

A Study on Customer Satisfaction Towards E-Commerce Logistics Services

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Abstract- *The rapid growth of e-commerce has significantly transformed the retail industry by providing consumers with convenient access to products and services through online platforms. As online shopping continues to expand, logistics services have emerged as one of the most critical determinants of customer satisfaction. Efficient logistics operations, including timely delivery, accurate order fulfillment, secure packaging, real-time shipment tracking, and responsive customer support, directly influence customers' overall shopping experiences and their intention to repurchase. This study examines customer satisfaction towards e-commerce logistics services by analyzing the perceptions and experiences of online shoppers. Primary data were collected from 200 respondents using a structured questionnaire, while secondary data were obtained from journals, books, websites, and published reports. A descriptive research design and convenience sampling technique were adopted for the study. Percentage analysis was used to interpret the collected data. The findings reveal that most respondents are satisfied with the logistics services offered by leading e-commerce platforms such as Amazon, Flipkart, Meesho, and Myntra. Safe packaging, delivery speed, order accuracy, and effective tracking systems were identified as the major factors influencing customer satisfaction. However, issues such as damaged products, delayed deliveries, and occasional order inaccuracies continue to affect customer experiences. The study concludes that improving logistics efficiency, strengthening packaging standards, and enhancing communication throughout the delivery process will help e-commerce companies increase customer satisfaction, loyalty, and long-term competitiveness.*

Keywords: *E-commerce, Logistics Services, Customer Satisfaction, Online Shopping, Delivery Performance, Order Fulfilment, Supply Chain Management*

I. INTRODUCTION

The rapid advancement of digital technologies has transformed the way consumers purchase products and services. E-commerce has become one of the fastest-

growing sectors worldwide due to increasing internet penetration, smartphone usage, digital payment systems, and changing consumer lifestyles. Customers today prefer online shopping because it offers convenience, wider product selection, competitive pricing, and doorstep delivery. As a result, logistics services have become an essential component of e-commerce operations.

E-commerce logistics refers to the planning, implementation, and management of activities involved in storing, handling, transporting, tracking, and delivering products purchased through online platforms. Logistics also includes reverse logistics, which involves product returns, refunds, and exchanges. Efficient logistics management ensures that products reach customers safely, accurately, and within the promised delivery time. Therefore, logistics plays a vital role in determining customer satisfaction and organizational success.

Customer satisfaction has become a key performance indicator for e-commerce companies operating in today's highly competitive marketplace. Customers evaluate logistics services based on delivery speed, product condition, order accuracy, shipment tracking, communication, customer support, and return policies. When these expectations are fulfilled, customers are more likely to remain loyal, recommend the platform to others, and continue purchasing in the future. On the other hand, delayed deliveries, damaged products, poor communication, and complicated return procedures negatively affect customer trust and satisfaction.

India has emerged as one of the world's fastest-growing e-commerce markets. Government initiatives such as Digital India, increasing internet accessibility, affordable smartphones, and digital payment systems have accelerated the growth of online shopping across

urban and rural regions. Leading e-commerce companies such as Amazon, Flipkart, Meesho, Myntra, and others continuously invest in advanced logistics technologies, automated warehouses, artificial intelligence, route optimization, and real-time tracking systems to improve customer experiences.

Despite significant technological improvements, logistics challenges continue to exist. Last-mile delivery issues, damaged products, inaccurate deliveries, increasing transportation costs, and return management remain major concerns for e-commerce companies. These operational challenges directly influence customer satisfaction and purchasing behaviour.

This study aims to evaluate customer satisfaction towards e-commerce logistics services by examining customers' perceptions regarding delivery speed, packaging quality, order accuracy, shipment tracking, communication, and return services. The findings will help e-commerce companies understand customer expectations and improve their logistics operations to achieve higher customer satisfaction and long-term business success.

II. LITERATURE REVIEW

Several researchers have examined the relationship between logistics service quality and customer satisfaction in e-commerce. Their findings indicate that logistics performance plays a significant role in enhancing customer loyalty, trust, and repurchase intentions.

Sachin Khatan (2025) examined customer satisfaction in India's e-commerce industry and found that delivery speed, customer service, product quality, and return policies significantly influence customer loyalty and purchasing behaviour.

Dr. Arun Kaushal (2026) reported that the rapid growth of e-commerce has increased customer expectations regarding delivery performance. The study concluded that efficient logistics services are essential for improving customer satisfaction.

Siber Akıl (2022) investigated logistics service quality among Turkish online shoppers and identified timely

delivery, order accuracy, product condition, and order discrepancy management as major determinants of customer satisfaction and loyalty.

Jancy Nadar (2024) studied the influence of fast delivery services on customer satisfaction and found that quick and reliable delivery significantly improves customers' online shopping experiences and encourages repeat purchases.

Sushama Gandal (2024) emphasized that logistics has evolved from a back-end operational activity into a strategic competitive advantage for e-commerce companies. High-quality logistics services contribute directly to customer satisfaction.

Roopal Gangwar (2024) explored logistics service quality in rural India and concluded that improving logistics infrastructure and delivery reliability can significantly enhance customer satisfaction in geographically challenging regions.

Mrs. N. Chitraklekha (2023) highlighted that technological innovation, efficient delivery systems, and improved logistics operations positively influence customer satisfaction among e-logistics users.

Nur Faizilah Rizal (2024) applied the SERVQUAL model to evaluate logistics service quality and concluded that responsiveness, reliability, assurance, and information quality significantly affect customer satisfaction.

Dr. Aamir Rashid (2024) found that logistics service dimensions such as delivery reliability, responsiveness, and communication have a direct positive relationship with customer satisfaction and product satisfaction.

Muhammed Turgut (2025) concluded that logistics service quality is one of the strongest predictors of customer satisfaction and online purchase intention. Companies that invest in logistics improvements achieve higher customer retention.

Research Gap

Previous studies have extensively examined logistics service quality and customer satisfaction in e-commerce. However, many studies have focused primarily on developed markets or specific logistics

dimensions. Limited research has comprehensively evaluated customer satisfaction across multiple logistics service factors among Indian online shoppers. Furthermore, rapidly changing consumer expectations and continuous technological advancements require updated empirical evidence. This study addresses this gap by examining customers' perceptions of delivery speed, packaging quality, order accuracy, shipment tracking, communication, and return services using recent survey data collected from 200 respondents.

III. RESEARCH METHODOLOGY

3.1 Research Design

The present study adopts a descriptive research design to examine customer satisfaction towards e-commerce logistics services. A descriptive approach is appropriate because it enables the researcher to collect, analyze, and interpret customers' opinions regarding various logistics service dimensions such as delivery speed, packaging quality, order accuracy, shipment tracking, communication, and return management. The study provides a clear understanding of customers' perceptions and satisfaction levels with logistics services offered by leading e-commerce platforms.

3.2 Statement of the Problem

The rapid expansion of e-commerce has made logistics one of the most important determinants of customer satisfaction. Customers expect timely deliveries, secure packaging, accurate order fulfillment, real-time shipment tracking, and efficient customer support. Although e-commerce companies continuously improve their logistics infrastructure, customers still experience problems such as delayed deliveries, damaged products, incorrect deliveries, poor communication, and inefficient return procedures. These issues negatively affect customer satisfaction, trust, and repurchase intention. Therefore, it is essential to evaluate customer satisfaction towards e-commerce logistics services and identify the logistics factors that require improvement.

3.3 Objectives of the Study

The study has the following objectives:

- To examine customer satisfaction towards e-commerce logistics services.
- To analyze customers' perceptions regarding delivery speed, packaging quality, and order accuracy.
- To evaluate the effectiveness of shipment tracking and delivery communication.
- To identify the major logistics-related problems experienced by customers.
- To provide suggestions for improving logistics service quality and customer satisfaction.

3.4 Research Hypotheses

Null Hypothesis (H_0):

There is no significant relationship between logistics service quality and customer satisfaction towards e-commerce logistics services.

Alternative Hypothesis (H_1):

There is a significant relationship between logistics service quality and customer satisfaction towards e-commerce logistics services.

3.5 Scope of the Study

The study focuses on evaluating customer satisfaction with logistics services provided by major e-commerce platforms such as Amazon, Flipkart, Meesho, and Myntra. It examines important logistics dimensions including delivery speed, packaging quality, order accuracy, shipment tracking, communication, return and refund services, and overall customer satisfaction. The findings provide useful insights for logistics managers and e-commerce companies to improve service quality and customer experience.

3.6 Research Methodology

Sources of Data

The study is based on both primary and secondary data.

Primary Data

Primary data were collected through a structured questionnaire administered to customers who have experience purchasing products through e-commerce platforms. The questionnaire measured respondents' opinions regarding logistics performance and customer satisfaction.

Secondary Data

Secondary information was collected from books, research journals, conference proceedings, company reports, government publications, websites, and previously published research studies related to e-commerce logistics and customer satisfaction.

Sampling Technique

The study employs a Convenience Sampling Method, under which respondents were selected based on their accessibility and willingness to participate in the survey.

Sample Size

The study consists of 200 respondents who have experience using e-commerce logistics services.

Research Instrument

A structured questionnaire containing demographic questions and multiple-choice questions was used for data collection. The questionnaire covered customer opinions regarding delivery speed, packaging quality, order accuracy, tracking facilities, communication effectiveness, logistics issues, return services, and overall satisfaction.

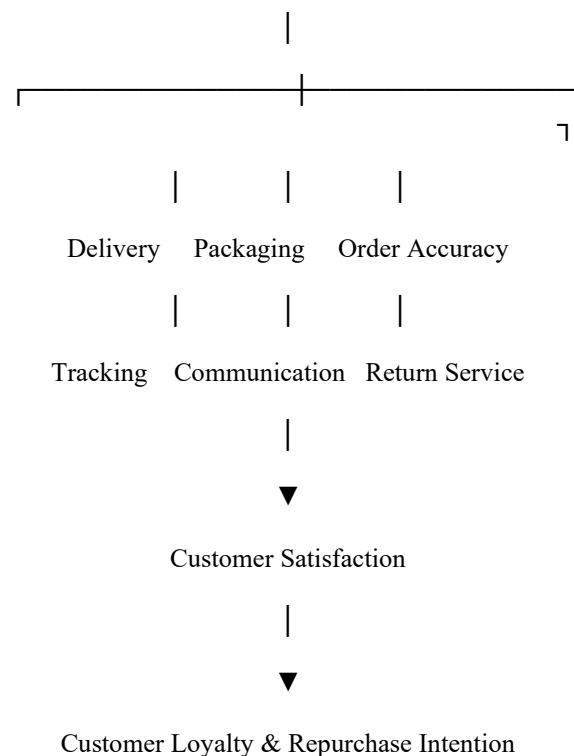
Statistical Tools Used

The collected data were analyzed using the following statistical techniques:

- Percentage Analysis
- Frequency Distribution
- Tables
- Charts
- Graphical Representation

3.7 Conceptual Framework

E-Commerce Logistics Service Quality



3.8 Limitations of the Study

The study has certain limitations that should be considered while interpreting the findings.

- The study is limited to 200 respondents.
- Convenience sampling may not fully represent the entire population of online shoppers.
- Customer opinions are based on personal experiences and may vary over time.
- The study focuses only on selected e-commerce logistics service dimensions.
- Time and resource constraints limited the geographical coverage of the research.

IV. RESULTS AND DISCUSSION

4.1 Demographic Profile of Respondents

The demographic analysis indicates that 78% of respondents are male and 22% are female, suggesting greater participation from male online shoppers. Most

respondents (60%) belong to the 21–30 years age group, highlighting that young adults are the most active users of e-commerce platforms. Regarding educational qualification, 60% have completed Higher Secondary education, followed by SSLC (21%), Undergraduate (14%), and Postgraduate (5%). In terms of monthly income, 50% earn below ₹20,000, indicating that a large proportion of respondents belong to lower- and middle-income groups. These findings suggest that young consumers with moderate income constitute the primary customer base for e-commerce platforms.

4.2 Online Shopping Behaviour

The analysis reveals that 64% of respondents shop online monthly, indicating regular usage of e-commerce services. Amazon is the most preferred platform (50%), followed by Flipkart (23%), Meesho (18%), and Myntra (7%). When asked about the most important logistics factor, 40% selected safe packaging, followed by fast delivery (31%) and low delivery charges (22%). These findings demonstrate that customers prioritize product safety and timely delivery over other logistics attributes.

4.3 Customer Satisfaction Towards Logistics Services

The survey indicates a positive perception of logistics services among respondents. A majority (56%) reported being satisfied, while 20% were highly satisfied with overall logistics services. Similarly, 45% expressed satisfaction with delivery speed, 66% rated packaging quality as good, and 67% were satisfied with shipment tracking facilities. Effective communication regarding delivery updates was appreciated by 59% of respondents. These results suggest that logistics providers are successfully meeting customer expectations in several important service dimensions, although opportunities for further improvement remain.

4.4 Delivery Issues and Return Services

The survey findings indicate that while overall customer satisfaction with e-commerce logistics services is positive, several operational challenges continue to affect customer experiences. Approximately 44% of the respondents reported that they had not faced any major logistics-related issues,

reflecting the effectiveness of logistics operations among leading e-commerce platforms. However, 26% experienced damaged products, making it the most frequently reported problem, followed by 16% who reported delayed deliveries and 11% who received incorrect products. These issues highlight the need for continuous improvement in packaging standards, transportation handling, and order fulfillment accuracy.

Regarding delivery-related problems, a considerable proportion of respondents indicated that they experience logistics issues frequently. About 57% stated that they often encounter delivery-related problems, while 21% reported experiencing such issues sometimes. These findings suggest that although customers generally express satisfaction with logistics services, consistency in service delivery remains an area requiring attention. Improving last-mile delivery performance and reducing operational errors can significantly enhance customer satisfaction.

The return and refund process is another important determinant of customer satisfaction. The study reveals that 80% of respondents have never returned an online purchase, indicating that most orders are delivered successfully and meet customer expectations. Among respondents who had used return services, 65% were satisfied and 11% were highly satisfied with the return and refund process. This indicates that e-commerce companies have developed relatively efficient reverse logistics systems, although simplifying return procedures and reducing processing time could further improve customer confidence.

V. KEY FINDINGS

The major findings of the study are summarized below:

- The majority of respondents (78%) are male, while 22% are female.
- Most respondents (60%) belong to the 21–30 years age group, indicating that young adults constitute the primary users of e-commerce services.
- Amazon is the most frequently used e-commerce platform, followed by Flipkart, Meesho, and Myntra.

- Safe packaging (40%) is considered the most important logistics service attribute, followed by fast delivery (31%) and affordable delivery charges (22%).
- Overall customer satisfaction is high, with 56% of respondents satisfied and 20% highly satisfied with logistics services.
- Packaging quality, delivery speed, order tracking, and communication regarding shipment updates receive favorable ratings from most respondents.
- Damaged products and delayed deliveries remain the major operational issues affecting customer satisfaction.
- Most respondents have not experienced product returns; however, those who used return services expressed satisfactory opinions regarding the return and refund process.
- A significant majority (74%) are willing to recommend their preferred e-commerce platform based on its logistics performance, indicating strong customer loyalty.

VI. MANAGERIAL IMPLICATIONS

The findings of this study provide valuable insights for e-commerce companies and logistics service providers. Organizations should prioritize strengthening packaging quality to minimize product damage during transportation. Investments in warehouse automation, barcode-based order verification, and quality inspection systems can improve order accuracy and reduce fulfillment errors.

Companies should also enhance last-mile delivery operations through route optimization, real-time monitoring, and improved coordination with delivery personnel. Providing accurate shipment tracking information and proactive delivery notifications can improve transparency and customer trust. Furthermore, simplifying return and refund procedures and ensuring faster claim settlements will strengthen customer confidence and encourage repeat purchases.

The adoption of advanced technologies such as Artificial Intelligence (AI), Internet of Things (IoT),

predictive analytics, and automated warehouse management systems can significantly improve logistics efficiency and customer satisfaction while reducing operational costs.

VII. CONCLUSION

E-commerce logistics has become a strategic factor influencing customer satisfaction, loyalty, and business competitiveness. The findings of this study indicate that customers generally express positive opinions regarding logistics services provided by major e-commerce platforms. Delivery speed, secure packaging, order accuracy, shipment tracking, and communication play a significant role in shaping customers' online shopping experiences.

Although the majority of respondents reported satisfaction with logistics performance, recurring issues such as damaged products, delayed deliveries, and incorrect order fulfillment continue to affect customer experiences. Addressing these operational challenges through better packaging, improved inventory management, advanced tracking technologies, and efficient last-mile delivery systems can substantially improve customer satisfaction.

Overall, the study concludes that continuous investment in logistics infrastructure, technological innovation, and customer-focused service strategies will enable e-commerce companies to strengthen customer loyalty, improve operational efficiency, and sustain long-term competitive advantage in the rapidly evolving digital marketplace.

VIII. LIMITATIONS OF THE STUDY

- The study was limited to 200 respondents, which may not fully represent all e-commerce users.
- Convenience sampling may introduce respondent bias.
- The research focused only on selected logistics service dimensions.
- Responses were based on customers' personal opinions and experiences.
- Time and geographical constraints limited broader data collection.

IX. FUTURE SCOPE

Future researchers may expand the study by including larger sample sizes across multiple states or countries. Comparative studies between different e-commerce platforms or logistics providers can provide deeper insights into service quality differences. Advanced statistical techniques such as correlation, regression analysis, structural equation modeling (SEM), and factor analysis may also be employed to examine the relationship between logistics service quality, customer satisfaction, customer loyalty, and repurchase intention. Additionally, future studies may investigate the impact of emerging technologies such as Artificial Intelligence, drone delivery, robotics, blockchain, and green logistics on customer satisfaction.

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