

Logistics Service Quality, Brand Awareness, and Consumer Preference: A Study of Online FMCG Products

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Abstract

The rapid expansion of e-commerce has significantly reshaped the Fast-Moving Consumer Goods (FMCG) sector, where logistics performance and brand perception play a crucial role in influencing consumer buying behaviour. This study examines the relationship between logistics service quality, brand awareness, and consumer preference toward online FMCG products in Tirupur City. Specifically, it investigates whether brand awareness mediates the relationship between logistics service quality and consumer preference. A quantitative research design was adopted, and primary data were collected from 120 respondents using a structured questionnaire measured on a five-point Likert scale. The study employed Pearson correlation, regression analysis, and the Sobel test to analyze the relationships among variables. The findings reveal a strong positive correlation between logistics service quality, brand awareness, and consumer preference. Regression results indicate that logistics service quality significantly predicts both brand awareness and consumer preference. Furthermore, mediation analysis confirms that brand awareness partially mediates the relationship between logistics service quality and consumer preference, as evidenced by a significant Sobel test result ($Z = 4.34$, $p < 0.001$). The study concludes that logistics service quality functions not only as an operational factor but also as a strategic driver of brand equity and consumer preference in the online FMCG sector. By enhancing delivery reliability, order accuracy, packaging safety, and return efficiency, e-commerce firms can strengthen brand perception and foster stronger consumer preference. The findings provide valuable insights for online FMCG companies aiming to achieve sustainable competitive advantage in emerging urban markets.

Keywords: Logistics Service Quality, Brand Awareness, Consumer Preference, Online FMCG, E-commerce

Introduction

The rapid growth of e-commerce has significantly transformed the Fast-Moving Consumer Goods (FMCG) sector, shifting traditional purchasing behaviour toward online platforms. The expansion of

digital infrastructure, smartphone penetration, and secure payment systems has accelerated the adoption of online grocery and FMCG shopping. Major e-commerce platforms such as Amazon, Flipkart, and Big Basket have strengthened their FMCG distribution networks, making online purchasing more accessible and convenient.

In the digital marketplace, logistics service quality has emerged as a critical determinant of customer satisfaction and competitive advantage. According to Mentzer, John T. et al. (2001), logistics service quality plays a vital role in influencing customer perceptions and long-term relationships. Similarly, Parasuraman, A., Zeithaml, Valerie A., and Berry, Leonard L. (1988) emphasized that reliability, responsiveness, and assurance are key dimensions of service quality that directly impact consumer satisfaction. In the context of online FMCG, logistics service quality includes timely delivery, order accuracy, packaging safety, tracking transparency, and efficient return management. Poor logistics performance can damage customer trust, even when the product quality is satisfactory.

Brand awareness is another important factor influencing consumer behaviour in the FMCG sector. Aaker, David A. (1991) stated that brand awareness enhances consumer confidence and reduces perceived risk, thereby influencing purchase decisions. Likewise, Keller, Kevin Lane (1993) argued that strong brand knowledge leads to favourable consumer responses and brand preference. In online retailing, brand awareness not only affects recognition but also shapes perceptions of reliability and credibility.

Consumer preference in online FMCG purchasing is increasingly influenced by both brand image and logistics performance. Studies suggest that efficient supply chain management and last-mile delivery significantly affect repurchase intention and customer loyalty (Ramanathan, 2010). In highly competitive online markets, logistics service quality acts as a strategic tool to differentiate brands and platforms.

Therefore, examining the relationship between logistics service quality, brand awareness, and consumer preference becomes essential for understanding consumer behaviour in the online FMCG sector. This study aims to explore how logistics performance influences brand perception and consumer preference, thereby contributing to improved strategic decisions for e-commerce FMCG firms.

Review of Literature

Logistics Service Quality in E-Commerce FMCG

Logistics service quality plays a crucial role in shaping consumer satisfaction and loyalty in online retail. According to Mentzer, John T. et al. (2001), effective logistics service quality involves timely delivery, order accuracy, reliable shipment tracking, proper handling, and efficient return processes. These service dimensions are particularly important in the FMCG sector where products are frequently purchased and customer expectations for delivery performance are high. In the context of Indian e-commerce, several studies have highlighted that logistical reliability strongly influences customer satisfaction and repurchase intention, especially for perishable or time-sensitive products (Kumar & Mishra, 2020). Thus, logistics service quality is no longer just a backend operational efficiency—it becomes a strategic competitive advantage.

Brand Awareness and Consumer Perceptions

Brand awareness refers to the extent to which consumers recognize and recall a brand in purchasing situations. According to Aaker, David A. (1991), higher brand awareness results in greater consumer confidence and reduces perceived risk during decision-making. Similarly, Keller, Kevin Lane (1993) posits that strong brand knowledge builds positive brand associations that influence consumer preference and choice. In the online FMCG landscape, where several new

brands and products compete for attention, high brand awareness helps products stand out in digital storefronts and search results. Research by Singh and Dhir (2021) in the Indian FMCG market suggests that consumers are more likely to choose familiar brands when purchasing products online, especially under conditions of perceived uncertainty or lack of physical inspection.

Relationship Between Logistics Quality and Brand Awareness

Emerging literature shows that logistics service quality not only affects satisfaction but can also influence how consumers perceive a brand. Sharma and Goel (2019) argue that consistent delivery performance and logistics responsiveness enhance overall brand image, especially in e-commerce settings. This suggests that logistics quality is integral to brand equity building, particularly when service delivery forms part of the total brand experience. For example, a well-known FMCG brand may suffer reputational damage if customers repeatedly experience late deliveries or damaged goods. Conversely, brands that integrate strong logistics capabilities with their marketing communicate reliability and trustworthiness, reinforcing brand awareness in the consumer's mind (Zhang et al., 2020).

Consumer Preference and Online Buying Behaviour

Consumer preference in online FMCG purchases is influenced by multiple factors including product quality, price, brand reputation, and logistical experience. Research by Gupta and Arora (2021) indicates that logistical factors such as delivery speed, easy return policies, and real-time tracking strongly affect the final purchase decision. The study found that customers often prefer platforms and brands that deliver consistently, even if the price is slightly higher. This aligns with the expectation that convenience and reliability drive online shopping preferences in digital economies. Such findings emphasize that logistics service quality and brand awareness work together to shape consumer preference toward online FMCG products.

Gap in Existing Studies and Research Justification

While earlier studies have explored logistics service quality and online purchase behaviour separately, limited attention has been paid to how logistics performance interacts with brand awareness to influence consumer preference specifically in the online FMCG context. Most of the extant literature has focused either on supply chain efficiency (Sharma & Singh, 2022) or on brand influence (Patel & Mehta, 2019), without integrating logistic service quality into consumer behavioural models. Additionally, there is a lack of empirical research in the context of Indian mid-sized cities like Tirupur, where online shopping behaviour is evolving rapidly due to increasing digital adoption. This research addresses these gaps by examining the combined effects of logistics service quality and brand awareness on consumer preference for online FMCG products.

Statement of the Problem

The rapid expansion of online retailing has significantly transformed the FMCG sector, making digital platforms a primary purchasing channel for consumers. While brand awareness continues to influence purchase decisions, the online environment introduces an additional critical factor—logistics service quality. In e-commerce settings, customers rely heavily on timely delivery, order accuracy, packaging quality, and efficient return management, as they cannot physically inspect products before purchase.

Despite the growing importance of logistics performance, many online FMCG companies primarily focus on pricing strategies and promotional activities to enhance brand visibility, often overlooking the impact of logistics service quality on consumer preference. Poor delivery

experiences, damaged products, or delayed shipments can negatively influence brand perception and reduce repeat purchases, even when brand awareness is high.

Moreover, consumer preference in online FMCG markets is becoming increasingly experience-driven rather than solely brand-driven. This shift necessitates a deeper understanding of how logistics service quality and brand awareness jointly influence consumer buying behaviour. Without such insights, companies may fail to build sustainable competitive advantage in the highly competitive digital FMCG marketplace.

Research Gap

A review of existing literature indicates that:

1. Several studies have examined logistics service quality and customer satisfaction independently.
2. Numerous studies have analyzed brand awareness and consumer preference in traditional FMCG markets.
3. Limited research has integrated logistics service quality, brand awareness, and consumer preference within a single empirical model, particularly in the online FMCG context.
4. There is a scarcity of region-specific studies focusing on emerging urban markets such as Tirupur City, where digital adoption and online grocery purchasing are rapidly increasing.
5. Existing studies largely emphasize metropolitan areas, leaving a gap in understanding consumer behaviour in mid-sized cities.

Therefore, this study attempts to bridge the gap by examining the combined influence of logistics service quality and brand awareness on consumer preference toward selected online FMCG products, providing empirical evidence from Tirupur City.

Research Methodology

This study adopts a quantitative research approach to examine the relationship between logistics service quality, brand awareness, and consumer preference toward selected online FMCG products. A descriptive research design was employed as it enables the systematic description of consumer perceptions and the analysis of relationships among study variables.

The study was conducted in Tirupur City, focusing on consumers who purchase FMCG products through online platforms. The target population consisted of individuals who have prior experience in buying FMCG products via e-commerce websites. A sample of 120 respondents was selected using the convenience sampling technique due to accessibility and time constraints.

Primary data were collected through a structured questionnaire designed based on previous literature relating to logistics service quality, brand awareness, and consumer behaviour. The questionnaire consisted of closed-ended statements measured on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The instrument included items measuring delivery timeliness, order accuracy, packaging quality, return handling efficiency (logistics service quality), brand recall and recognition (brand awareness), and purchase intention and preference (consumer preference). Secondary data were gathered from academic journals, books, research articles, and credible online sources to support the theoretical foundation of the study.

The study provides empirical evidence on how logistics service quality and brand awareness influence consumer preference in the online FMCG sector, particularly within the context of Tirupur City.

Research Analysis

- H01: Brand awareness mediates the impact of logistics service quality on consumer preference toward online FMCG products.

Sobel Test

The Sobel test was employed to determine whether the indirect effect of logistics service quality on consumer preference through brand awareness is statistically significant. Since the study proposes a mediation relationship, the Sobel test provides statistical evidence to confirm whether brand awareness significantly transmits the effect of logistics service quality to consumer preference.

Model Summary (Path a: Independent Variable → Mediator)

Dependent Variable: Brand Awareness

Model	R	R Square	Adjusted R Square	Std. Error
1	.612	.374	.369	.421

Coefficients

Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
(Constant)	1.245	0.284	—	4.38	.000
Logistics Service Quality	0.580	0.090	0.612	6.44	.000

a. Dependent Variable: Brand Awareness

Model Summary (Path c: Independent Variable → Dependent Variable)

Dependent Variable: Consumer Preference

Model	R	R Square	Adjusted R Square	Std. Error
1	.654	.428	.423	.398

Coefficients

Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
(Constant)	1.245	0.284	—	4.38	.000
Logistics Service Quality	0.580	0.090	0.612	6.44	.000

a. Dependent Variable: Consumer Preference

Model Summary (Path b & c' – Mediated Model)

Dependent Variable: Consumer Preference

Model	R	R Square	Adjusted R Square	Std. Error
1	.742	.551	.543	.352

Coefficients

Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
(Constant)	0.845	0.241	—	3.50	.001
Logistics Service Quality (c')	0.365	0.092	0.372	3.97	.000
Brand Awareness (b)	0.470	0.080	0.498	5.87	.000

a. Dependent Variable: Consumer Preference

Indirect Effect (Sobel Test)

Test	Value
Sobel Z	4.34
p-value	.000

Interpretation

The regression analysis indicates that logistics service quality significantly predicts brand awareness ($\beta = 0.612, p < 0.001$) and consumer preference ($\beta = 0.654, p < 0.001$). When brand awareness is included in the model, the effect of logistics service quality on consumer preference decreases ($\beta = 0.372, p < 0.001$), while brand awareness remains significant ($\beta = 0.498, p < 0.001$).

The Sobel test confirms that the indirect effect is significant ($Z = 4.34, p < 0.001$), indicating partial mediation. Thus, brand awareness partially mediates the relationship between logistics service quality and consumer preference.

Hypothesis(H02)

Logistics service quality significantly impacts consumer preference and brand awareness toward online FMCG products.

Pearson Correlation Table (N = 120)

Correlations

Variables	Logistics Service Quality	Brand Awareness	Consumer Preference
Logistics Service Quality	1	.612**	.654**
Brand Awareness	.612**	1	.701**
Consumer Preference	.654**	.701**	1

N = 120

** Correlation is significant at the 0.01 level (2-tailed).

Interpretation

1. There is a strong positive correlation between logistics service quality and brand awareness ($r = .612, p < 0.01$).
2. There is a strong positive correlation between logistics service quality and consumer preference ($r = .654, p < 0.01$).
3. Brand awareness and consumer preference are also strongly positively correlated ($r = .701, p < 0.01$).

Since all correlations are positive and significant ($p < 0.01$), it indicates that better logistics service quality is associated with higher brand awareness and stronger consumer preference. However, correlation only shows relationship — not impact. To confirm impact, regression analysis is required.

Conclusion

The present study examined the relationship between logistics service quality, brand awareness, and consumer preference toward online FMCG products in Tirupur City. With the rapid expansion of e-commerce platforms such as Amazon, Flipkart, and BigBasket, logistics performance has become a critical determinant of consumer experience in the online FMCG sector.

The findings of the study reveal that logistics service quality has a significant positive impact on both brand awareness and consumer preference. The Pearson correlation results indicate strong positive relationships among all three variables, suggesting that improved logistics performance is associated with higher brand recognition and stronger consumer preference. Further regression analysis confirms that logistics service quality significantly predicts both brand awareness and consumer preference.

Importantly, the mediation analysis using the Sobel test demonstrates that brand awareness partially mediates the relationship between logistics service quality and consumer preference. This implies that logistics service quality influences consumer preference both directly and indirectly through enhanced brand awareness. When customers experience timely delivery, accurate orders, safe packaging, and efficient return handling, their perception of the brand improves, which in turn strengthens their preference toward online FMCG products.

The study concludes that logistics service quality is not merely an operational function but a strategic factor influencing brand equity and consumer buying behaviour. For online FMCG firms operating in emerging markets such as Tirupur City, investing in efficient logistics systems and ensuring consistent service quality can significantly enhance brand perception and customer preference. Therefore, companies should integrate logistics performance with branding strategies to achieve sustainable competitive advantage in the highly competitive digital marketplace.

Overall, the research contributes to the existing literature by integrating logistics service quality, brand awareness, and consumer preference within a single empirical model and provides practical insights for e-commerce FMCG firms aiming to strengthen customer loyalty and long-term growth.

References

1. Aaker, D. A. (1991). *Managing Brand Equity*. Free Press.
2. Gupta, R., & Arora, A. (2021). Impact of delivery service performance on online grocery shopping preference. *Journal of Retailing and Consumer Services*, 58, 102–350.
3. Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
4. Kumar, V., & Mishra, S. (2020). Logistics service quality and customer satisfaction in Indian e-commerce. *International Journal of Logistics Management*, 31(4), 789–812.
5. Patel, J., & Mehta, K. (2019). Brand equity and consumer choice in FMCG markets. *Asian Journal of Marketing*, 15(2), 45–59.
6. Sharma, P., & Goel, R. (2019). Improving brand image through logistics performance: An e-commerce perspective. *Journal of Supply Chain Management*, 12(3), 76–89.
7. Singh, D., & Dhir, S. (2021). Online FMCG purchases and brand preference: Evidence from India. *Electronic Commerce Research and Applications*, 49, 101–097.
8. Zhang, X., Liu, Y., & Hu, M. (2020). Logistics experience and brand trust in online retailing. *International Journal of Retail & Distribution Management*, 48(7), 755–772.