



Online Markets and the Transformation of Consumer Behaviour in India: Trends, Drivers, and Implications

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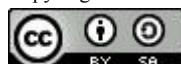
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Abstract

India's e-commerce landscape has grown rapidly, from USD 38.5 billion in 2017 to USD 147.3 billion in 2024, with projections of USD 200 billion by 2026 and USD 350 billion by 2030 (IBEF, 2025; Mordor Intelligence, 2025). This study synthesizes secondary data from industry reports and literature to examine the drivers of consumer behaviour transformation. Key enablers include smartphone penetration, mobile-first commerce, Unified Payments Interface (UPI) adoption, social commerce, and AI-powered personalization. The analysis draws on the Technology Acceptance Model, Diffusion of Innovation, and trust-based adoption frameworks (Rogers, 2003; Venkatesh & Davis, 2000) to explain how these factors interact. Findings highlight significant generational differences, rapid rural adoption via mobile platforms, and the influence of peer networks on trust formation. Policy implications include improving rural digital infrastructure, enhancing cybersecurity, and promoting sustainable logistics. The study offers insights for businesses, policymakers, and researchers aiming to leverage India's unique digital ecosystem for inclusive and sustained growth.

Keywords: E-commerce india, consumer behaviour, mobile commerce, UPI, digital payments, social commerce

Introduction

Over the past decade, India has transformed from an emerging digital retail market into one of the fastest-growing e-commerce economies worldwide (IBEF, 2025). Market expansion has been driven by the convergence of affordable smartphones, low-cost mobile internet, supportive government policies, and innovative platform strategies (MeitY, 2024; Future Market Insights, 2025). By 2025, over 830 million Indians are projected to be online, with mobile devices serving as the primary access point for most users (KPMG, 2024).

Mobile commerce now accounts for over 78% of transactions (Mordor Intelligence, 2025), reshaping platform design priorities toward mobile apps, localized content, and seamless digital payments (IMARC Group, 2025). UPI's integration into commerce has revolutionized transactions, processing 186 billion payments in FY 2024–25 and reducing reliance on cash (NPCI, 2025).

Social commerce platforms such as Meesho and WhatsApp storefronts have enabled small sellers to reach new markets, particularly in rural and semi-urban areas (Singh & Dhir, 2024; Statista, 2025). This study integrates findings from two major



analyses to provide a holistic understanding of India's e-commerce growth, examining both technological drivers and socio-cultural dynamics

Problem Statement

While India's e-commerce growth is well documented, studies often isolate factors—such as mobile adoption, digital payments, or rural penetration—without examining their combined influence on behaviour change (Bansal & Sinha, 2023). Research is heavily skewed toward urban markets, overlooking rural adoption patterns and generational differences (KPMG, 2024). Emerging technologies like AI, AR/VR, and voice commerce are advancing faster than behavioural research in India can track (Deloitte, 2024). Furthermore, systematic assessments of government initiatives' long-term impact remain limited (MeitY, 2024). This study addresses these gaps by presenting an integrated analysis of technological, demographic, and policy factors shaping consumer behaviour in India's e-commerce sector.

Objectives

Primary Objective

To analyze the transformation of consumer behaviour in India's online markets from 2017 to 2026 through an integrated lens.

Secondary Objectives

1. Examine the evolution and growth trajectory of e-commerce.
2. Identify the role of mobile commerce, UPI, and social platforms in shaping adoption.
3. Compare generational differences in usage and spending.
4. Evaluate rural inclusion strategies and emerging technologies.
5. Derive policy and business recommendations for sustainable, inclusive growth.

Scope of the Study

This study covers India's e-commerce market between 2017 and 2026, with projections to 2030. The analysis spans:

1. **Geography:** Urban, semi-urban, and rural markets.
2. **Demographics:** Gen Z, Millennials, Gen X, and Baby Boomers.
3. **Sectors:** Business-to-consumer (B2C), consumer-to-consumer (C2C), mobile-first commerce, social commerce, and quick commerce.
4. **Technology:** UPI, AI personalization, AR/VR, and voice-enabled shopping.

The study uses secondary data from government reports, industry databases, and academic literature, interpreting findings within relevant theoretical frameworks (Rogers, 2003; Venkatesh & Davis, 2000).

Literature Review

The Technology Acceptance Model (TAM) and Theory of Planned Behaviour (TPB) have been widely used to explain e-commerce adoption in India (Venkatesh & Davis, 2000; Ajzen, 1991). TAM emphasizes perceived ease of use and usefulness, while TPB considers attitudes, subjective norms, and perceived behavioural control. Rogers' Diffusion of Innovation theory provides additional insight into the speed and pattern of technology adoption (Rogers, 2003). Mobile commerce has emerged as the dominant format, with app-based shopping providing localized interfaces and vernacular language support (Mordor Intelligence, 2025). The rapid growth of UPI has reduced payment friction, making online purchases accessible to those without credit cards (NPCI, 2025). Social commerce—driven by peer recommendations—has gained momentum in rural areas, where trust in large platforms remains limited (Singh & Dhir, 2024). Trust-based adoption models are particularly relevant in India, where concerns over fraud and data security persist (Bansal & Sinha, 2023). Research shows that platform reliability, transparent return policies, and community reviews significantly influence purchase decisions (Sharma & Sheth, 2024).

AI-powered personalization is another emerging driver, enabling platforms to deliver targeted



recommendations and optimize search results (Deloitte, 2024). However, privacy concerns and algorithmic bias remain underexplored in the Indian context (Kumar et al., 2023). While literature captures various aspects of e-commerce evolution, there is a gap in integrated analyses that combine technological, demographic, cultural, and policy factors to explain consumer behaviour shifts. This study seeks to fill that gap.

Conceptual Framework

The study proposes an Integrated Consumer Behaviour Transformation Model with four interlinked components:

- 1. Technological Infrastructure** – Mobile internet, UPI, AI tools, and platform interfaces.
- 2. Demographics** – Age, education, income, and location influencing adoption speed and depth.
- 3. Cultural & Social Factors** – Trust formation via peer networks, community recommendations, and social commerce.
- 4. Policy & Regulatory Environment** – Digital India initiatives, MSME support, and data protection regulations.

The model suggests that technology acts as the primary enabler, but adoption and sustained usage are mediated by socio-cultural norms and regulatory frameworks.

Data Analysis

The following section presents an integrated analysis of India's e-commerce landscape, structured around the five core objectives of the study. Each objective is supported by the latest 2024 data, sectoral trends, and interpretative insights relevant to the Indian context.

Evolution and growth trajectory of e-commerce (India)

- India's broad e-commerce market rose from US\$38.5B (2017) to ~US\$123B (FY2024) and is projected to US\$292B by FY2028 (IBEF).
- Within that, e-retail GMV (narrower, product retail) was ~US\$60B in 2024 and is forecast to US\$170–190B by 2030 (Bain 2025).

Interpretation

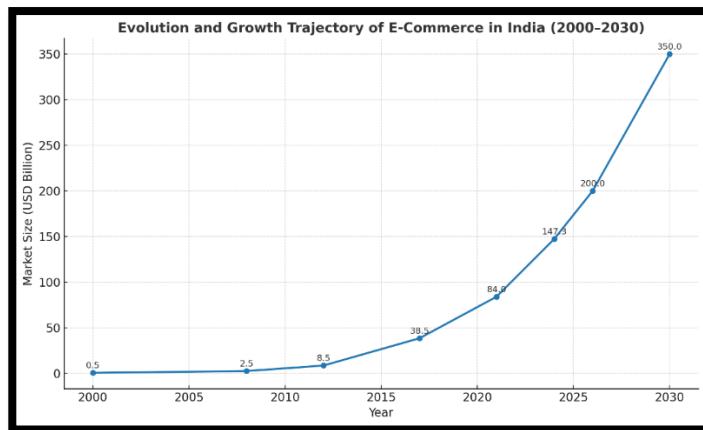
Two complementary lenses are useful: (a) the *overall e-commerce market* spanning many digital categories (IBEF), and (b) *e-retail GMV* (Bain). Both point to a strong, sustained trajectory, even after a 2024 growth slowdown due to consumption stress, with the rebound driven by rising per-capita GDP and increased discretionary spending as India approaches the US\$3.5–4k GDP-per-capita “tipping point” for e-retail shares.

Table 1 Six Stages of E-Commerce Evolution in India

Stage	Period	Market Size (USD Bn)	Key Characteristics	Growth Drivers
1. Early Emergence ☐	Late 1990s–2005	<0.5	☐ Dot-com pioneers, ☐ limited internet, ☐ early COD	☐ IT Act 2000, ☐ urban cafes
2. Foundation Building ☐	2005–2012	2.5 → 8.5	☐ Flipkart/Snapdeal launch, ☐ COD at scale, ☐ improved logistics	☐ 3G rollout, ☐ FDI inflow
3. Mobile-First Era ☐	2013–2017	13 → 38.5	☐ Amazon India entry, ☐ smartphone boom, ☐ 4G revolution	☐ Jio effect, ☐ Digital India
4. Digital Payments & COVID Boost ☐	2018–2021	25 → 84	☐ UPI surge, ☐ online groceries, ☐ lockdown shopping	☐ UPI/wallets, ☐ delivery networks
5. Maturity & Diversification ☐	2022–Present	60 → 147.3	☐ Social commerce, ☐ quick commerce, ☐ AI personalization	☐ Tier-2/3 adoption, ☐ vernacular apps
6. Future Expansion ☐	2025–2030	200 → 350	☐ Omni-channel retail, ☐ AR/VR shopping, ☐ cross-border trade	☐ 5G, ☐ policy support



Chart 1 Evolution and Growth Trajectory of E-Commerce in India (2000-2030)



Source: compiled by author based on secondary inputs

Role of mobile commerce, UPI, and social platforms in adoption

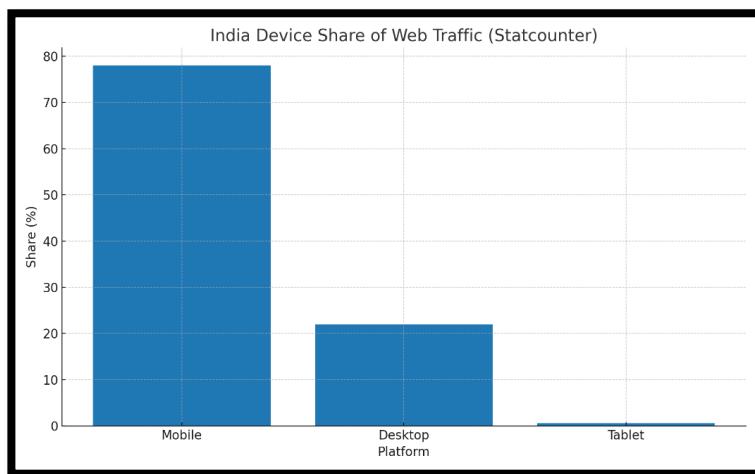
Mobile is the default access point

1. In 2025, ~78% of India's web traffic comes from mobile, with ~22% desktop and <1% tablet (Stat Counter). This entrenches m-commerce as the first channel for discovery and purchase.

UPI is the payments backbone

1. India processed 222.19B digital payment transactions in FY25, up from 164.43B in FY24 (IBEF), reflecting the infrastructural role of UPI.
2. Among Gen Z digital transactors, ~90% use UPI (vs ~60% of other shoppers), underscoring UPI's critical role for younger cohorts (Bain).

Chart 2: India's device share of Web Traffic



Source: compiled by author based on secondary inputs

Social platforms accelerate discovery and “conversational commerce”:

1. ~70% of Gen Z discover new brands on social media; 80–85% of Gen Z internet users are on Instagram (Bain).

2. Meesho exemplifies social-led, hyper-value adoption from smaller cities—now among India's largest e-commerce platforms by orders (FT).



3. Meta/WhatsApp highlights rapid growth in conversational commerce and WhatsApp Business adoption among Indian SMBs, boosting frictionless purchasing.

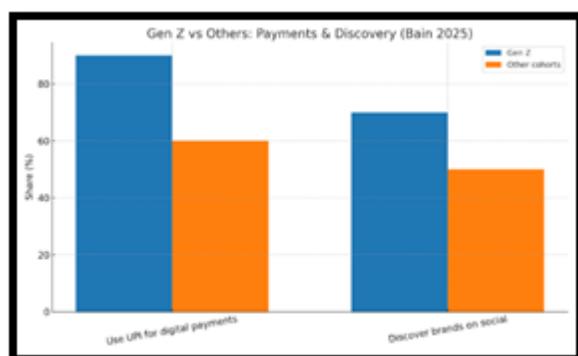
Interpretation

Mobile access, UPI rails, social discovery/DM are mutually reinforcing. Low-friction discovery on Instagram/short video, combined with WhatsApp-native chat and UPI one-tap pay, compresses the funnel and reduces the need for desktop sessions or card-based checkout. The channel mix therefore biases toward impulse and trend-led categories (fashion/beauty/grocery via q-commerce) and increases the conversion of first-time digital buyers in Tier-2/3+ markets.

Generational Differences in usage and Spending

Who's shopping—and how:

1. Gen Z ~40% of India's e-retail shoppers (Bain).
2. Gen Z spends ~1.5× the e-retail GMV share (vs other age groups) in lifestyle, beauty & personal care, and electronics (Bain).
3. Behavioral deltas: Gen Z scrolls less before deciding, discovers more on social, prefers UPI, and shops across >5 platforms more often than other cohorts (Bain).



Source: Bain (2025)

Chart 3 Gen Z vs. Others

Interpretation

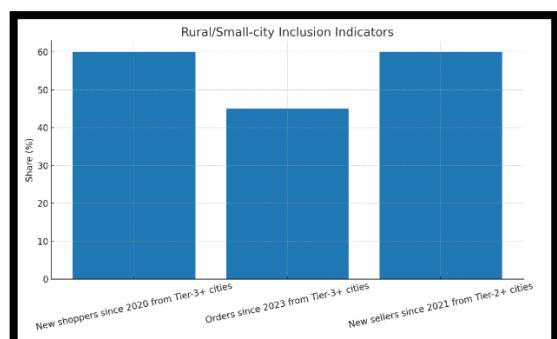
Gen Z are high-velocity, social-led, UPI-first shoppers with faster decision cycles. Their over-indexing in lifestyle/BPC/electronics fits trend-first

commerce and influencer-led funnels. For design, this implies: short path-to-purchase, social proof (ratings/reviews), creator partnerships, UPI-native flows, and fast fulfilment options.

Rural Inclusion Strategies and Emerging Technologies

Inclusion via Tier-2/3+ demand and supply:

1. Since 2020, 60%+ of new e-retail customers come from Tier-3+ cities; since 2023, 45%+ of orders originate there; since 2021, 60%+ of new sellers come from Tier-2+ cities (Bain).
2. India's e-retail has unlocked access in remote Northeast regions where organized retail density is ~0.3× the rest of India; yet e-retail shoppers per capita ~1.2× the rest—evidence of digital inclusion through logistics/marketplace reach (Bain).
3. Digital public infrastructure and connectivity programs (e.g., Digital India, UPI) and initiatives like ONDC aim to lower platform barriers for MSMEs and expand market access (DPIIT/ONDC; IBEF).
4. Emerging technologies shifting the curve:
5. Quick commerce: >½ of e-grocery orders and ~10% of total e-retail spend (2024); projected >40% CAGR to 2030 (Bain/Reuters), driving habit formation in FMCG and convenience categories.
6. Trend-first commerce (fast-cycle fashion) expected to 4× to US\$8–10B by 2028, with >50% online share (Bain).



Source: Compiled by Author Based on
Secondary Inputs



Chart 4: Rural/Small city Inclusion Indicators Interpretation

Inclusion stems from three flywheels: (1) discovery (vernacular social, creator content), (2) trust (UPI/COD + platform guarantees), (3) speed/availability (q-commerce, dark stores, intercity logistics). ONDC can add supplier-side inclusion (open networks, interoperable discovery), while Tier-2/3+ shoppers converge to urban ASPs as delivery SLAs and assortment improve.

Policy & Business Recommendations for Sustainable, Inclusive Growth

Policy levers

1. Deepen UPI rails and dispute resolution for micro-merchants and first-time users; usage is near-universal among Gen Z and a critical onramp to formal digital spend.
2. Back ONDC-driven interoperability and MSME onboarding (catalog standards, logistics discovery, grievance redressal). This reduces platform concentration risk and promotes inclusion.
3. Invest in logistics & last-mile in Tier-3+/rural belts (micro-fulfilment, cold chain) to sustain q-commerce performance without negative externalities.
4. Digital safety & consumer protection (returns, counterfeit control, data privacy) to maintain trust as mobile-first cohorts scale (IBEF macro trends; Bain trust drivers).

Business Moves

1. Design for mobile-first + UPI-native journeys (single-page checkout, UPI intent flows), given ~78% mobile traffic and UPI dominance.
2. Lean into social + creator: Gen Z's ~70% social discovery requires creator partnerships, short-video PDPs, and social proof engineered into PLPs (less scrolling before purchase).
3. Assortment & pricing by tier: Hyper-value constructs (EMI/BNPL, lower entry prices) and trend-first launches for Gen Z; premium depth in mature cities where ASPs run 10–25% higher.

4. Q-commerce where basket economics allow (repeat FMCG, beauty, OTC, gifting), but guard contribution margins via dark-store density planning and attach-rate tactics.
5. MSME on boarding playbooks for ONDC and marketplaces (catalog quality, ad-ops, ratings flywheel) to scale the long tail—critical as 60%+ new sellers are Tier-2+.

Analysis & Interpretation

India's e-Commerce Evolution Reflects a Multifaceted Transformation

1. The Indian e-commerce market is emerging as a dominant channel driven by rapid technological diffusion and changing consumer preferences.
2. The growth trajectory—from USD 38.5 billion in 2017 to USD 147.3 billion in 2024, with strong projections for 2030—illustrates not only market expansion but also the deepening penetration across socio-economic strata.
3. The role of mobile commerce and UPI has been central in lowering transaction frictions, enabling even first-time digital buyers to engage in secure online purchases.
4. Social commerce platforms have further blurred the lines between content consumption and shopping, tapping into impulsive and peer-influenced buying patterns.
5. Generational differences indicate that while Gen Z and Millennials are the most digitally native and spend the most per capita online, older generations are increasingly participating, albeit with different product priorities. This generational spread signals that the e-commerce ecosystem is becoming less niche and more reflective of India's broad consumer base.
6. Rural inclusion remains both a challenge and an opportunity. Despite infrastructure gaps, strategies like vernacular interfaces, rural fulfilment centres, and partnerships with India Post are extending the reach of online markets. The early introduction of emerging technologies—AI for personalised recommendations, AR for product trials, and drones for logistics—suggests



that India's e-commerce sector is positioning itself to leapfrog legacy barriers.

Table 2 Summary

Objective	Key Data (2024)	Interpretation
E-commerce Growth	US\$123B in 2024 → US\$292B by 2028 (CAGR: ~18.7%)	Rapid modernization of retail; post-pandemic acceleration
Mobile & UPI Role	UPI: 185.8B transactions, 83.7% digital volume	Universal access, reduced friction, gateway for first-time online users
Social Commerce	Meesho massive rural onboarding; Instagram reach	Content+commerce synergy; strong impulse buying
Tier II/III & Quick-Commerce	60% new shoppers from Tier II/III; quick-commerce: ½ of e-grocery orders, 10% e-retail spend	Rising inclusion, shift in fulfillment and category dynamics
Offline vs Online Retail	Online: ~10.7%; Offline: ~89.3% of retail market	E-commerce still growing from a low base; omnichannel strategy crucial

Source: compiled by author from various sources

Discussion & Policy Implications

The evolution of India's online markets offers important implications for both policy and business:

- Digital Payment Ecosystem as a Growth Engine:** The success of UPI underscores the importance of a unified, interoperable payment infrastructure. Policymakers should continue incentivising innovation while ensuring fraud mitigation. Businesses can integrate UPI-based micro-credit or BNPL (Buy Now, Pay Later) schemes tailored for rural and semi-urban markets.
- Bridging the Urban–Rural Digital Divide:** Although rural internet penetration has improved, affordability, digital literacy, and trust remain barriers. Public–private partnerships under BharatNet and PMGDISHA (Pradhan Mantri Gramin Digital Saksharta Abhiyan) should be scaled, with local entrepreneurs

incentivised to serve as e-commerce intermediaries.

- Generational Marketing Strategies:** The generational data suggests that product mix, marketing tone, and service expectations differ widely. Businesses must design age-specific marketing: influencer-led, trend-driven campaigns for younger users; trust-building, service-oriented messaging for older segments.
- Emerging Technology Adoption:** AI and AR adoption should be paired with user education, especially in rural and first-time-buyer contexts. Policymakers should ensure that AI-driven recommendations comply with consumer protection and data privacy frameworks to avoid algorithmic bias.
- Sustainability and Inclusive Growth:** With the environmental footprint of rapid e-commerce growth under scrutiny, policy can encourage sustainable packaging, carbon-neutral logistics, and localised supply chains. For inclusivity, targeted subsidies for MSMEs to join online marketplaces can democratise market access.

Conclusion

India's e-commerce transformation reflects a confluence of infrastructure, technology, and socio-cultural shifts. Mobile-first consumption, UPI's frictionless payments, and social commerce integration have redefined convenience and trust in online transactions. Generational diversity in usage patterns points to an expanding but heterogeneous consumer base, while rural inclusion strategies demonstrate that the market's next growth frontier lies beyond the metros. The policy imperative is to ensure that this growth remains sustainable, secure, and equitable. Bridging digital divides, supporting MSME participation, and embedding environmental responsibility into the e-commerce value chain will be crucial. For businesses, agility in addressing generational preferences, embracing emerging technologies, and tapping rural markets will define competitiveness in the next decade. Ultimately, India's online market evolution is not merely a retail story—it is an economic and social transformation,



positioning the country as a global benchmark for inclusive digital commerce growth.

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