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A Study on Perception of Customer Towards Delayed Deliveries in E-Commerce

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Abstract: ***The rapid growth of e-commerce has significantly transformed the retail industry by providing customers with convenience, wider product choices, and easy access to goods and services. However, delayed deliveries remain one of the major challenges affecting customer satisfaction and trust in online shopping platforms. This study aims to analyze customer perceptions toward delayed deliveries in the e-commerce sector and to identify the factors influencing their attitudes and satisfaction levels. The research focuses on aspects such as delivery reliability, communication, tracking updates, and the overall performance of logistics partners. Primary data were collected from 112 respondents using a structured questionnaire, and statistical tools such as percentage analysis and ANOVA were used for data interpretation. The findings reveal that delivery delays influence customer satisfaction, loyalty, and repurchase intentions. Effective communication, efficient logistics management, and improved delivery systems can reduce negative perceptions. The study provides useful insights for e-commerce companies to enhance delivery performance and improve overall customer experience.***

Keywords: E-commerce, Customer Perception, Delayed Delivery, Customer Satisfaction, Logistics Partners, Last-Mile Delivery, Online Shopping, Delivery Performance, Customer Loyalty, Supply Chain Management.

I. INTRODUCTION

The rapid growth of e-commerce has changed the way people purchase goods and services. Online shopping platforms offer convenience, a wide variety of products, competitive prices, and doorstep delivery. As a result, customers expect quick and reliable delivery services. However, delayed deliveries remain a common issue in the e-commerce industry due to factors such as logistics problems, transportation delays, high order volumes, and last-mile delivery challenges.

Customer perception toward delivery performance plays a crucial role in determining their satisfaction and trust in online platforms. When deliveries are delayed, customers may feel dissatisfied and lose confidence in the service. Therefore, understanding customer perception towards delayed deliveries is important for e-commerce companies to improve logistics efficiency and enhance overall customer experience.

II. REVIEW OF LITERATURE

Zeithaml, and Berry's (1988) SERVQUAL model, reliability and responsiveness are key dimensions of service quality. In e-commerce, timely delivery is a major component of reliability. Studies by Rao et al. (2019) and Singh & Sahu (2021) found that customers expect accurate delivery timelines and proactive communication regarding order status. When these expectations are unmet, perceived service quality declines sharply.

Zhang & Wei, (2021). In contrast, customers in individualistic cultures (e.g., the U.S., U.K.) tend to have lower tolerance for delays and expect compensation. The literature consistently highlights that delayed deliveries negatively influence customer satisfaction, trust, and loyalty. However, effective communication, transparency, and service recovery strategies can reduce the adverse effects. Future research could explore the role of emerging technologies—such as predictive logistics and AI-driven communication—in managing customer perceptions of delivery performance.

III. OBJECTIVE OF STUDY

1) To analyses customer attitudes towards delayed deliveries in online shopping platforms.
2) To identify key factors influencing customer satisfaction when deliveries are delayed (e.g., communication, compensation, frequency of delay).
3) To assess the impact of delayed deliveries on customer loyalty and repurchase intentions.

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IV. RESEARCH METHODOLOGY

The study adopts a descriptive and exploratory research design. The descriptive aspect Aims to describe the current practices, trends, and challenges in implementing innovative and ecoFriendly logistics techniques.

V. DATA ANALYSIS & RESEARCH

What type of product do you order most?

	Sum of squares	df	Mean square	F	Sig
Between group	1.285	1	1.285	1.045	.309
Within group	119.341	97	1.230		
Total	120.626	98			

INTERPRETATION

The above table presents the descriptive statistics and ANOVA results for how often respondents shop online based on gender. Out of 99 respondents, 70 are male and 29 are female. The mean value for males is 2.10 and for females is 2.10, indicating that both male and female respondents have almost the same frequency of online shopping.

The ANOVA test result shows a significance value (Sig.) of 0.987, which is greater than the standard level of 0.05. This indicates that there is no significant difference between male and female respondents in terms of how often they shop online.

Therefore, it can be interpreted that gender does not significantly influence the frequency of online shopping among the respondents.

INFERENCE

From the above table, it is inferred that the mean frequency of online shopping among male respondents (2.10) and female respondents (2.10) is almost the same. The ANOVA test shows a significance value of 0.987, which is greater than the standard significance level of 0.05.

Therefore, the null hypothesis is accepted, indicating that there is no significant difference between male and female respondents in terms of how often they shop online. This implies that gender does not influence the frequency of online shopping among the respondents.

Descriptives

How often do you shop

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
male	46	2.2391	1.15825	.17077	1.8952	2.5831	1.00	4.00
female	53	2.7736	.84675	.11631	2.5402	3.0070	1.00	4.00
Total	99	2.5253	1.03355	.10388	2.3191	2.7314	1.00	4.00

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	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.034	1	7.034	6.987	.010
Within Groups	97.653	97	1.007		
Total	104.687	98			

INTERPRETATION

The above table presents the descriptive statistics and ANOVA results for the type of product most frequently ordered online based on gender. Out of the total 99 respondents, 70 are male and 29 are female. The mean value for males is 2.5571, while for females it is 2.7931, indicating a slight difference in the type of products ordered by male and female respondents.

However, the ANOVA test shows a significance value (Sig.) of 0.254, which is greater than the standard significance level of 0.05. This indicates that there is no statistically significant difference between male and female respondents regarding the type of products they order most online.

Therefore, it can be interpreted that gender does not significantly influence the type of products ordered most frequently through online shopping among the respondents.

INFERENCE

This table presents descriptive statistics and one-way ANOVA results comparing means between male (N=79, mean=2.571) and female (N=93, mean=2.381) groups on an unstated continuous variable. The ANOVA F-statistic is 1.697 with a p-value of 0.194, indicating no statistically significant difference between group means at α=0.05.

Key Statistics Male group: Mean 2.571 (SD=0.988), 95% CI [2.350, 2.792]. Female group:

Mean 2.381 (SD=0.968), 95% CI [2.182, 2.580]. Overall: Mean 2.481 (SD=0.980). Effect size (η^2=0.010) suggests very small practical difference. Interpretation The non-significant ANOVA (p=0.194) means you fail to reject the null hypothesis of equal population means between males and females. A follow-up two-sample t-test confirms this (t=1.271, p=0.206). CIs overlap substantially, supporting no meaningful group difference; variability within groups dominates (SS within=84.33 vs. SS between=0.842).

VI. FINDINGS

1) The age range range of the respondents are 20-30 years.
2) Male makes up the majority of the responders.
3) The vast majority of those survived are married.
4) The majority of the respondents are employed.
5) The majority of the respondents are purchasing from online shopping.
6) The majority of the respondents are using Flipkart.
7) The majority of the respondents are using Ekart partners.
8) The majority of the respondents are from semi-urban area.
9) The majority of the respondents' orders fashion items.
10) The majority of the respondents receives order in sometime.

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VII. SUGGESTION

1) Adopt advanced route optimization systems to reduce delivery time and fuel consumption. Technologies like AI and GPS tracking help logistics partners choose the shortest and fastest routes.
2) Improve real-time tracking and customer notifications so customers can monitor delivery status and expected arrival times, which increases transparency and satisfaction.
3) Increase the number of local distribution hubs or micro-warehouses within Coimbatore to reduce delivery distance and improve same-day delivery performance.
4) Strengthen workforce training for delivery personnel to ensure better customer interaction, accurate delivery updates, and reduced delivery errors.

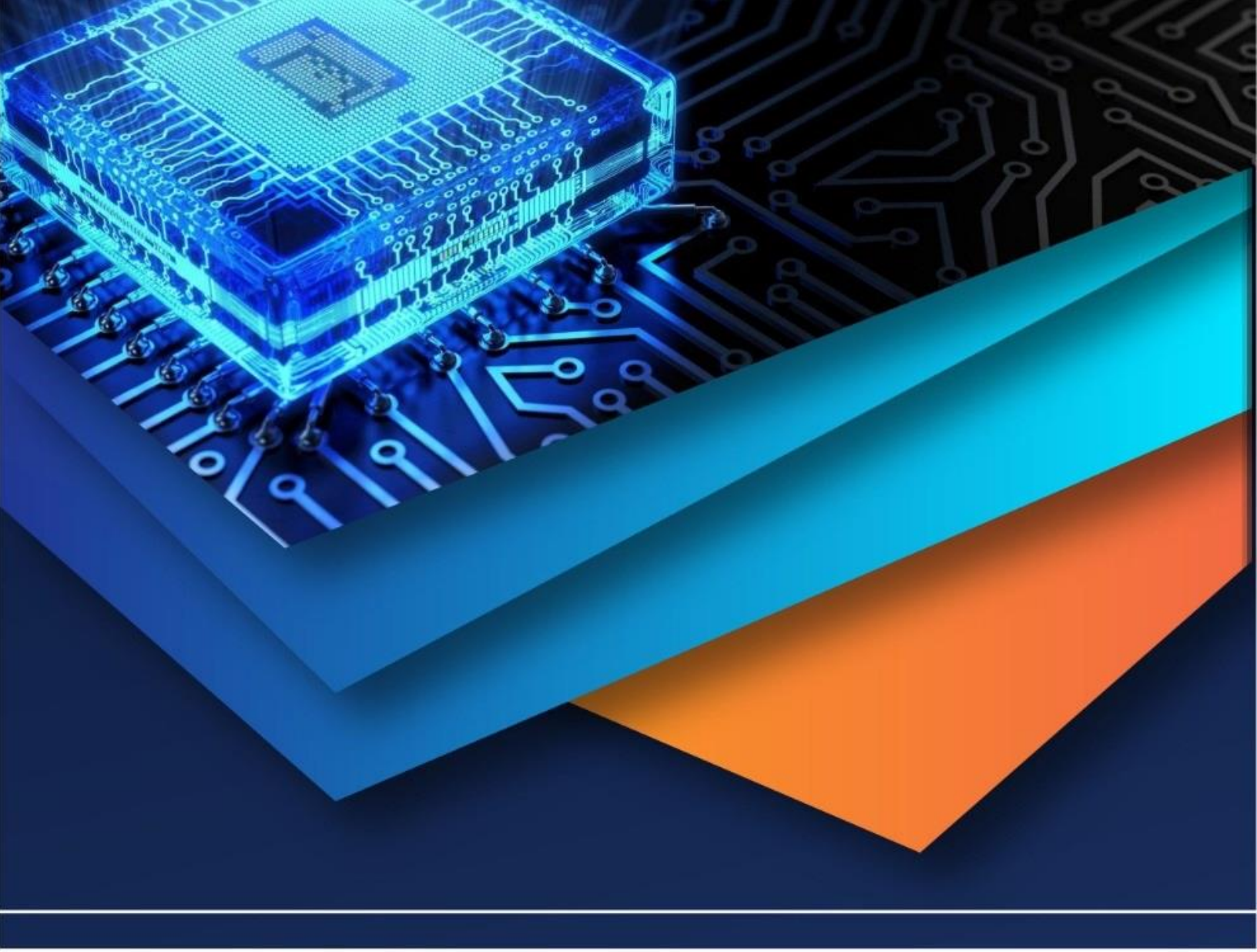
VIII. CONCLUSION

The study titled “Comparative Study on Last-Mile Delivery Performance of E-Commerce Logistics Partners in Coimbatore” emphasizes the importance of last-mile delivery in the success of e-commerce operations. It shows that delivery speed, reliability, order tracking, customer communication, and return handling significantly influence customer satisfaction. The comparative analysis reveals that logistics partners using advanced technology, efficient routing systems, and strong local delivery networks perform more effectively. However, challenges such as traffic congestion, incorrect addresses, and delayed deliveries still affect performance. The growing e-commerce market in Coimbatore increases the need for faster and more reliable delivery services. Improving technology, coordination, and infrastructure will help logistics partners enhance service quality and customer satisfaction.

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