- Return Process Convenience received the highest mean score of 3.94, showing that respondents rated this dimension positively.
- Refund Processing Time and Return Pickup Timeliness both recorded mean scores of 3.93, indicating high perceived service quality in these areas.
- Return Policy Clarity recorded a mean score of 3.84, while Return Communication and Tracking recorded 3.82 and Customer Support/Resolution recorded 3.81.
- The correlation analysis showed positive and statistically significant relationships between all six reverse logistics service-quality dimensions and Customer Switching Intention. The correlation values ranged from 0.327 to 0.469.
- Customer Support/Resolution recorded the highest correlation with Customer Switching Intention, with a coefficient of 0.469, followed by Return Communication and Tracking at 0.466.
- The regression analysis showed that the model explained approximately 28.8% of the variation in Customer Switching Intention. Customer Support/Resolution was the only dimension with a statistically significant individual regression coefficient at the 5% significance level.

Conceptual Framework with Correlation Coefficients Managerial Implications

The findings of this study provide useful insights for Flipkart management to improve reverse logistics service quality and support data-driven decision-making. The following managerial implications are based on the analysis of responses from 131 Flipkart users in Hyderabad.

Improving Customer Support and Resolution

Customer Support/Resolution received the lowest mean score of 3.81 and showed the highest correlation with Customer Switching Intention ($r = 0.469$). Flipkart management may focus on improving customer support responsiveness, providing clear solutions to return-related problems, and resolving customer complaints within reasonable timeframes.

Strengthening Return Communication and Tracking

Return Communication and Tracking received a mean score of 3.82. Management may improve return status notifications, pickup updates, refund progress information, and communication regarding delays. Clear and timely updates can help customers understand the progress of their returns.



Maintaining Convenience in the Return Process

Return Process Convenience received the highest mean score of 3.94. Management should maintain the convenience of the existing return process by simplifying return re-quests, providing easy-to-follow instructions, and minimising unnecessary steps for cus-tomers.

Improving Return Policy Clarity

Return Policy Clarity received a mean score of 3.84. Management may ensure that return eligibility, time limits, refund conditions, and product-specific return rules are communi-cated clearly before and after purchase.

Monitoring Refund and Pickup Performance

Refund Processing Time and Return Pickup Timeliness received mean scores of 3.93 each. Management may continue monitoring refund turnaround time and pickup perfor-mance using service-level indicators, identifying delays, and taking corrective action where required.

Using Analytics for Continuous Improvement

The Power BI dashboard developed for this study can serve as a framework for monitor-ing reverse logistics service quality. Management may track customer ratings, return pickup timeliness, refund processing time, support resolution, and return communication indicators regularly. The correlation and regression findings should be interpreted as associations rather than proof of causation. Further research using larger and more diverse samples, along with additional customer behaviour measures, may help management better understand the relationship between reverse logistics service quality and Customer Switching Intention.

V. CONCLUSION AND RECOMMENDATIONS

1. Conclusion

The present study examined the impact of Reverse Logistics Service Quality on Customer Switching Intention among Flipkart users in Hyderabad. The study focused on six important dimensions of the return process: Return Process Convenience, Return Pickup Timeliness, Re-fund Processing Time, Return Policy Clarity, Return Communication and Tracking, and Cus-tomer Support/Resolution. Primary data were collected from 131 respondents through a struc-tured questionnaire and analysed using Microsoft Excel and Microsoft Power BI.

The findings of the study indicate that respondents generally had a high perception of Flipkart's reverse logistics service quality. The overall mean score was 3.88 out of 5, indicating a positive perception of the return and reverse logistics services. Among the six dimensions, Return Pro-cess Convenience received the highest mean

score of 3.94, followed by Refund Processing Time and Return Pickup Timeliness, both with mean scores of 3.93. Return Policy Clarity recorded a mean score of 3.84, while Return Communication and Tracking received 3.82 and Customer Support/Resolution received the lowest mean score of 3.81. These findings indicate that respondents generally rated Flipkart's return-related services positively, although customer support and resolution received comparatively lower ratings.

The correlation analysis further showed that all six reverse logistics service-quality dimensions had positive and statistically significant relationships with Customer Switching Intention. Cus-tomer Support/Resolution recorded the highest correlation with Customer Switching Intention ($r = 0.469$), followed by Return Communication and Tracking ($r = 0.466$) and Return Policy Clarity ($r = 0.464$). Refund Processing Time recorded a correlation of 0.401, while Return Process Convenience and Return Pickup Timeliness recorded correlations of 0.343 and 0.327, respectively. These results indicate that all six dimensions were positively associated with the measured Customer Switching Intention variable among the respondents.

The regression analysis showed that the six reverse logistics service-quality dimensions col-lectively explained approximately 28.81% of the variation in Customer Switching Intention. The overall regression model was reported as statistically significant. Among the six dimen-sions, Customer Support/Resolution was the only dimension with a statistically significant individual regression coefficient at the 5% significance level, with a coefficient of $B = 0.222$ and $p = 0.026$. The other five dimensions were not individually significant at the 5% level. These findings highlight the relevance of examining customer support and resolution in relation to Customer Switching Intention.

The study also highlights the importance of reverse logistics as a part of the overall customer experience on Flipkart. A convenient return process, timely pickup, appropriate refund pro-cessing, clear return policies, effective communication, and customer support are important aspects of the return experience. Although all six dimensions received mean scores within the High category, Customer Support/Resolution and Return Communication and Tracking re-ceived comparatively lower ratings. These areas may therefore require further attention from Flipkart management to improve the customer return experience.

The study was limited to 131 respondents from Hyderabad and used convenience sampling. Therefore, the findings may not represent the perceptions of all Flipkart customers. The study also relied on self-reported



questionnaire responses and examined relationships between variables at a specific point in time. Consequently, the positive associations identified in the correlation and regression analyses do not establish that reverse logistics service quality directly causes changes in Customer Switching Intention. Further research using larger and more diverse samples may provide a broader understanding of these relationships.

Overall, the study provides insights into consumers' perceptions of reverse logistics service quality and its statistical relationship with Customer Switching Intention among Flipkart users in Hyderabad. The findings can support further research and managerial efforts to monitor and improve the return experience. By maintaining the service dimensions that received positive ratings and giving additional attention to customer support, return communication, and policy clarity, Flipkart may identify opportunities to improve its reverse logistics services and strengthen the overall customer experience.

2. Recommendations and Implementation Plan

Recommendation

Based on the findings of the study, Flipkart should focus on maintaining and improving its reverse logistics service quality to enhance the customer return experience. The company should give particular attention to customer support and resolution, as this dimension received the lowest mean score of 3.81 and showed the highest correlation with Customer Switching Intention ($r = 0.469$). Flipkart should provide timely responses to return-related queries, resolve customer complaints effectively, and ensure that customers receive clear information about their complaints and return requests.

The company should also strengthen return communication and tracking by providing timely updates about return requests, pickup schedules, refund progress, and unexpected delays. Re-turn policy information should be clearly communicated, including return eligibility, time limits, refund conditions, and product-specific rules. Flipkart should maintain the convenience of its existing return process by simplifying return requests and providing easy-to-follow instructions. In addition, the company should continue monitoring refund processing time and return pickup timeliness to identify delays and improve service performance. Regular monitoring of customer feedback and service-quality indicators can help Flipkart identify areas requiring improvement and support better decision-making.

Implementation Plan

The implementation plan should focus on converting these recommendations into practical service improvements. Flipkart can regularly review return-related complaints and monitor customer support response times to identify

recurring problems. Return policy information can be reviewed to ensure that instructions are clear and accessible to customers. The company can monitor pickup delays and refund processing performance to identify service gaps and take corrective action where necessary. Return status notifications and tracking information can also be improved to keep customers informed about the progress of their requests.

Flipkart can use business analytics and dashboard-based monitoring to review customer ratings, pickup timeliness, refund processing time, customer support resolution, and return communication indicators. The Power BI dashboard developed for this study can provide a framework for presenting and monitoring these service-quality measures. Regular review of these indicators can help management identify areas requiring attention and support continuous improvement in the return process. The proposed activities are recommendations for managerial consideration and were not tested as part of the present survey. Their effectiveness should be evaluated using operational data and further customer feedback.

3. Limitations and Future Scope

Limitations

- **Geographical Limitation:** The study was restricted to Flipkart users in Hyderabad, Telangana. Therefore, the findings may not represent the perceptions of customers from other cities or regions.
- **Sample Size:** The study was conducted with 131 respondents. A larger sample may provide a broader understanding of reverse logistics service quality and Customer Switching Intention.
- **Sampling Technique:** Convenience sampling, a non-probability sampling method, was used to collect the data. Therefore, the findings may not be generalised to the entire population of Flipkart customers.
- **Limited Platform Coverage:** The study focused only on Flipkart users and did not include customers of other e-commerce platforms for comparison.
- **Self-Reported Data:** The study relied on responses collected through a structured Google Forms questionnaire. Respondents' answers may be influenced by their individual experiences, perceptions, memory, and response bias.
- **Limited Variables:** The study examined six dimensions of reverse logistics service quality and Customer Switching Intention. Other factors, such as product quality, pricing, overall delivery experience, brand image, and competitor offerings, were not the main focus of the analysis.
- **Research Design:** The study used a descriptive, cross-sectional research design. The findings indicate statistical associations between variables but do not establish causal relationships or changes in customer behaviour over time.



Future Scope of the Study

Future researchers may consider the following directions to extend the present study:

- Larger and More Diverse Sample: Future studies may include a larger sample from different cities and regions to obtain a broader understanding of customer perceptions of reverse logistics service quality.
- Comparison Across E-Commerce Platforms: Similar research may be conducted on platforms such as Amazon and other e-commerce providers to compare reverse logistics service quality and Customer Switching Intention.
- Additional Variables: Future research may include factors such as customer satisfaction, customer loyalty, trust, perceived value, product category, and previous return experience to obtain a broader understanding of customer behaviour.
- Advanced Analytical Techniques: Researchers may use structural equation modelling or other suitable multivariate analytical methods to examine relationships among re-verse logistics service quality, customer satisfaction, and Customer Switching Intention.
- Longitudinal Research: Future studies may collect data at different points in time to understand how customer perceptions and switching intention change after return and refund experiences.
- Qualitative Research: Interviews with customers, customer support personnel, and logistics professionals may provide deeper insights into return-related problems and possible improvements in reverse logistics services.
- Operational Performance Analysis: Future studies may combine customer survey responses with operational data, such as actual pickup times, refund turnaround times, and complaint resolution records, where access and permissions are available.

In conclusion, the present study provides insights into reverse logistics service quality and Customer Switching Intention among Flipkart users in Hyderabad. Further research using larger samples, additional variables, different e-commerce platforms, and varied research methods may help develop a more comprehensive understanding of reverse logistics and customer behaviour in e-commerce.

REFERENCES

1. Textbooks

- Malhotra, N. K. (2020). Marketing Research: An Applied Orientation (7th ed.). Pearson. Useful for research methodology, questionnaire design, sampling, data collection, correlation and regression analysis. Pearson – Marketing Research

- Zeithaml, V. A., Bitner, M. J., Gremler, D. D., & Mende, M. (2024). Services Marketing: Integrating Customer Focus Across the Firm (8th ed.). McGraw Hill. Useful for understanding service quality, customer expectations, service recovery and customer relationships.
- McGraw Hill – Services Marketing Kotler, P., Keller, K. L., & Chernev, A. Marketing Management. Pearson. Useful for customer satisfaction, consumer behaviour, customer loyalty and marketing management concepts.

2. Web Resources

- Flipkart – Official Website
Useful for understanding Flipkart's e-commerce services and customer shopping experience.
- Flipkart Official Website
Ecart Logistics – Official Website
Useful for understanding logistics, delivery operations and related services. Ecart Logistics
- India Brand Equity Foundation (IBEF) – E-commerce Industry in India Useful for understanding the Indian e-commerce industry and its development. IBEF – E-commerce Industry
- Microsoft Learn – Power BI Dashboards
Useful for preparing dashboards, data visualization and presenting research findings. Microsoft Learn – Power BI Dashboards
- Rogers, D. S., & Tibben-Lembke, R. S. (1999). Going Backwards: Reverse Logistics Trends and Practices. Reverse Logistics Executive Council.
- Malhotra, N. K. (2020). Marketing Research: An Applied Orientation (7th ed.). Pearson.
- Zeithaml, V. A., Bitner, M. J., Gremler, D. D., & Mende, M. (2024). Services Marketing: Integrating Customer Focus Across the Firm (8th ed.). McGraw Hill.
- Kotler, P., Keller, K. L., & Chernev, A. Marketing Management. Pearson.
- Flipkart. (n.d.). Official website. <https://www.flipkart.com/>
- Ecart Logistics. (n.d.). Official website. <https://www.ecartlogistics.com/>
- India Brand Equity Foundation. (n.d.). E-commerce industry in India. <https://www.ibef.org/industry/ecommerce>
- Microsoft. (n.d.). Introduction to dashboards for Power BI designers. Microsoft Learn. <https://learn.microsoft.com/en-us/power-bi/create-reports/service-dashboards>
- Primary data collected through a structured questionnaire from 131 Flipkart users in Hyderabad for the present study.



- Microsoft Excel and Microsoft Power BI were used for data analysis, statistical interpretation and dashboard preparation in the present study.