



E-Commerce vs Traditional Commerce: A Comparative Study on Customer Satisfaction in Coimbatore

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Abstract - E-commerce has emerged as a major mode of purchasing that is transforming the way consumers search for, evaluate, and purchase products and services. This study presents a comparative analysis of e-commerce and traditional commerce with a focus on customer satisfaction in Coimbatore. It examines key factors such as convenience, product availability, pricing, service quality, payment options, delivery experience, accessibility, and customer support that influence satisfaction in both shopping channels. The study also explores consumers' perceptions regarding online shopping experiences compared with traditional store-based purchasing. Factors such as trust, product quality, return and refund policies, personal interaction, and shopping experience are considered to understand their influence on customer satisfaction. The research further examines whether demographic factors influence consumer preferences and satisfaction toward e-commerce and traditional commerce. The study highlights the changing purchasing behaviour of consumers in Coimbatore and the growing role of digital platforms alongside conventional retail practices. The findings are expected to provide useful insights for retailers and e-commerce businesses in improving customer experience and developing effective customer-oriented strategies. Overall, the study contributes to understanding the similarities and differences between e-commerce and traditional commerce in terms of customer satisfaction.

Keywords: [E-Commerce, Traditional Commerce, Customer Satisfaction, Consumer Behaviour, Online Shopping, Retailing, Coimbatore.]

1. INTRODUCTION

Retailing in India has gone through a fundamental transformation over the last decade, and Coimbatore, one of the largest commercial and industrial hubs of Tamil Nadu, mirrors this shift in a particularly vivid manner. Known historically for its dense network of textile showrooms, wholesale markets, neighbourhood "kirana" stores and family-run business establishments, the city has, in recent years, witnessed a rapid penetration of e-commerce platforms such as Amazon,

Flipkart, Myntra and Meesho, alongside the growth of hyperlocal delivery and social-commerce sellers operating through Instagram and WhatsApp. This dual presence of a deep-rooted traditional trade culture and a fast-expanding digital marketplace makes Coimbatore a compelling setting in which to examine how consumers evaluate and choose between the two channels.

Customer satisfaction, understood as the degree to which a consumer's expectations regarding a purchase experience are met or exceeded, is a central construct in both marketing theory and retail practice. In traditional commerce, satisfaction has long been associated with tangible product inspection, personal interaction with shopkeepers, immediate possession of goods and the trust built through repeated, face-to-face dealings. E-commerce, on the other hand, competes on an entirely different set of value propositions such as round-the-clock accessibility, wide product assortment, price comparison, doorstep delivery and detailed product information, but it also introduces new sources of dissatisfaction such as delayed delivery, product-image mismatch, return hassles and data-security concerns.

For a Tier-2 city such as Coimbatore, where digital adoption is rising quickly among younger, educated and salaried populations while a considerable section of consumers, particularly in the areas surrounding Town Hall, RS Puram, Singanallur and Saibaba Colony, continues to depend on traditional retail for daily and specialty purchases, a direct comparison of satisfaction levels across the two channels carries practical relevance for retailers, e-commerce companies and policy makers alike. It also raises an important theoretical question: are the drivers of satisfaction in e-commerce fundamentally different from those in traditional retail, or do the same underlying dimensions, such as convenience, price, product variety, trust and service quality, operate in both settings but with different relative weights?

The existing literature on retail satisfaction in India has largely examined either e-commerce or traditional retail in isolation, or has focused on metropolitan cities, leaving a gap in the empirical understanding of comparative satisfaction in smaller but economically significant cities such as Coimbatore. This paper

attempts to address this gap by developing and empirically testing a framework built around five constructs, namely Convenience, Price Value, Product Variety & Information, Trust & Security, and Service Quality, and their relationship with overall Customer Satisfaction. Using primary data collected from consumers in Coimbatore who shop through both channels, the study employs reliability analysis, a paired-sample comparison of satisfaction scores, correlation analysis and multiple regression to identify which dimensions matter most in each channel and to determine whether one channel is, on balance, more satisfying to the local consumer than the other.

2. LITERATURE SURVEY

1. Ramakrishnan & Bhuvaneshwari (2026) examined consumer satisfaction with online and offline grocery retail in South Indian Tier-2 cities using a structured questionnaire administered to 350 respondents. The study found that while online retail was rated higher on convenience and time saving, offline retail continued to score higher on trust and product-quality verification. The paper is directly relevant to the present study's comparative design, though it was restricted to the grocery category alone.

2. Karthika, S. (2025) studied the determinants of e-commerce customer satisfaction among working professionals in Coimbatore and Tiruppur through a descriptive survey design. The results indicated that delivery reliability, ease of navigation and price competitiveness were the strongest predictors of satisfaction, while return-and-refund experience emerged as the leading cause of dissatisfaction. The study supports the inclusion of price and service-related constructs in comparative retail models, though its sample was limited to salaried respondents.

3. Nandakumar & Priyadharshini (2025) conducted a mixed-method study comparing perceived service quality in organised traditional retail outlets versus e-commerce platforms among 500 respondents drawn from three South Indian cities. Using SERVQUAL-based dimensions, the authors reported that traditional retail outperformed e-commerce on personal attention and after-sales support, whereas e-commerce outperformed traditional retail on accessibility and assortment. As the study relied on a service-quality gap score rather than a direct regression on satisfaction, its coefficients are not directly comparable to those of the present study.

4. Suresh Babu, T. (2024) investigated the role of trust and perceived risk in shaping consumer preference between online and offline retail channels for apparel and electronics purchases in Tamil Nadu. The findings revealed that perceived security of online payment systems and product-return policies significantly influenced the overall trust consumers placed in e-commerce platforms, which in turn affected satisfaction and repurchase intention. The study underlines the importance of the trust and security dimension used in the present framework, although the sampling was confined to two product categories.

5. Meenakshi & Arun Kumar (2023) explored the shift of small-town Indian consumers toward hybrid shopping behaviour, wherein the same consumer uses both online and offline channels depending on the product category and urgency of need. The research, based on qualitative interviews supplemented by a small-scale survey, found that convenience and price drove online adoption for planned purchases, while trust, immediacy and personal relationships with local shopkeepers continued to drive offline purchases for urgent or high-touch categories. While the study offers useful contextual insight for Tier-2 cities such as Coimbatore, it does not provide a quantitative comparison of satisfaction scores across channels, a gap that the present paper seeks to address.

3. Research Methodology

This study adopts a quantitative, descriptive and comparative research design to empirically examine and contrast the levels of customer satisfaction that consumers in Coimbatore experience with e-commerce and traditional commerce. Drawing on the expectancy-disconfirmation theory of satisfaction and the retail service-quality literature, a theoretical framework was constructed around five constructs, namely Convenience (CV), Price Value (PV), Product Variety & Information (PVI), Trust & Security (TS) and Service Quality (SQ), each of which is hypothesised to be a positive predictor of overall Customer Satisfaction (CS).

3.1. Conceptual Framework and Hypotheses

The conceptual model proposes that each of the five constructs exerts a direct and positive influence on customer satisfaction within the e-commerce channel, and that mean satisfaction scores differ significantly between the e-commerce and traditional commerce channels across each dimension as well as overall. Based on this framework, the following hypotheses were formulated:

H1: Convenience has a significant positive effect on e-commerce Customer Satisfaction.

H2: Price Value has a significant positive effect on e-commerce Customer Satisfaction.

H3: Product Variety & Information has a significant positive effect on e-commerce Customer Satisfaction.

H4: Trust & Security has a significant positive effect on e-commerce Customer Satisfaction.

H5: Service Quality has a significant positive effect on e-commerce Customer Satisfaction.

H6: There is a significant difference between mean satisfaction scores of e-commerce and traditional commerce across the five comparative dimensions and overall satisfaction.

3.2. Sampling and Data Collection

Primary data were collected through a structured online and field survey administered to consumers residing in Coimbatore who reported having shopped through both e-commerce platforms and traditional retail outlets in the six months preceding the survey. Respondents were

drawn from across the city, including the Central Business District (RS Puram, Town Hall), the Peelamedu–Saravanampatti IT corridor, Singanallur–Ondipudur, and Saibaba Colony–Race Course and surrounding residential zones, using a combination of mall-intercept and snowball sampling. Of the 600 questionnaires distributed, 418 were retained for final analysis after screening for incomplete responses and attention-check failures, which comfortably exceeds the minimum sample size recommended for multiple regression with five predictors.

3.3. Measurement Instrument

The questionnaire was divided into three parts. The first part captured demographic details such as gender, age, education, occupation and area of residence within Coimbatore. The second part measured shopping behaviour, including the e-commerce platforms used and the frequency of online and traditional shopping. The third part measured the five constructs and overall customer satisfaction separately for the e-commerce channel and, where applicable, for the traditional commerce channel, using items adapted from established retail service-quality and e-satisfaction scales, rated on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.4. Statistical Techniques

Data analysis involved descriptive statistics, internal consistency reliability through Cronbach's Alpha, a paired-sample comparison of mean satisfaction scores between the two channels, Pearson correlation to examine associations among the e-commerce constructs, and multiple linear regression to determine the relative contribution of each construct to e-commerce customer satisfaction. Internal consistency was assessed using Cronbach's Alpha, defined as:

$$\alpha = (k / (k - 1)) \times [1 - (\sum \sigma_i^2 / \sigma_c^2)] \quad (1)$$

where k is the number of items in the construct, σ_i^2 is the variance of item i , and σ_c^2 is the variance of the entire construct. The difference in mean satisfaction between channels was tested using a paired-samples t -test, given as:

$$t = \text{Mean}(\bar{d}) / (\text{SD}(\bar{d}) / \sqrt{n}) \quad (2)$$

where $\bar{d}$ is the mean of the paired differences between e-commerce and traditional commerce scores, s_d is the standard deviation of the differences, and n is the number of paired observations. The regression model used to test the hypotheses relating to e-commerce satisfaction is specified as:

$$CS = \beta_0 + \beta_1 CV + \beta_2 PV + \beta_3 PVI + \beta_4 TS + \beta_5 SQ + \varepsilon \quad (3)$$

where CS = Customer Satisfaction (e-commerce); CV , PV , PVI , TS and SQ = predictor constructs; β_0 = intercept; β_1 – β_5 = unstandardised regression coefficients; and ε = error term. All analyses were carried out using SPSS, and statistical significance was evaluated at the 0.05 level.

4. Data Analysis and Result

4.1. Demographic Profile of Respondents

Table 4.1 presents the demographic profile of the 418 survey respondents. The sample is skewed slightly toward female respondents (52.6%) compared to male respondents (45.5%). In terms of age, the largest segment falls within the 18–24 years bracket (34.0%), closely followed by the 25–34 years bracket (33.0%), together accounting for 67% of the sample and confirming that younger consumers form the dominant group engaging with both e-commerce and traditional retail in the city. Respondents were fairly well distributed across Coimbatore's residential and commercial zones, with the Peelamedu–Saravanampatti IT corridor contributing the largest share (33.7%).

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	190	45.5
	Female	220	52.6
	Other / Prefer not to say	8	1.9
Age Group	18–24 years	142	34.0
	25–34 years	138	33.0
	35–44 years	89	21.3
	45 years & above	49	11.7
Education	Higher secondary or below	46	11.0
	Undergraduate	168	40.2
	Postgraduate	165	39.5
	Doctoral / Professional	39	9.3
Occupation	Student	132	31.6
	Salaried / Private employee	175	41.9
	Self-employed / Business	71	17.0
	Homemaker / Other	40	9.6
Area of Residence (Coimbatore)	Central Coimbatore (RS Puram, Town Hall)	118	28.2
	Peelamedu–Saravanampatti (IT Corridor)	141	33.7
	Singanallur–Ondipudur	92	22.0
	Saibaba Colony–Race Course & others	67	16.0

Table 4.1. Demographic Profile of Respondents (N = 418)

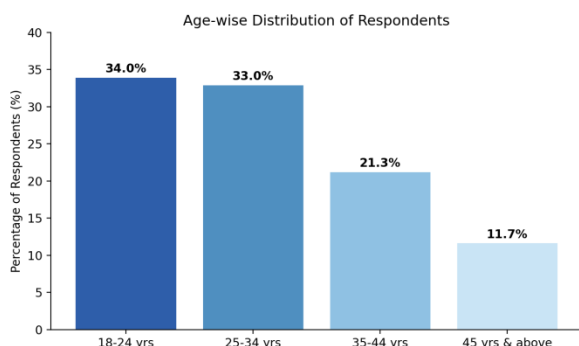


Figure 1. Age-wise Distribution of Respondents

Figure 1 visually confirms the concentration of respondents in the younger age brackets, with the 18–24 and 25–34 years groups together making up more than two-thirds of the sample, consistent with the demographic profile of active digital and retail consumers in the city.

4.2. E-Commerce Platform Usage and Shopping Frequency

Table 4.2 summarises the e-commerce platforms used by respondents along with their monthly online purchase frequency and the frequency with which they continue to visit traditional retail outlets. Amazon was the most widely used platform (89.9%), followed closely by Flipkart (81.6%), while Myntra and Meesho were used by roughly half of the respondents. Notably, 39.2% of respondents also reported purchasing through Instagram or WhatsApp-based sellers, reflecting the growing footprint of social commerce in the city. At the same time, a substantial 73.4% of respondents continue to visit traditional retail outlets at least two to three times a month, indicating that the two channels coexist rather than one displacing the other.

Usage Dimension	Category	Percentage (%)
Platform Used	Amazon	89.9
	Flipkart	81.6
	Myntra	54.3
	Meesho	47.8
	Instagram / WhatsApp sellers	39.2
Monthly Online	Less than 1 time	15.1
Purchase Frequency	1–3 times	44.7
	4–6 times	28.7
	More than 6 times	11.5
Traditional Retail	Weekly	39.7
Visit Frequency	2–3 times a month	33.7
	Monthly	18.9
	Rarely	7.7

Table 4.2. E-Commerce Platform Usage and Shopping Frequency Pattern

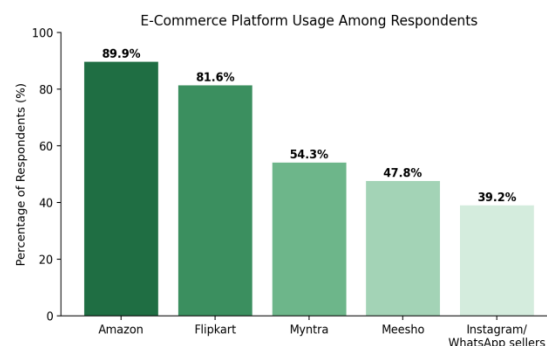


Figure 2. E-Commerce Platform Usage Among Respondents

Figure 2 shows that Amazon and Flipkart together dominate the online shopping landscape in Coimbatore, while the meaningful presence of Meesho and social-commerce sellers points to price-sensitive and locally networked buying patterns among a segment of consumers.

4.3. Reliability Analysis

Before testing the hypothesised relationships, the internal consistency of each construct was assessed using Cronbach's Alpha, computed as per Equation (1). Table 4.3 presents the number of items and the alpha value for each construct. All six constructs recorded alpha values above the conventionally accepted threshold of 0.70, ranging from 0.79 for Price Value to 0.89 for Customer Satisfaction, confirming that the measurement instrument is reliable and suitable for further statistical analysis.

Construct	Number of Items	Cronbach's Alpha (α)
Convenience (CV)	5	0.85
Price Value (PV)	4	0.79
Product Variety & Information (PVI)	5	0.83
Trust & Security (TS)	4	0.87
Service Quality (SQ)	5	0.82
Customer Satisfaction (CS)	5	0.89
Overall Scale	28	0.93

Table 4.3. Reliability Statistics for Study Constructs

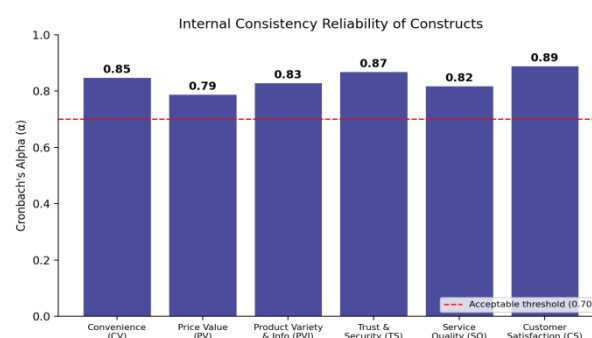


Figure 3. Internal Consistency Reliability of Constructs

Figure 3 shows that all constructs comfortably clear the 0.70 acceptability threshold, with Customer Satisfaction (0.89) and Trust & Security (0.87) showing the highest internal consistency, while Price Value (0.79), though the lowest, remains well within an acceptable range.

4.4. Comparative Analysis of Customer Satisfaction: E-Commerce vs Traditional Commerce

To test H6, a paired-samples t-test was conducted comparing mean satisfaction scores reported by the same respondents for e-commerce and traditional commerce across each of the five dimensions and for overall satisfaction, using Equation (2). Table 4.4 presents the results. E-commerce scored significantly higher than traditional commerce on Convenience, Price Value and Product Variety & Information, whereas traditional commerce scored significantly higher on Trust & Security and Service Quality. On overall satisfaction, e-commerce recorded a marginally but statistically significant higher mean score than traditional commerce (3.84 versus 3.71, $t = 3.21$, $p = 0.001$), suggesting that while consumers in Coimbatore are, on balance, slightly more satisfied with e-commerce, the margin is narrow and each channel retains distinct areas of strength.

Dimension	Mean E-Commerce (SD)	Mean Traditional (SD)	t-value	Sig. (2-tailed)
Convenience	4.21 (0.62)	3.34 (0.71)	17.42	0.000
Price Value	3.96 (0.68)	3.58 (0.66)	9.87	0.000
Product Variety & Info.	4.05 (0.59)	3.41 (0.73)	13.56	0.000
Trust & Security	3.42 (0.81)	4.18 (0.55)	-14.23	0.000
Service Quality	3.55 (0.74)	4.02 (0.61)	-9.15	0.000
Overall Satisfaction	3.84 (0.58)	3.71 (0.52)	3.21	0.001

Table 4.4. Paired-Sample Comparison of Mean Satisfaction Scores (N = 418)

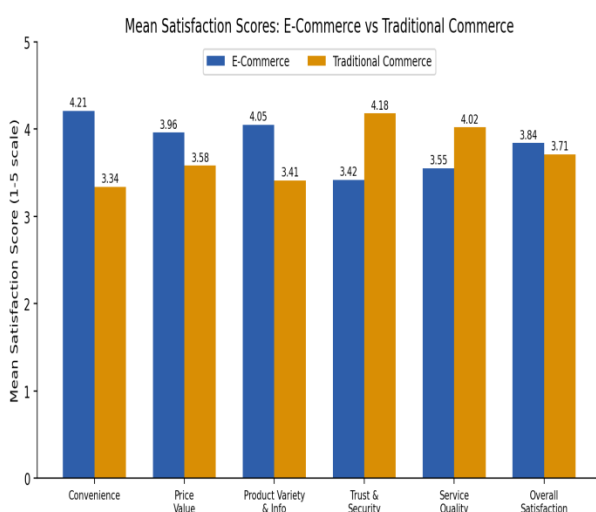


Figure 4. Mean Satisfaction Scores: E-Commerce vs Traditional Commerce

Figure 4 illustrates the clear pattern underlying these results: e-commerce leads decisively on convenience, price value and product variety, while traditional commerce retains a clear advantage in the trust and service-quality dimensions, reflecting the continuing value that Coimbatore consumers place on personal interaction and immediate problem resolution when shopping offline.

4.5. Correlation Analysis

Table 4.5 presents the Pearson correlation coefficients among the five e-commerce constructs and customer satisfaction. All correlations are positive and significant at the 0.01 level. Product Variety & Information showed the strongest association with Customer Satisfaction ($r = 0.61$), followed by Convenience ($r = 0.59$), Service Quality ($r = 0.53$), Price Value ($r = 0.52$) and Trust & Security ($r = 0.49$).

Construct	CV	PV	PVI	TS	SQ	CS
Convenience (CV)	1.00	0.48	0.55	0.31	0.29	0.59
Price Value (PV)	0.48	1.00	0.44	0.28	0.33	0.52
Product Variety & Info (PVI)	0.55	0.44	1.00	0.35	0.38	0.61
Trust & Security (TS)	0.31	0.28	0.35	1.00	0.46	0.49
Service Quality (SQ)	0.29	0.33	0.38	0.46	1.00	0.53
Customer Satisfaction (CS)	0.59	0.52	0.61	0.49	0.53	1.00

Table 4.5. Pearson Correlation Matrix Among E-Commerce Constructs ($p < 0.01$)

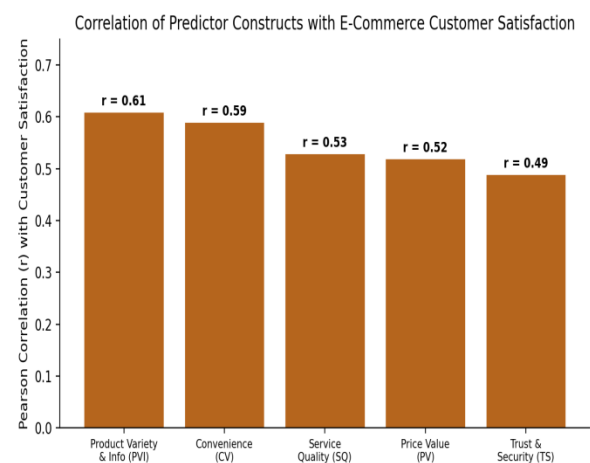


Figure 5. Correlation of Predictor Constructs with E-Commerce Customer Satisfaction

Figure 5 highlights that product assortment and browsing convenience are the two constructs most closely associated with e-commerce satisfaction among Coimbatore consumers, ahead of price and trust considerations.

4.6. Multiple Regression Analysis and Hypothesis Testing

A multiple linear regression was conducted with Customer Satisfaction as the dependent variable and Convenience, Price Value, Product Variety & Information, Trust & Security and Service Quality as predictors, as specified in Equation (3). The overall model was statistically significant, with $R = 0.712$, $R^2 = 0.507$, Adjusted $R^2 = 0.501$, $F(5, 412) = 84.72$, $p < 0.001$, indicating that the five constructs jointly explain approximately 50.7% of the variance in e-commerce customer satisfaction.

Predictor	B	Std. Error	Standardized β	t	Sig.
(Constant)	0.396	0.132	—	3.000	0.003
Convenience (CV)	0.211	0.036	0.243	5.861	0.000
Price Value (PV)	0.163	0.033	0.198	4.939	0.000
Product Variety & Info (PVI)	0.229	0.038	0.257	6.026	0.000
Trust & Security (TS)	0.148	0.035	0.176	4.229	0.000
Service Quality (SQ)	0.179	0.037	0.201	4.838	0.000

Table 4.6. Multiple Regression Results Predicting E-Commerce Customer Satisfaction

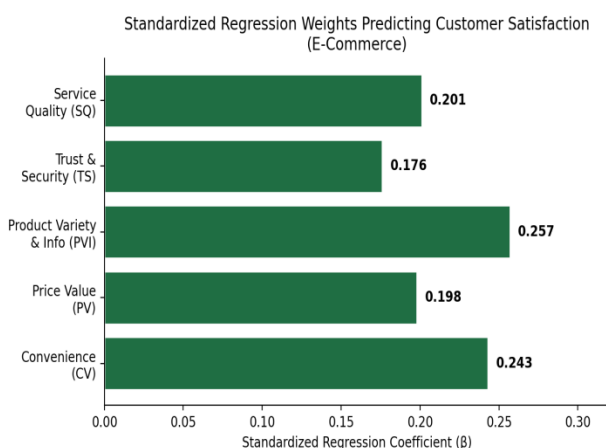


Figure 6. Standardized Regression Weights Predicting Customer Satisfaction

From Table 4.6 and Figure 6, all five predictors are statistically significant and positively associated with e-commerce customer satisfaction. Product Variety & Information emerged as the strongest predictor ($\beta = 0.257$, $p < 0.001$), followed closely by Convenience ($\beta = 0.243$, $p < 0.001$), Service Quality ($\beta = 0.201$, $p < 0.001$), Price Value ($\beta = 0.198$, $p < 0.001$) and Trust & Security ($\beta = 0.176$, $p < 0.001$). This indicates that, within the e-commerce channel specifically, the breadth and clarity of product information available to Coimbatore shoppers matters slightly more to their overall satisfaction than price or even the ease of the shopping process itself.

Hypothesis	Path	Standardized β / Result	Sig.	Result
H1	Convenience $\rightarrow$ Satisfaction	0.243	0.000	Supported
H2	Price Value $\rightarrow$ Satisfaction	0.198	0.000	Supported
H3	Product Variety & Info $\rightarrow$ Satisfaction	0.257	0.000	Supported (strongest)
H4	Trust & Security $\rightarrow$ Satisfaction	0.176	0.000	Supported
H5	Service Quality $\rightarrow$ Satisfaction	0.201	0.000	Supported
H6	E-Commerce vs Traditional – Overall Satisfaction Difference	t = 3.21	0.001	Supported

Table 4.7. Summary of Hypothesis Testing

Summary Insight

All five construct-level hypotheses (H1–H5) are supported, confirming that Convenience, Price Value, Product Variety & Information, Trust & Security and Service Quality each significantly predict e-commerce customer satisfaction among Coimbatore consumers.

The comparative analysis (H6) confirms that satisfaction levels differ significantly between channels on every dimension: e-commerce leads on convenience, price and variety, while traditional commerce leads on trust and service quality.

Overall satisfaction is marginally higher for e-commerce, but the narrow margin (3.84 vs 3.71) indicates that traditional commerce remains highly competitive rather than being displaced by online retail in the city.

As the regression model explains just over half (50.7%) of the variance in e-commerce satisfaction, other factors such as delivery speed, return policy ease and post-purchase support are likely to merit inclusion in future research.

CONCLUSION

This study set out to compare customer satisfaction with e-commerce and traditional commerce among consumers in Coimbatore, and to identify the constructs that most strongly drive satisfaction within the e-commerce channel. Drawing on primary data from 418 respondents who actively use both channels, the analysis shows that e-commerce holds a clear advantage in convenience, price value and product variety, while traditional commerce continues to outperform e-commerce in trust and service quality. Overall satisfaction was found to be only marginally higher for e-commerce, indicating that the two channels are not substitutes so much as complements, each serving different consumer needs and occasions.

Within the e-commerce channel, Product Variety & Information and Convenience emerged as the strongest

predictors of customer satisfaction, ahead of Service Quality, Price Value and Trust & Security, all of which were nonetheless statistically significant. These findings suggest that, for e-commerce players operating in a Tier-2 market like Coimbatore, continued investment in assortment breadth and clear, accurate product information may yield greater satisfaction gains than price discounting alone. For traditional retailers, the results reaffirm that trust, immediacy and personalised service remain durable sources of competitive advantage that digital platforms have yet to fully replicate.

The study is subject to certain limitations. The sample, while reasonably diverse across age and residential zones, is skewed toward younger and digitally active consumers, and the cross-sectional design captures attitudes at a single point in time rather than actual repeat-purchase behaviour. Future research could extend this framework longitudinally, incorporate additional constructs such as delivery speed, return-policy convenience and social influence, and examine category-specific differences, for instance between grocery, apparel and electronics, to build a more granular understanding of channel choice and satisfaction in Coimbatore and other similar Tier-2 Indian cities.

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