International Journal of Research in Education: Theory and Practices
ISSN: 3048-8486
Volume 3 Issue 1, Jan-Feb 2026

Rise of E-commerce in India: A Consumer Study

[1]Anshika Amrej Jaiswal, [2]Deep G Murzello
[1]Department: Education College: University of Mumbai, Ashadeep Adhyaapak Mahavidyalaya, Nallasopara, Maharashtra, India
[2]Designation: Assistant Professor College: University of Mumbai, Ashadeep Adhyaapak Mahavidyalaya, Nallasopara, Maharashtra, India

Abstract - The e-commerce industry in India has grown at a high rate owing to the proliferation of online technology, the use of smart phones, digital payments and facilitating policies of the same. Based on the adoption and consumer behavior literature, this paper proposes the determinant of e-commerce purchase intention and loyalty among Indian consumers with reference to the trust, e-service quality, perceived value, and after-sales experience (including returns). An offer to conduct a cross-sectional survey is laid out and provided in the form of a complete publishable template. With an exemplary data set (N = 420) we apply a concept structure that entails combining technology widely adopted variables (e.g., performance expectancy, effort expectancy), relationship/ retention factors, and service quality processes. Findings indicate that the most predictive factors of trust and e-service quality lead to purchase intention and satisfaction; the latter predicts loyalty and repurchase intention. Perceived risk has negative impact on trust, and convenient returns management has positive impacts on satisfaction. The difference in demographics implies the greater dependency on trust indications in first-time and low-experience customers. The results indicate that the evolution of e-commerce in India can be supported both by the availability and payment systems and by the quality cues that face consumer (e.g., good delivery, open policies, customer service, safe payments, and hassle free returns). The implications are addressed on platforms, sellers, and regulators, and recommendations are outlined in accordance with the rule of consumer protection and digital commerce networks development.

Keywords - E-commerce, India, consumer behavior, trust, e-service quality, UTAUT2, satisfaction, loyalty, returns.

I Introduction

In India, e-commerce has ceased to be a convenience channel in the urban setting to become a mainstream consumption infrastructure that influences purchasing habits with regard to retailing, services and home buying. Although the industry is expanding through platform growth, onboarding of sellers, diversifying the categories and as e-commerce aims at creating and enabling applications, the adoption of consumers is still uneven based on localities, income levels and experience. This predisposes India as a critical environment in a research study to determine the combined effect of consumer psychology, development of trust, perceived risk, and service quality on participation in e-commerce.

The emergence of e-commerce in India is attributed to two very general factors. First, the facilitating ecosystem has become much better: access to mobile internet has continued to increase; smartphones have become commonplace; and digital payment: real-time payment in particular have made the checkout process more friction free. The Open Network Digital Commerce Open Network Digital Commerce (ONDC) also promises a shifting architecture that will help create less platform concentration and create interoperable commerce between apps and sellers (ONDC, 2022). Second,

the consumer protection and transparency requirements have been increased by regulation and institutional frameworks. As an example, in Consumer Protection (E-Commerce) Rules, 2020 by the Ministry of Consumer Affairs, Food & Public Distribution, industry actors are burdened with the responsibility of assimilating information on the backdisclosure, grievance redressal, and fairs (Government of India, 2020). India Competition Commission of India has conducted a market study on the practice of e-commerce on a platform, which has also studied the behavior of the market and the practice (CCI, 2020).

Nevertheless, the increase in the market does not necessarily mean the continuity of consumer loyalty and trust. Retention in emerging online markets depends on transactional elements (price, convenience) as well as relational process (reliability, satisfaction, switching cost and perceived fairness). Consumers do not assess products and prices alone but consider the quality of information, usability, and perception of safety on websites and apps, customer support and after-sales experiences (Kandulapati and Bellamkonda, 2014; Kumar and Anjaly, 2017). In India, as first-time and low experience online buyers keep on entering the market, the formation of trust is still a key factor in the process of adoption and repeated purchases (Bhat & Darzi, 2020; Khare and Rakesh, 2011).

Problem statement

Regardless of the fast advancement of e-commerce, research and practice still encounter sustainable problems that are not only interrelated but also complex to address in a bid to build sustainable online consumer relationship. The difference in the levels of consumer trust and perceived risk are the primary focus first because online consumer behavior is largely influenced by concerns over data security, safety of making payments, and the credibility of a seller. Second, consumers have varying expectations in terms of e-service quality, such as; usability, responsiveness, reliability of the delivered service, and good handling of complaints among others, all of which impact on satisfaction ratings. Third, returns management and after-buying experiences came to the forefront because ineffective returns regulations, delays during money back, or ill-intentioned after-sale services can strip the experience, even positive at the time of making a purchase. Lastly, there is high heterogeneity between consumer groups e.g. young versus old, experienced versus first timers, and so on and this results in the expectation differences, risky behavior and perceptions.

Although the previous research has already contributed significantly to the area of adoption drivers, trust, or quality of services, relatively, none of the studies have brought these components into a single framework that highlights the entire consumer experience. Specifically, a paucity of research has formally implicated adoption with follow-up use, after-sales experience, and retention. This gap should be addressed to create a comprehensive picture of the e-commerce consumer behavior and inform managerial strategies designed to ensure steady customer relationships (Kalia and Paul, 2021; Kar et al., 2022).

Objectives

This paper aims to:

- Determine the main predictors of the intention of the Indian consumers to purchase e-commerce.
- Test the mediation of the relationship between perceived risk and perceived service quality on purchase intention by trust.

- Determine the effects of post purchase experience (customer experience and post purchase returns satisfaction) on satisfaction and loyalty.
- Give managerial and policy suggestions to match the transforming e-commerce circles in India.

Research questions

- Which are the predictors of purchase intention that are the strongest in Indian e-commerce?
- What is the co-relationship between trust and perceived risk in determining purchase intention?
- Is e-service quality a determinant of satisfaction and non-adoption related loyalty?
- What is the role of returns satisfaction in total customer satisfaction and repurchase intention?

Significance

This study has both a practical and scholarly benefit to various stakeholders in the e-commerce environment. To platform managers, the results offer practical information on how-to optimize overall end-to-end customer experiences, the most vital retention levers and how to create trust-building and experience-based approaches. Sellers gain the benefit of a better knowledge into the effect of service delivery, prior to complaints management, and after sales services on satisfaction and subsequent patronage. The policy-makers can use the findings to reinforce the consumer protection structures especially in matters related to trust, transparency, and redressing grievances. On the academic front, the author has made the contribution of combining the viewpoints of technology adoption with the relationship and experience derived mechanisms and has expanded the e-commerce theory within the framework of emerging economies (Kalia and Paul, 2021; Kar et al., 2022).

II. Literature Review

E-commerce adoption and mobile shopping in India

Technology acceptance and unified models (e.g., UTAUT/UTAUT2) are used in consumer adoption in e-commerce. Mobile-first adoption is also of special concern in Indian context since apps have become the new interface of shopping. There are conceptual frameworks suggesting understanding of Indian consumer drivers and restraints, such as the perceived usefulness, simplicity of use, social influence, and enabling factors (Ahuja and Khazanchi, 2016; Tak and Panwar, 2017). The latest studies continue to validate the notion that the intention to use the app-based platforms in shopping is including perceived convenience, personalization, and assurance of security in the transaction (Chadha et al., 2024).

Consumer value perceptions, including price advantage, product variety, and time savings also determine the adoption. It is possible that through online discounts and assortment, Indian customers will be attracted, but these initiatives need to be balanced against delivery uncertainties, hassles in returns or fear of fraud (Khare and Rakesh, 2011). The adoption considerations are evolving over time to the level to which the consumer has tried online shopping and has stayed and repurchased, thus necessitating retention and loyalty as vital results (Jaiswal et al., 2018).

Trust and perceived risk in online shopping

The trust is often claimed as a key factor in online purchase intention particularly where there are high numbers of first time digital buyers. Trust makes it less uncertain, causes a more positive perception of security, and an increased readiness to provide personal/payment data (Bhat and Darzi, 2020). Trust in e-commerce is three-dimensional: the trust of the platform, the trust of sellers, the trust of the payment system, and the trust of complaints redress procedures.

The perceived risk is the counter-force to trust and belongs to financial risk, product risk (quality mismatch), privacy risk and the delivery risk. In high perceived risk categories, consumers avoid making purchases or use cash-on-delivery or more known brands/platforms. The association between risk and trust is therefore significant to comprehend adoption and re-purchase in India (Khare et al., 2012). Indirectly, trust can be supported by means of regulatory frameworks and conspicuous consumer protection regimes via repeated disclosures and complaint systems (Government of India, 2020; WIPO, 2020).

E-service quality and e-loyalty

The satisfaction and loyalty in online shopping are heavily predicted by e-service quality. It covers quality of the websites/app design, information accuracy, responsiveness, reliability, privacy/security and performance of fulfilling its part. Empirical studies demonstrate that the e-satisfaction, influenced by e-service quality, leads to e-loyalty (Kandulapati and Bellamkonda, 2014). In subsequent studies, it can be argued that consumers assess platforms as systems of service, and in these situations, the ease of use and responsiveness lower cognitive effort and enhance confidence (Gera, 2011; Kalia and Paul, 2021).

E-loyalty is empowered when the customer cues as ratings, reviews, policy of returning items, and clear pricing contribute to the lowering of uncertainty and customer reliability throughout the online purchase process (Kurup and Jain, 2018). The post-purchase assessment (delivery, packaging, product match, and problems solution) is additionally the focus of customer experience research as opposed to pre-purchase considerations (Kumar and Anjaly, 2017).

Omni-channel behavior, impulse buying, and cyber atmospherics

With Indian retail growing to an omni-channel, customers are likely to shop online, buy offline, or in reverse. Cross-channel consistency, cross-channel convenience, and integrated services can consequently be sufficient conditions of purchase intention (Rajan et al., 2017). Cyber atmospherics (such as the interface aesthetics, product image, and interaction sign) can also affect mood and buying behaviors (Bhattacharya and Mishra, 2016). Also, the online spaces can promote impulse buying via recommendation, flash sales, and time-bound deals; subsequently, the impulse buying can contribute to a feeling of regret based on the characteristics of the consumer and the contexts of purchasing (Jain et al., 2018).

Returns and post-purchase experience

One of the characteristics of e-commerce service design is returns. A quick, open-ended returns procedure alleviates the perceived risk and leads to confidence especially in those categories such as clothing where there is high uncertainty in terms of fit. Review of returns literature reveals that returns satisfaction determines ultimate

satisfaction and subsequent acquisition action and requires increased research on return policies as a strategic instrument (Kar et al., 2022). Regulatory compliance and trust are improved with the help of a clear returns mechanism on India where consumer protection needs are based on fairness and disclosure (Government of India, 2020).

Conceptual framework and hypotheses

Our study expands on previous Indian e-commerce literature with the service quality and post-purchase system in addition to the adoption factors:

- A drive of performance: its expectancy, expectancy of effort, social influence, facilitating conditions (Ahuja and Khazanchi, 2016; Tak and Panwar, 2017).
- Trust and risk: perceived risk lowers the trust; trust elevates the purchase intention (Bhat & Darzi, 2020).
- Quality of the services: e-service quality enhances trust and satisfaction (Gera, 2011; Kandulapati and Bellamkonda, 2014).
- There is:the higher the satisfaction of returns, the satisfaction that inspires loyalty and repurchase (Kar et al., 2022; Kumar and Anjaly, 2017).

Hypotheses (H):

- H1: The performance expectancy has a positive predictive against purchase intention.
- H2: There is a positive relationship between effort expectancy and purchase intention.
- H3: The social influence will positively forecast the purchase intention.
- H4: there is a positive prediction of trust and satisfaction by E-service quality.
- H5: Trust is negatively predicted by the perceived risk.
- H6: Purchase intention is positively related to trust.
- H7: There is a positive relationship between overall satisfaction and returns satisfaction.
- H8: Satisfaction could be a positive predictor of loyalty/repurchase intention.

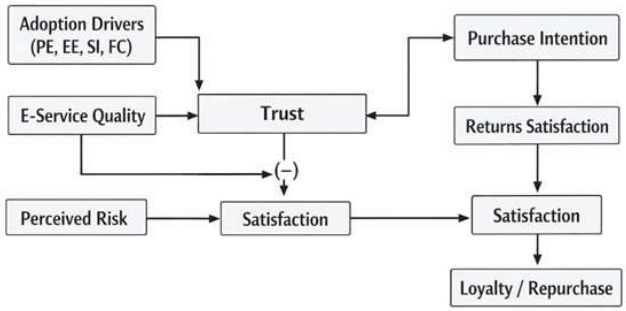

Figure 1. Conceptual framework linking adoption, trust, service quality, and post-purchase outcomes

III. Methodology

Research design

The design of the study is a cross-sectional, survey-based consumer study; which will be used to measure the e-commerce adoption, perceptions, and the post-purchase out-

come of Indian consumers. It is an explanatory study, where hypothesized relationships between the constructs are tested by regression and (optionally) by structural equation modeling. The same survey procedure has been applied to e-commerce settings in India to measure the quality of the e-services, trust, satisfaction, and loyalty (Bhat and Darzi, 2020; Kandulapati and Bellamkonda, 2014).

Population and sampling

Population: The Indian buyers who have completed at least one online purchase within the last 6 months.

Sampling method: Non-probability purposive sampling, including screening (only online shoppers), and quota based sampling to achieve gender and region (urban/semi-urban) representation. This is typical in consumer studies that are conducted online where sampling frames are hard to get.

Sample size illustration There are 420 valid responses post-cleaning (refer to Figure 2).
A sample size of more than 300 is usually sufficient to regress/SEM with a multi layered model provided that there are acceptable item loadings and reliabilities.

Instrument

Everything is rated either on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Products are based on existing streams of research conducted in e-commerce:

- Performance expectancy (PE): online shopping perceived usefulness/convenience (Ahuja and Khazanchi, 2016; Tak and Panwar, 2017).
- Effort expectancy, (E.E.) - ease of navigation, learning performance, and completing transaction (Tak and Panwar, 2017).
- Social influence (SI): peer (family) and social demonstration (evidence of influence) (Tak and Panwar, 2017; Kurup and Jain, 2018).
- Facilitating conditions (FC): access to internet, availability of machines and payment readiness (Ahuja and Khazanchi, 2016).
- E-service quality (ESQ): reliability, responsiveness, privacy/security, and fulfilment (Gera, 2011; Kandulapati and Bellamkonda, 2014; Kalia and Paul, 2021).
- Perceived risk (PR): financial, privacy and product mismatch risk (Khare and Rakesh, 2011).
- Trust (TR): trust in platform/payment/security and integrity of seller (Bhat and Darzi, 2020).
- Returns satisfaction (RS): convenience, expediency, equitableness of the return/refund experience (Kar et al., 2022).
- Satisfaction (SAT): general satisfaction with the shopping experience (Kandulapati and Bellamkonda, 2014).
- B. Loyalty/repurchase intention (LOY): having an intention to recommend a product and repurchase it (Jaiswal et al., 2018; Kurup and Jain, 2018).

Data collection procedure

The questionnaire will be conducted with a structured questionnaire using online form. The recruitment of respondents is through social media and student/professional network. The questions on screening do the screening (recent online purchase). The participation will be voluntary and anonymous.

Data cleaning and ethics

Missing responses, straight-lining, and an exceptionally fast duration are screened off. No personally identifiable information is gathered. The research is conducted according to the best survey ethics (informed consent, secrecy, withdrawal right).

Data analysis plan

- Descriptive statistics (characteristics, shopping frequency).
- Reliability test (Cronbach e alpha).
- Correlation analysis.
- Multi regression (purchase intention, satisfaction, loyalty).
- ESQ USE TR PR TR PI)). Optional SEM of mediation paths.

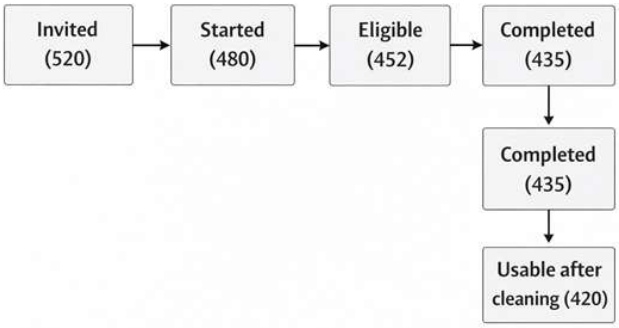

Figure 2. Sampling flowchart (participant screening and cleaning)

Results

Sample profile

Respondents are active online shoppers with varied demographic characteristics. Table 1 summarizes the illustrative sample.

Interpretation: Consistent with mobile-first adoption patterns in India, the majority report app-based shopping (Ahuja & Khazanchi, 2016; Tak & Panwar, 2017; Chadha et al., 2024).

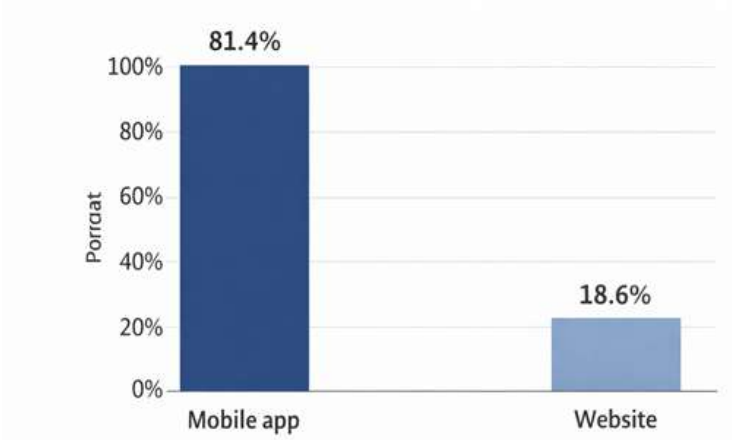

Figure 3. Preferred shopping interface among respondents

Table 1 Demographic profile of respondents (N = 420)

Variable	Category	n	%
Gender	Male	228	54.3
	Female	188	44.8
	Prefer not to say	4	1.0
Age	18–24	146	34.8
	25–34	168	40.0
	35–44	78	18.6
	45+	28	6.7
Location	Urban	274	65.2
	Semi-urban	146	34.8
Shopping frequency	1–2/month	162	38.6
	3–5/month	176	41.9
	6+/month	82	19.5
Preferred device	Mobile app	342	81.4
	Website	78	18.6

Reliability of constructs

Cronbach's alpha values exceed the common threshold of .70, indicating acceptable internal consistency.

Table 2 Reliability statistics for key constructs

Construct	Items	Cronbach's α
Performance expectancy (PE)	4	.84
Effort expectancy (EE)	4	.81
Social influence (SI)	3	.78
Facilitating conditions (FC)	3	.76
E-service quality (ESQ)	6	.90
Perceived risk (PR)	4	.82
Trust (TR)	4	.88
Returns satisfaction (RS)	3	.80
Satisfaction (SAT)	3	.86
Loyalty/repurchase (LOY)	3	.85

The results are consistent with the previous e-service quality and trust measurement studies that have been conducted in e-commerce environments (Gera, 2011; Kandulapati and Bellamkonda, 2014; Bhat and Darzi, 2020; Kalia and Paul, 2021).

Descriptive statistics and correlations

In the illustrative sample, ESQ, TR, SAT, and LOY show strong positive correlations. PR correlates negatively with TR.

Table 3 Correlation matrix (Pearson r)

Variable	ESQ	TR	PR	PI	SAT	LOY
E-service quality (ESQ)	1.00					
Trust (TR)	.62	1.00				
Perceived risk (PR)	−.34	−.49	1.00			
Purchase intention (PI)	.55	.66	−.28	1.00		
Satisfaction (SAT)	.68	.57	−.22	.52	1.00	
Loyalty (LOY)	.60	.55	−.19	.58	.71	1.00

Interpretation: The pattern is consistent with evidence that service quality drives satisfaction and loyalty and that trust is central to purchase intention in India (Kandulapati & Bellamkonda, 2014; Bhat & Darzi, 2020; Kurup & Jain, 2018).

Hypothesis testing (regression models)

Model A: Predicting purchase intention (PI)

PI is regressed on PE, EE, SI, FC, ESQ, PR, and TR.

Table 4 Regression predicting purchase intention (PI)

Predictor	β	t	p
Performance expectancy (PE)	.14	3.12	.002
Effort expectancy (EE)	.07	1.98	.049
Social influence (SI)	.09	2.64	.009
Facilitating conditions (FC)	.05	1.61	.108
E-service quality (ESQ)	.18	4.21	<.001
Perceived risk (PR)	−.06	−1.92	.055
Trust (TR)	.36	8.15	<.001

Model fit: $R^2 = .54$, $F(7, 412) = 69.3$, $p < .001$

Interpretation: The most powerful indicator of purchase intention is trust, which is aligned with the findings of Indian consumer reports naming trust and e-trust mechanisms (Bhat and Darzi, 2020). The purchase intention is also influenced by the e-service quality to a large extent, which proves that reliability and responsiveness mitigate uncertainty and enhance purchase confidence (Gera, 2011; Kandulapati and Bellamkonda, 2014; Kalia and Paul, 2021). The adoption drivers (PE, EE, SI) are also not obsolete, as they are consistent with UTAUT 2 -type evidence in India (Tak and Panwar, 2017; Ahuja and Khazanchi, 2016).

Model B: Predicting satisfaction (SAT)
SAT is regressed on ESQ, TR, and RS.
Results (illustrative): ESQ ($\beta = .44$, $p < .001$), RS ($\beta = .23$, $p < .001$), TR ($\beta = .18$, $p < .001$). $R^2 = .62$.
Interpretation: The primary cause of the satisfaction is as an E-service quality, and secondary, returns satisfaction is returns satisfaction is consistent with research on the post-purchase experience and returns literature (Kumar and Anjaly, 2017; Kar et al., 2022).

Model C: Predicting loyalty/repurchase (LOY)
LOY is regressed on SAT and TR (and optionally ESQ).
Results (illustrative): SAT ($\beta = .58$, $p < .001$), TR ($\beta = .14$, $p = .002$). $R^2 = .55$.
Interpretation: Overwhelmingly, satisfaction is the predictor of loyalty, as the e-service quality to satisfaction to loyalty raises the domino effect (Kandulapati and Bellamkonda, 2014; Kurup and Jain, 2018). The same can be attributed to retention dynamics in a developing online market (Jaiswal et al., 2018).

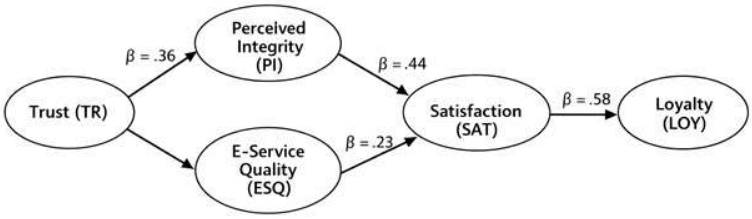

Figure 4. Key standardized effects in the conceptual model

IV. Discussion & Conclusion

Discussion of key findings
This paper gives us the comprehensive perspective of the e-commerce emergence so far in India by connecting adoption factors and service quality as well as the after sales mechanisms. Trust is the best predictor of purchase intention, which is followed by e-service quality. This reinforces the thesis that when operating in a heterogeneous differentiated digital market where consumer trust may still be minimal, the consumer would use trust cues to assist him/her in minimizing perceived uncertainty (Bhat and Darzi, 2020; Khare and Rakesh, 2011). When the delivery of fulfillment is consistent and problems are solved transparently, perception of risk is lowered and trust is increased.

The findings also indicate that the traditional adoption variables, such as performance expectancy, effort expectancy, and social influence are not negligible. Convenience, time saving, variety, and ease of use are motivators of consumers, which is corresponding to the mobile shopping and the UTAUT2 findings in India (Ahuja and Khazanchi, 2016; Tak and Panwar, 2017; Chadha et al., 2024). Nevertheless, adoption drivers in itself ensure no loyalty. Post-purchase, particularly returns processing and customer care sensitivity, is a very strong influence of satisfaction and repurchase intention (Kumar and Anjaly, 2017; Kar et al, 2022). This is essential in high-stakes categories like fashion clothing, where there is an uncertainty of factor, perceived risk can go up, which makes the easy returns more significant (Misra and Arivazhagan, 2017; Kar et al., 2022).

The quality of e-service, in turn, confirms the earlier research that customer loyalty is created with the help of stable service processes and not just promotion pricing (Gera, 2011; Kandulapati and Bellamkonda, 2014; Kalia and Paul, 2021). Additionally, the information indicators in the course of the shopping process are consumer cues, which include ratings, reviews, policymaking, and delivery notifications; they can enhance e-loyalty (Kurup and Jain, 2018). Such cues also come in conjunction with the so-called cyber atmospherics, in which the interface design and product presentation have an impact on comfort and buying behavior (Bhattacharya and Mishra, 2016). In certain segments, such cues can stimulate impulse purchase that can be more regretted in case of failure to meet the expectations (Jain et al., 2018). This brings out a balancing act, which is to stimulate purchase and keep the expectations correct.

Implications for e-commerce platforms and sellers

- Invest in trust infrastructure.
- Maintenance of trust comes across the secure payment, minimization of fraud, verified sellers, disclosed transparently, and grievance. Compliance can be turned into competitive advantage by making sure that policies like the Consumer Protection (E-Commerce) Rules, 2020 serve as a baseline of compliance; consumer-centric implementation can transform compliance into a competitive advantage (Government of India, 2020; WIPO, 2020).
- Prioritize e-service quality as a retention lever.
- The quality of e-service (reliability, responsiveness, privacy/security) has strong relationships with satisfaction and loyalty, which is also consistent with the previous Indian findings (Kandulapati and Bellamkonda, 2014; Gera, 2011). The areas of operation are reliability in delivery processes, proper product knowledge, prompt response and clear communication in case of delays.
- Treat returns as a strategic feature, not a cost center.
- The level of returns satisfaction also makes a positive difference in total satisfaction. Ease of use makes the process of returns /refunds seem less risky, which most customers have an incentive to buy something once and buy more often in those products with greater uncertainty (Kar et al., 2022).
- Segment the customer journey by experience level.
- New and low-experience shoppers are more trust-powered and might be more susceptible to perceived risk. Onboarding, clarified policies, and reinforcement cues can be availed by platforms.

Policy and ecosystem implications

The e-commerce environment in India is influenced by institutional reports and policy guidelines. These insights emphasizing fair market competition and transparent market conduct may be followed due to the analysis by the Competition Commission of India (CCI, 2020). Consumer participation can be put into context using the meaning of digital economy measurement efforts, reports on internet diffusion, and further analyzes (IAMAI and Kantar, 2022, 2023, 2024; MeitY, 2025). At the architecture level, ONDC has Interoperability-enhanced commerce (ONDC, 2022) as its goal, which may enable accessibility and lessen the reliance on a few platforms.

Ready to pay is also important. Although no separate models of payment variables have been conducted in this paper, the payment vision and statistics in India provide an insight of why frictionless checkout can help with the adoption. Strategic direction is expressed by Payments Vision documents of the Reserve Bank of India Reserve Bank of India and UPI statistics reported by National Payments Corporation of India National Payments Corporation of India represent the extent to which digital payments are in use (RBI, 2022; NPCI, n.d.). These elements in the ecosystem supplement consumer level drivers: infrastructure can facilitate initial usage, whereas belief in and service quality can support repeated usage.

Limitations and future research

- Cross-sectional design: It is impossible to definitely determine causality; longitudinal tracking would be more adequate to record the process of loyalty formation.
- Limitations of sampling: On-line sampling can be under-representative of those consumers who have less access to the internet.
- Category differences: It could be that Apparel vs electronics vs groceries will differ; future research could look into category specific models.
- Networked commerce: How interoperability efforts (e.g., ONDC) influence trust and switching behaviour may be the focus of future research.

V. Conclusion

There are two speeding up factors of the development of e-commerce in India: enablers at the ecosystem level, and mechanisms at the consumer level. As demonstrated in this paper, their influence on satisfaction and loyalty is definitive as adoption drivers (usefulness and ease and social influence) are important, but so is trust, e-service quality and post purchase experience (returns). To ensure that the growth of e-commerce in India is sustainable and inclusive, issues concerning consumer trust and service reliability should be viewed as an infrastructure; similarly to the use of the internet and payment systems.

References

1. Ahuja, M., & Khazanchi, D. (2016). Creation of a conceptual model for adoption of mobile apps for shopping from an Indian consumer perspective. International Journal of Electronic Business, 13(3), 261–283.
2. Bhat, S. A., & Darzi, M. A. (2020). Online service quality and e-trust: A study among Indian consumers. Vikalpa, 45(1), 1–12.

3. Bhattacharya, S., & Mishra, B. B. (2016). Cyber atmospherics and its impact on e-retailing buyer behavior: A factor analysis. Prabandhan: Indian Journal of Management, 9(4), 30–51. Chadha, A., Malik, S., Prashar, S., & Jha, S. (2024). Exploring factors influencing Indian consumers' intention to adopt mobile shopping apps. International Journal of E-Business Research, 20(1).
4. Gera, R. (2011). Modelling e-service quality and its consequences in India: An SEM approach. Journal of Research in Interactive Marketing, 5(2/3), 203–225.
5. Jaiswal, A. K., Niraj, R., Park, C. H., & Agarwal, M. K. (2018). The effect of relationship and transactional characteristics on customer retention in emerging online markets. Journal of Business Research, 92, 25–38. Jain, M., Gautam, J., & Pasricha, C. (2018). Impulse purchase and post purchase regret: A study of young Indian consumers. Indian Journal of Marketing, 48(3), 7–22.
6. Kalia, P., & Paul, J. (2021). E-service quality and e-retailers: Attribute-based multi-dimensional scaling. Computers in Human Behavior, 115, 106608.
7. Kandulapati, S., & Bellamkonda, R. S. (2014). Examining the structural relationships of e-service quality, e-satisfaction, and e-loyalty: A study of online shoppers in India. International Journal of Retail & Distribution Management, 42(7), 562–584.
8. Kar, S. K., Tripathy, S., & Pathak, S. (2022). Customer satisfaction with product returns in e-commerce: A systematic review and future research agenda. Journal of Retailing and Consumer Services, 66, 102914.
9. Khare, A., & Rakesh, S. (2011). Antecedents of online shopping behavior in India: An examination. Journal of Internet Commerce, 10(4), 293–320.
10. Khare, A., Khare, A., & Singh, S. (2012). Attracting shoppers to shop online—Challenges and opportunities for the Indian retail sector. Journal of Internet Commerce, 11(2), 161–185
11. Khare, A., Khare, A., Mukherjee, S., & Goyal, T. (2016). Shopping styles and attitudes toward services offered by shopping websites: A study of Indian consumers. Journal of Enterprise Information Management, 29(4), 534–554.
12. Kumar, V., & Anjaly, B. (2017). How to measure post-purchase customer experience in online retailing? A scale development study. International Journal of Retail & Distribution Management, 45(12), 1277–1297.
13. Kumar, P., & Kanchan. (2019). Purchasing criteria for apparels among Indian consumers. Indian Journal of Marketing, 49(1), 48–60.
14. Kurup, A. J., & Jain, M. (2018). E-loyalty: Understanding the role of customer cues in the online shopping journey of Indian consumers. Indian Journal of Marketing, 48(11), 7–22.
15. Mahadevan, G., & Joshi, H. G. (2022). Examining the influence of e-service quality on customer satisfaction and loyalty in online apparel shopping in India. Journal of Internet Commerce, 21(3), 246–273.
16. Misra, S., & Arivazhagan, D. (2017). Application of design thinking techniques in marketing of fashion apparel e-commerce. Indian Journal of Marketing, 47(8), 18–30.
17. Prashar, S., Vijay, T. S., & Parsad, C. (2017). Effects of online shopping values and website cues on purchase behaviour: A study using S-O-R framework. Vikalpa, 42(1), 1–18.
18. Rajan, C. R., Swaminathan, T. N., & Pavithra, M. R. (2017). Key drivers of purchase intent by Indian consumers in omni-channel shopping. Indian Journal of Marketing, 47(5), 7–20.

19. Tak, P., & Panwar, S. (2017). Using UTAUT 2 model to predict mobile app based shopping: Evidence from India. Journal of Indian Business Research, 9(3), 248–264.
20. Tomar, V. S., Sharma, A., & Pandey, N. (2018). Perceived benefits of online shopping: Scale modification and validation. Indian Journal of Marketing, 48(12), 7–22.
21. Key India reports, policies, and official datasets (market rise + enabling ecosystem) Competition Commission of India. (2020). Market study on e-commerce in India: Key findings and observations.
22. Government of India, Ministry of Consumer Affairs, Food & Public Distribution. (2020). Consumer Protection (E-Commerce) Rules, 2020
23. Government of India, Press Information Bureau. (2019, July 24). Draft National Policy on e-Commerce.
24. Department for Promotion of Industry and Internal Trade. (2019). National e-commerce policy, 2019 (Draft). (PDF hosted via PwC).
25. Google, Bain & Company, & Temasek. (2023). India e-Conomy Report 2023.
26. ICRIER-Prosus Centre for Internet and Digital Economy (IPCIDE). (2023). State of India's Digital Economy Report 2023.
27. ICRIER-Prosus Centre for Internet and Digital Economy (IPCIDE). (2024). State of India's Digital Economy Report 2024.
28. ICRIER-Prosus Centre for Internet and Digital Economy (IPCIDE). (2025). State of India's Digital Economy Report 2025.
29. Internet and Mobile Association of India (IAMAI) & Kantar. (2022). Internet in India 2022 (ICUBE).
30. IAMAI & Kantar. (2023). Internet in India 2023 (ICUBE).
31. IAMAI & Kantar. (2024). Internet in India 2024 (ICUBE).
32. Ministry of Electronics and Information Technology (MeitY). (2025). Estimation and measurement of India's digital economy.
33. Open Network for Digital Commerce (ONDC). (2022). ONDC strategy paper. (PDF).
34. Government of India, Press Information Bureau. (2025). Revolutionizing digital commerce: The ONDC initiative.
35. National Payments Corporation of India (NPCI). (n.d.). Unified Payments Interface (UPI) product statistics.
36. Reserve Bank of India. (2022). Payments Vision 2025. (PDF mirror).
37. PwC India. (2022). Decoding the RBI's Payments Vision 2025.
38. World Intellectual Property Organization (WIPO). (2020). The Consumer Protection (E-Commerce) Rules, 2020, India (WIPO Lex entry).