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Original Article

Adoption of Emerging Business Trends among Retailers in Four Metropolitan Cities: A Mixed-Method Study on Strategic and Technological Integration

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Abstract

The retail industry is always evolving owing to new technology, changing customer habits, and shifting market dynamics. It is important to understand how merchants in four Indian metropolitan cities, namely Mumbai, Delhi, Kolkata, and Bangalore, adopt and incorporate these changes for academic purposes as well as for real-world applications. This study investigates how much retailers have integrated emerging business trends into their operations. The adoption has been explored using NVIVO text mining tools and the significant recent trends in business have been analyzed using the parametric one-sample t-test, while Multiple Linear Regression was used to identify key predictors of overall adoption behavior. Findings indicate that Unified Payments Interface payments, virtual reality, WhatsApp marketing, Influencer marketing, Contactless payments, Go Green initiatives, selling local products through e-commerce platforms, Digital Catalogues, and augmented reality are the most significantly adopted trends. In contrast, Loyalty programs, Omnichannel retailing, Voice commerce, and Curbside pickup showed comparatively low adoption and were statistically insignificant in predicting overall behavior.

Categories: Digital business, Digital Marketing, Marketing and Market Issues in Business

Keywords: retail, business, trends, technology, omnichannel, virtual reality, augmented reality

Introduction

Evolution of the retail industry

In India, the retail sector is rapidly growing and evolving due to the entry of new players and the emergence of organized retail formats. Retailing in India started with Kirana stores and mom-and-pop shops, later supported by government initiatives like the Khadi & Village Industries Commission. In the early nineties, modern retailing evolved. Departmental stores were the first to spring up, followed by supermarkets and then hypermarkets. Simultaneously, by the late 1990s and early 2000s, malls came up fast in cities like Mumbai, Delhi, the NCR region, Bangalore, and other metros a little later. Shoppers' Stop (K. Raheja Group) opened first as a Men's store in Mumbai in 1991, and later in 1994 expanded into India's first large format department store. The Pantaloons department store opened in Kolkata in 1997, and it became a thumping success. Since the early 2000s, corporate organizations have ventured into the business of modern retailing.

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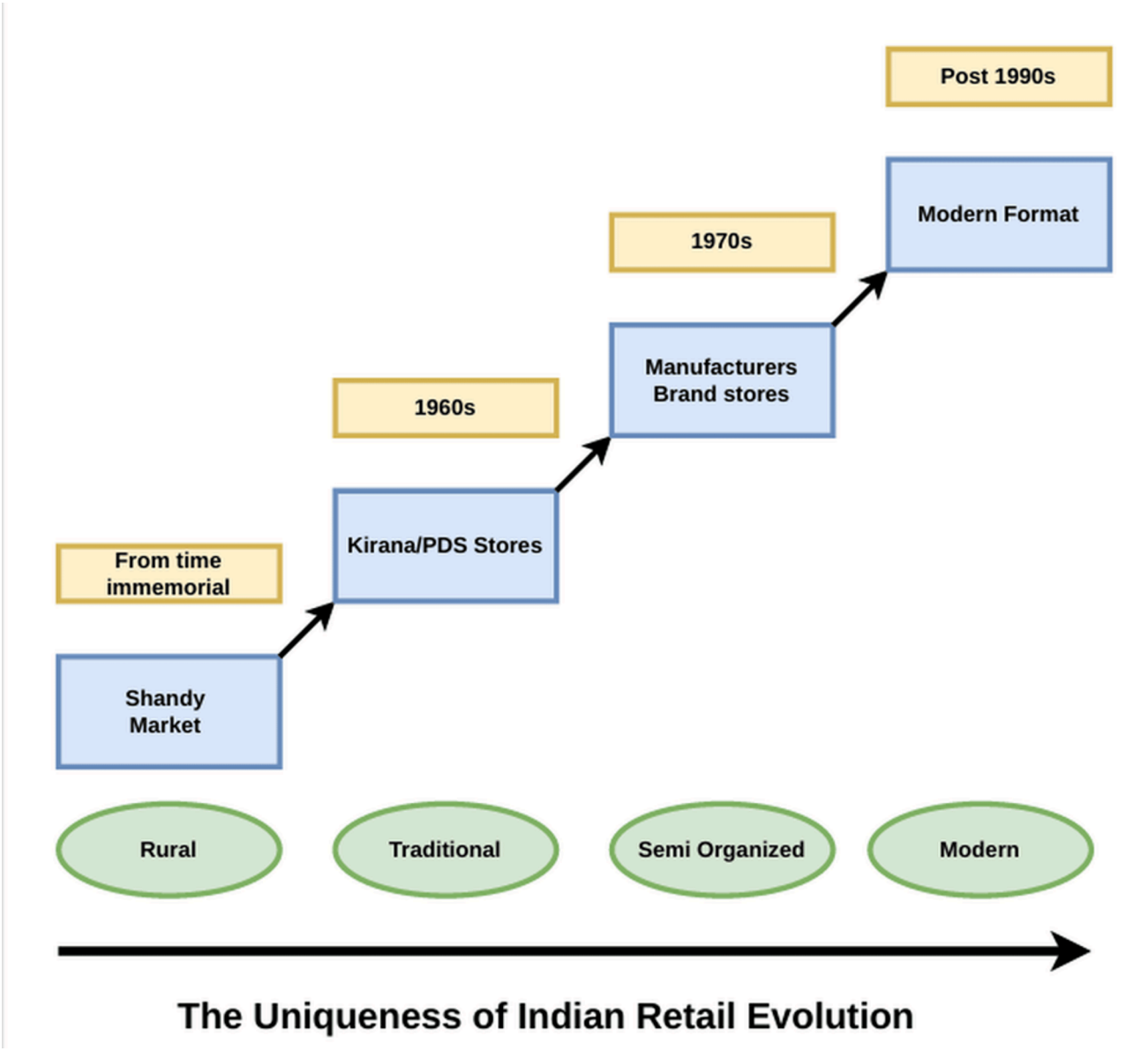


FIGURE 1: Evolution of Indian Retailing

Source: (Vedamani, 2018).

Figure *1* presents the evolutionary trajectory of Indian retailing, highlighting the transition from traditional and unorganized formats to modern retail structures. India's retail evolution is extremely unique. In all the above phases of the evolution process, except the barter system, we have all the early and traditional forms of retailing still intact. In the 1980s, companies such as Raymond, S. Kumar's, and Bombay Dyeing pioneered retail networks, followed by Titan's entry into organized retail. The 1990s saw the rise of outlets like Food World, Planet M, and Crossword, marking the growth of modern retail and mall culture. Despite rapid development, India's retail sector remains largely unorganized, with competition between organized and unorganized players shaping its future.

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Retailing in India

The retail sector in India is the largest and fastest-growing industry, contributing 10% of GDP and 8% of national employment. The industry has evolved into a dynamic, competitive sector due to strong economic growth, rising consumer power, and digital exposure. India is one of the most attractive retail destinations among 30 emerging nations, as per AT Kearney Global Retail Development Index (2017). This sector is continuously growing due to the spread of the internet and mobile technologies, and a remarkable shift from unorganized to organized retail. The FDI relaxation up to 100% in Single Brand and 51% in Multi Brand retail is also one of the reasons that provides a gateway for global brands to enter India. Furthermore, Morgan Stanley (Morgan Stanley, 2022) projects India's e-commerce market to grow from $15 billion in 2016 to $200 billion by 2026.

Digital disruption in retail

Digital Payment Disruption (UPI, QR, Contactless)

India hit 117 billion Unified Payments Interface (UPI) transactions in 2023-24, the highest globally (National Payments Corporation of India, 2024). A total of 90% of Indian consumers in metros prefer digital payments over cash for shopping (PricewaterhouseCoopers (PwC) India, 2026). QR-code adoption among small retailers crossed 50 million merchants as of 2024.

WhatsApp Commerce, Influencer Marketing & Digital Catalogues

WhatsApp Business has 50+ million Indian users, with 70%+ penetration among small retailers in metros (Bain and Company and Meta India, 2023). Influencer marketing in India grew to INR 3,000 crore in 2024, and is expected to reach INR 4,500 crore by 2026 (EY India, 2024). A total of 65% of retailers in metro cities use digital catalogues instead of print (India Brand Equity Foundation [IBEF], 2025).

Rise of Social Commerce (Instagram, WhatsApp, YouTube)

India's social commerce market is valued at USD 9-12 billion (2024) and is expected to reach USD 70 billion by 2030 (Accenture, 2023). A total of 60% of apparel and beauty purchases in metros originate from social media discovery (Meta and Bain and Company, 2024). Micro-influencers drive 2.5 times higher engagement than celebrity influencers (EY, 2024).

AR/VR Adoption in Retail

AR-assisted shopping can increase conversion rates by 90% in beauty, eyewear, and fashion (Deloitte, 2024). In India, 40% of Gen Z and 32% of millennials prefer AR-based try-ons before buying (McKinsey and Company, 2026). VR-based store simulations used by metro retailers for product trial and layout planning are expected to grow 30% YoY.

Omnichannel Retail & E-commerce Integration

A total of 73% of Indian urban consumers expect Buy Online - Pick Up In Store (BOPIS) or same-day delivery (McKinsey and Company, 2026). Omnichannel stores see 30-40% higher revenue than single-channel stores (Deloitte, 2024). Only 10-12% of small retailers in metro cities have adopted omnichannel strategies due to cost and skill barriers.

Sustainability & "Go Green" Adoption

A total of 55% of metro retailers have adopted biodegradable packaging (KPMG, 2023).
ESG considerations have become a priority - 68% of Indian consumers prefer green brands (KPMG, 2023). Energy-efficient stores (LED, solar) reduce retail operating costs by 20-25%.

E-commerce & Local Seller Digitization

Over 1.2 million Indian SMBs now sell on e-commerce platforms (Amazon India, 2023). A total of 62% of SMB sellers come from metro cities, with the highest share in Delhi, Mumbai, and Bangalore. Local-to-global exports grew by 50% YoY via Amazon and Flipkart (2024).

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Existing literature positions WhatsApp as a foundational communication infrastructure for small businesses in India (De, 2024), while the present study suggests that such platforms can act as enabling channels that complement the adoption of formal digital payment systems like UPI. These findings support the present study's observation that UPI and WhatsApp marketing are among the strongest predictors of overall adoption behavior in metropolitan retail contexts.

India's retail formats

Supermarkets and hypermarkets are large self-service retail stores offering a wide range of products, while mom-and-pop stores are small, family-run outlets providing personalized services. Department stores offer a broad assortment of goods organized into different sections, whereas convenience stores provide easy access to essential items with extended operating hours. Shopping malls integrate retail, entertainment, and dining facilities under one roof. E-tailers operate through online platforms, factory outlets offer discounted branded products, and vending machines provide automated retail services. Category killers focus on a single product category with deep assortment, while specialty stores cater to specific product segments with specialized offerings (Vedamani, 2018)

Retail industry trends

Organized retail is growing with mega malls and shopping centers. A rising youth population, higher incomes, easy credit, and brand consciousness drive demand, while consumers increasingly prefer convenience and value over low prices. Table *1* highlights the major emerging trends shaping the Indian retail landscape, particularly in metro cities. The findings indicate a strong shift toward digitalization, with widespread adoption of UPI payments, WhatsApp-based marketing, and digital catalogues. Additionally, technology-driven innovations such as augmented reality (AR) and virtual retail experiences are gaining traction, while sustainability initiatives are increasingly influencing retail practices. These trends reflect a broader transformation driven by changing consumer preferences, rising incomes, and technological advancements (India Brand Equity Foundation [IBEF], 2025), (Deloitte, 2024), and (KPMG, 2023).

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Emerging Trend	Key Insight/Adoption Evidence in Metro Cities	Cities Observed
UPI Payments and Digital Payments	UPI usage is highest in Mumbai, Delhi, and Bangalore; digital payments have become the dominant mode for small retailers.	Mumbai, Delhi, Bangalore
WhatsApp Marketing	Retailers in metro cities widely use WhatsApp Business for catalogues, customer communication, and order management.	Mumbai, Delhi, Bangalore, Kolkata
Influencer Marketing	Influencer-driven promotions are heavily adopted in Mumbai and Delhi owing to large consumer and creator ecosystems.	Mumbai, Delhi, Bangalore
Contactless Payments	NFC and QR-based contactless payments grew rapidly post-pandemic in Tier 1 metro retail outlets.	Mumbai, Delhi, Bangalore
Go Green Initiatives	Retailers increasingly adopt biodegradable packaging, sustainability branding, and energy-efficient store operations.	Mumbai, Bangalore, Delhi
Selling Local Products via E-commerce	Micro-sellers from metro regions have high onboarding rates on Amazon and Flipkart, boosting local-to-global sales.	Delhi, Bangalore, Kolkata, Mumbai
Digital Catalogues	Small retailers in major cities use Google Business listings & digital catalogues to attract urban online shoppers.	Mumbai, Delhi, Bangalore
Virtual Reality (VR)	VR store experiences (try-ons, virtual stores) are adopted mostly by fashion & electronics retailers in metros.	Mumbai, Delhi, Bangalore
Augmented Reality (AR)	Beauty and eyewear brands (Nykaa, Lenskart) drive AR adoption; penetration is highest in metro cities.	Mumbai, Delhi
Curbside Pickup	Adoption is still low across Indian metros due to logistics constraints and customer preference for home delivery.	All four metros (low adoption)
Loyalty Programs	Small retailers rarely adopt formal loyalty programs due to cost and technology barriers.	All four metros (low adoption)

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Voice Commerce	Voice search usage is growing among metro consumers, but retailer-side adoption remains minimal.	Delhi, Bangalore (low)
Omnichannel Retailing	Omnichannel remains limited to large brands; small metro retailers cite skill and cost limitations.	Mumbai, Delhi, Bangalore

TABLE 1: Retail Industry Trends

Note. Data derived from secondary sources (Reserve Bank of India, 2025) (De, 2024) (Setia et al., 2024) (Cushman and Wakefield, 2025) (UJA, 2025).

Review of literature

Technology Adoption and Analytics Utilization in Unorganized Retail: Overcoming Barriers and Pandemic Challenges

Berisha Qehaja (Berisha Qehaja, 2026) presents a clear, practical synthesis showing how data analytics powers retail digital transformation by linking trends, challenges, and case studies to guide data-driven, customer-centric strategies. Velásquez-Henao (Velásquez-Henao, 2025) conducted a bibliometric analysis that reveals that retail analytics is evolving rapidly toward AI-, machine learning-, and big data-driven innovations and identified 13 emerging trends that enhance decision-making, customer experience, and operational efficiency in retail. Quoc (Quoc, 2025) states the significance of Power BI in retail decision-making by integrating diverse data sources to deliver real-time analytics, improved inventory management, and deeper customer insights. Narang and Tiwari (Narang and Tiwari, 2025) revealed that small-scale retailers were unaware of the term "Artificial Intelligence". Ram et al. (Ram et al., 2023) identified determinants influencing mobile technology adoption among unorganized retailers such as grocery and kirana stores. Nagpal et al. (Nagpal et al., 2023) developed the “SPEFSERT Framework” to eliminate barriers and promote data-driven decision-making, thereby addressing the reluctance of small merchants in the SME sector to adopt analytics. Koul et al. (Koul et al., 2021) identify that entrepreneurial inclination is crucial for technology adoption. Ram et al. (Ram et al., 2023) identified that unorganized retailers adopt digital technologies mainly due to usefulness, ease of use, and self-efficacy. Collectively, these studies highlight technology’s growing influence in transforming India’s unorganized retail sector.

Impact of Retail Strategies on Consumer Behavior: A Study on Visual Merchandising, Sales Promotions, Digitalization, and Online Shopping Trends in India

Narang and Tiwari (Narang and Tiwari, 2025) identified that technology adoption among unorganized retailers is limited due to skill gaps and infrastructure limitations, although modern technologies improve efficiency. Dubey et al. (Dubey et al., 2025) emphasize that AI-driven systems are transforming business functions from operations and supply chains to customer management, while recognizing ethical, privacy, and security challenges that are associated with AI adoption. Pai and Mayya (Pai and Mayya, 2021) found that visual merchandising elements such as mannequins, lighting, music, and store layout influence consumer purchase behavior and stores must adopt an inviting and aesthetically appealing store environment to attract more customers and enhance long-term sales. Ravi et al. (Ravi et al., 2019) found that there exists a lower level of digital adoption for managing supply-side and customer-side processes, whereas they heavily rely on cash and credit-based low-value transactions. Reghuthaman and Gupta (Reghuthaman and Gupta, 2018) identified six crucial website factors that shape online purchasing behavior in India, i.e. management, interaction, security, aesthetics, privacy, and financial benefits.

Transforming Retail through Digital Platforms, E-Business Adoption, and Modern Retail Trends in India

Kasat et al. (Kasat et al., 2026) identified that AI recommendation systems, chatbots and predictive analytics significantly enhance omnichannel customer experience and improve operational efficiency at Amazon, Walmart, and Sephora, while the major challenges are data integration and cross-channel consistency. Jung (Jung, 2025) states that AI-powered personalized recommendation through ML, NLP, and GenAI significantly strengthens customer loyalty in retail by enabling hyper-personalized, omnichannel experiences supported by real-world case studies. Arora et al. (Arora et al., 2025) provide a comprehensive overview of the role of advancement of digital technologies, i.e. AI, ML, blockchain, and IoT, in transforming business and financial management, including emerging applications in retail, automation, and data-driven decision-making. Hänninen et al. (Hänninen et al., 2018) found that leveraging big data for consumer insights promotes a relationship-driven trade system, and the adoption of digital platforms is transforming retail by acting as a central link between suppliers and customers. Sailaja et al. (Sailaja et al., 2017) identified that high setup and maintenance costs are the major challenge and barriers that prevent microenterprises from adopting e-business. Jasola (Jasola, 2021) observed that India's retail ecosystem is becoming more organized and urban, and rural consumers are adopting modern and emerging technologies. Collectively, these studies emphasize the role of technology, consumer adaptation, and socioeconomic factors in shaping India's evolving retail landscape.

Objectives of the study

To explore the adoption of recent trends in business by retailers in four metropolitan cities.

To analyze the significant adoption of recent trends in business by retailers in four metropolitan cities.

To give appropriate suggestions to retailers for implementing recent trends in businesses.

To assess which emerging business trends significantly predict overall adoption behavior among retailers across the four metropolitan cities.

Hypothesis

H_0: The adoption of recent trends in businesses by retailers is low (Mean score < 3)

H_1: The adoption of recent trends in businesses by retailers is high (Mean score > 3)

H_0: Emerging business trends do not significantly predict overall adoption behavior among retailers in the four metropolitan cities.

H_2: Emerging business trends significantly predict overall adoption behavior among retailers in the four metropolitan cities.

Research Method

Research methodology

The study used a mixed-method design. Qualitative interviews with 30 retailers provided in-depth insights, while a survey of 200 retailers across four cities ensured statistical reliability. NVIVO 14 was used for qualitative data, and SPSS 29 for descriptive analysis, one-sample t-tests, and multiple linear regression. Thirteen trend scores were the independent variables, and the overall adoption score was the dependent variable to assess each trend's impact.

A sample size of n = 30 was selected for interviews, which supports qualitative research. Interviews were conducted until data saturation was achieved. As per green's (Green, 1991) regression formula ($N \geq 50 + 8m$), with 13 predictors, the minimum required sample size was 154; therefore, 200 respondents were selected for quantitative research ensuring adequate statistical power and representation across the four metropolitan cities.

Semi-structured interviews were conducted with 30 retailers across four metropolitan cities. Interviews were audio-recorded, transcribed, and analyzed using NVivo. Thematic analysis was performed through open, axial, and selective coding to identify key themes related to emerging trend adoption. Data saturation was achieved when no new themes

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emerged.

Thematic analysis of interviews

The 30 interview transcripts were analyzed using thematic analysis in NVivo 14. Open coding identified recurring adoption-related terms, which were grouped into categories and refined into themes based on frequency and relevance to the research objectives.

The themes correspond with the word cloud results, where frequently repeated terms reflected dominant retail adoption trends. Five key themes emerged: (1) UPI and contactless payment adoption, (2) WhatsApp and social commerce usage, (3) influencer and digital marketing practices, (4) technology-driven retail innovations such as AR/virtual reality (VR) and omnichannel, and (5) comparatively lower adoption of loyalty programs, voice commerce, and curbside pickup.

Data saturation was achieved when no new recurring adoption patterns emerged.

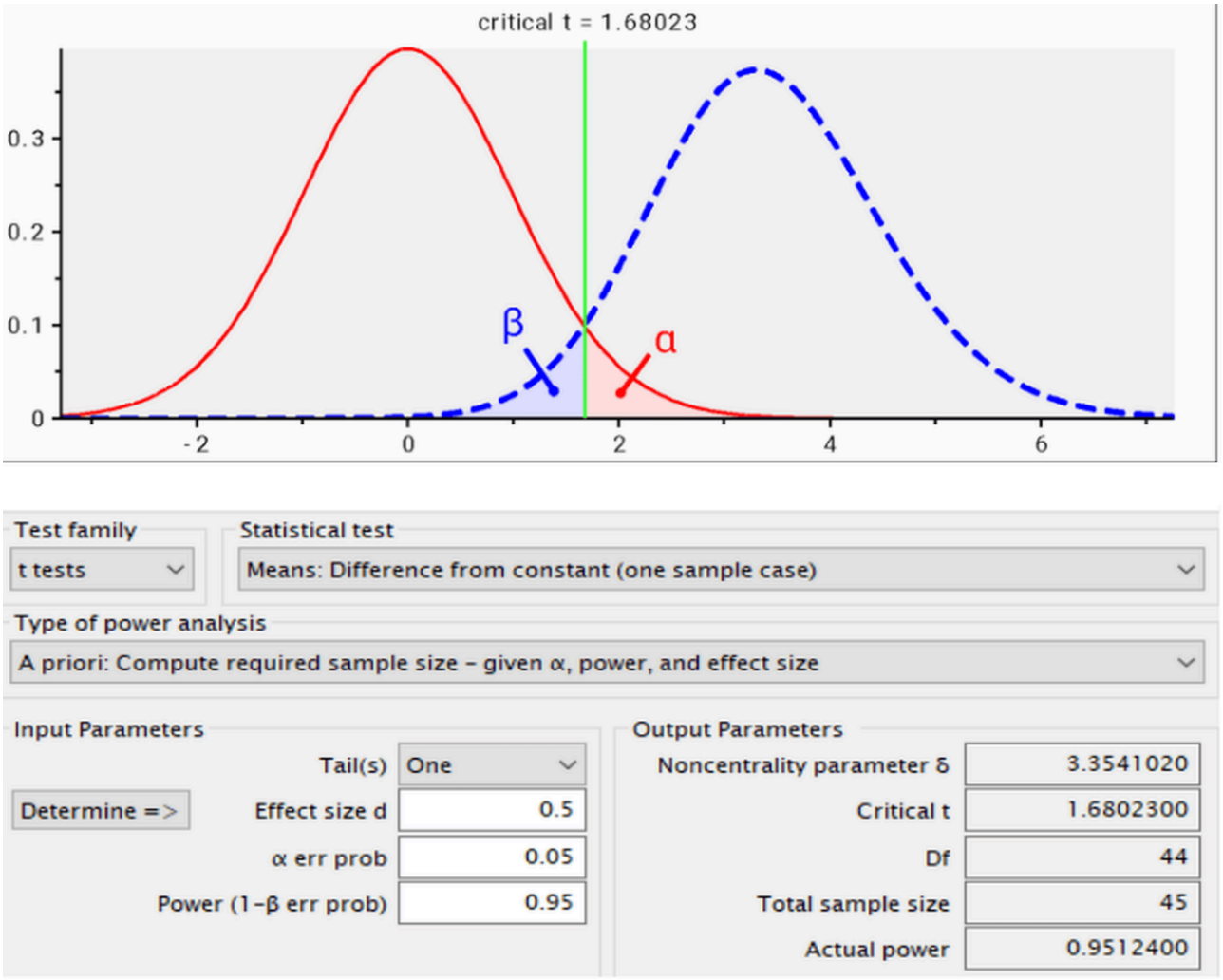


FIGURE 2: A Priori Power Analysis for One-Sample t-Test Using G*Power

An a priori power analysis was conducted using GPower to determine the appropriate sample size for the study. Figure *2* presents the results of the analysis, indicating that with an effect size of 0.5, significance level (α) of 0.05, and statistical power of 0.95, the minimum required sample size was 45 respondents.

Retail Format	Percentage
Mom-and-Pop Stores	20.00%
Supermarkets and Hypermarkets	12.50%
Specialty Stores	12.50%
Shopping Malls	12.50%
Convenience Stores	10.00%
E-tailers	10.00%
Department Shops	7.50%
Category Killers (MBOs)	7.50%
Discount Retailers	5.00%
Vending	2.50%

TABLE 2: Distribution of 200 Retailers by Type Across Four Metropolitan Cities

Table *2* presents the distribution of 200 retailers across various retail formats in four metropolitan cities. The findings indicate that traditional retail formats such as mom-and-pop stores constitute the largest share (20%), highlighting the continued dominance of unorganized retail. At the same time, organized formats such as supermarkets, specialty stores, and shopping malls each account for 12.5%, reflecting the gradual expansion of organized retail. Emerging formats such as e-tailers (10%) further demonstrate the growing influence of digital retail channels.

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Results And Discussion



FIGURE 3: Word Cloud

The word cloud shows the retailers' adoption trends like UPI Payment, WhatsApp Marketing, Influencer Marketing, Contactless payment, Go Green, Digital Catalogue, Omnichannel, AR, and Curbside. The word cloud highlights the keywords that are frequently repeated and help quickly identify key themes.

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Word	Length	Count	Weighted Percentage (%)
UPI Payment	3	40	11.17
WhatsApp marketing	8	37	10.34
Influencer marketing	10	36	10.06
Contactless payment	11	34	9.50
Go Green	5	34	9.50
Selling local products on e-commerce	12	28	7.82
Digital Catalogue	7	27	7.54
Curb side pick-up and delivery	8	25	6.98
Virtual reality	7	24	6.70
Loyalty program	7	21	5.87
Augmented reality	9	19	5.31
Voice commerce	5	18	5.03
Omnichannel retailing	11	15	4.19

TABLE 3: Summary of Keywords

Summary of keywords table shows the most adopted business trends by retailers: UPI Payment (11.17%), WhatsApp Marketing (10.34%), Influencer Marketing (10.06%), Contactless Payment (9.50%), Go Green (9.50%), Selling Local Products Online (7.82%), Digital Catalogue (7.54%), Curbside Pickup (6.98%), Virtual Reality (6.70%), Loyalty Program (5.87%), AR (5.31%), Voice Commerce (5.03%), and Omnichannel Retailing (4.19%)

As shown in Figure *3*, the word cloud highlights the most frequently adopted retail trends, with “UPI” and “WhatsApp” appearing most prominently. Consistent with this, Table *3* indicates that UPI Payment (11.17%) and WhatsApp Marketing (10.34%) are the most adopted practices among retailers.

These findings imply that retailers prioritize practical, customer-facing digital tools that enhance transaction convenience and communication. The moderate adoption of AR, VR, voice commerce, and omnichannel retailing suggests that advanced technologies are still emerging and reflect varying levels of digital maturity. Overall, the results indicate that retail transformation is primarily driven by utility-based and cost-effective digital adoption.

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Items	t -statistics	P -value	Ha: mean score of Adoption of Recent trends in Business by retailers > 3
UPI payment	21.76	p < .001	Significant
Virtual reality	20.99	p < .001	Significant
WhatsApp marketing	18.45	p < .001	Significant
Influencer marketing	18.14	p < .001	Significant
Contactless payment	19.54	p < .001	Significant
Go Green initiative	20.55	p < .001	Significant
Selling local product on e-commerce	18.99	p < .001	Significant
Digital Catalogue	21.54	p < .001	Significant
Curb side pickup and delivery	-20.00	p > 0.05	Insignificant
Loyalty program	-17.46	p > 0.05	Insignificant
Augmented reality	17.33	p < .001	Significant
Voice commerce	-20.88	p > 0.05	Insignificant
Omnichannel	-19.54	p > 0.05	Insignificant

TABLE 4: One-Sample t-Test Results

A one-sample t-test showed UPI Payment, VR, WhatsApp Marketing, Influencer Marketing, Contactless Payment, Go Green, Selling Local Products, Digital Catalogue, and AR as significant ($p < 0.05$), while Curbside Pickup, Loyalty Program, Omnichannel, and Voice Commerce were not significant.

The findings in Table *4* suggest that managers should focus on strengthening high-impact technologies such as UPI, WhatsApp marketing, and digital catalogues, as these show strong adoption among retailers. At the same time, gradual strategic planning is needed to integrate emerging practices like omnichannel retailing and voice commerce. Investing in digital skills and technological capability will help retailers move toward more advanced and competitive retail models.

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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.850	0.722	0.690	0.415

TABLE 5: Model Summary

Interpretation: The model explains 72.2% of the variance in overall adoption behavior, which indicates a strong predictive model in social science research. As shown in Table *5*, the model demonstrates a high explanatory power, with an R^2 value of 0.722 and an adjusted R^2 of 0.690, indicating that approximately 72.2% of the variance in overall adoption behavior is explained by the independent variables. This reflects a robust and reliable predictive model within the context of social science research.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	57.4	13	4.415	25.87	.000[b]
Residual	70.06	186	0.377	–	–
Total	127.46	199	–	–	–

TABLE 6: ANOVA[a]

[b] Predictors: (Constant), 13 Emerging Business Trends
[a] Dependent Variable: Overall Adoption Behavior

Interpretation: The regression model is statistically significant, $F(13, 186) = 25.87$, $p < 0.001$, meaning the predictors collectively explain variations in adoption behavior. Table *6* presents the ANOVA results, demonstrating that the regression model is highly significant ($F = 25.87$, $p < 0.001$). This indicates that the predictors, representing emerging business trends, jointly contribute to explaining variations in overall adoption behavior. The statistical significance of the model confirms its suitability for further hypothesis testing and supports the robustness of the proposed framework.

Implication: The findings imply that emerging business trends play a substantial role in shaping retailers' overall adoption behavior. Managers should strategically focus on integrating relevant digital and innovative practices, as these trends significantly influence retail transformation and competitiveness.

Predictor (Trend)	Unstandardized B	Std. Error	Beta	t	Sig.	Interpretation
(Constant)	0.915	0.211	–	4.34	0	The intercept indicates the baseline level of adoption behavior when all predictors are held constant.
UPI Payment	0.24	0.047	0.31	5.11	0	UPI payments have the strongest positive and statistically significant influence on overall adoption behavior, highlighting digital payments as a key driver of retail transformation.
WhatsApp Marketing	0.198	0.044	0.276	4.5	0	WhatsApp marketing significantly predicts adoption behavior, indicating the importance of low-cost, direct digital communication tools for retailers.
Influencer Marketing	0.142	0.046	0.185	3.09	0.002	Influencer marketing shows a moderate yet significant effect,

						suggesting its growing role in shaping retailer adoption decisions in metropolitan markets.
Digital Catalogue	0.129	0.044	0.172	2.93	0.004	Digital catalogues significantly contribute to adoption behavior, reflecting retailers' shift toward digital product presentation and online visibility.
Go Green Initiative	0.092	0.045	0.119	2.04	0.043	Sustainability initiatives have a positive and significant influence, indicating that environmental responsibility is increasingly embedded in retail adoption strategies.
Contactless Payment	0.056	0.045	0.074	1.24	0.217	Contactless payments show a positive but statistically insignificant effect, suggesting limited incremental impact beyond UPI adoption.
Virtual Reality	0.053	0.041	0.073	1.29	0.2	VR adoption does not significantly predict overall

						behavior, indicating experimental or selective use rather than widespread integration.
Augmented Reality	0.045	0.042	0.062	1.07	0.287	AR adoption remains statistically insignificant, reflecting early-stage adoption and cost or capability constraints among retailers.
Selling Local on E-commerce	0.067	0.046	0.094	1.46	0.147	Selling local products online shows a positive but insignificant relationship, suggesting adoption is present but not yet influential across retailers.
Loyalty Program	0.038	0.043	0.051	0.88	0.381	Loyalty programs do not significantly influence adoption behavior, indicating low formalization among small and mid-sized retailers.
Omnichannel Retailing	0.03	0.041	0.042	0.73	0.466	Omnichannel retailing is statistically insignificant, highlighting implementation barriers such as cost, skills, and

						system integration.
Voice Commerce	0.025	0.042	0.036	0.6	0.552	Voice commerce shows negligible influence, reflecting minimal retailer-side adoption despite growing consumer awareness.
Curbside Pickup and Delivery	0.02	0.045	0.029	0.44	0.663	Curbside pickup does not significantly predict adoption behavior, suggesting logistical and preference-related constraints in metro retail settings.

TABLE 7: Coefficients[a]

[a] Dependent Variable: Overall Adoption Behavior.

As shown in Table *7*, the results of the multiple linear regression analysis indicate that several emerging business trends significantly influence overall adoption behavior. UPI payments emerged as the strongest predictor ($\beta = 0.310$, $p < 0.001$), followed by WhatsApp marketing ($\beta = 0.276$, $p < 0.001$), highlighting the critical role of digital transformation in retail. Additionally, influencer marketing, digital catalogues, and sustainability initiatives also demonstrated statistically significant positive effects, suggesting a multidimensional shift in retail adoption patterns driven by both technological and sustainability-oriented factors. A multiple linear regression was conducted to examine whether 13 emerging business trends significantly predicted the overall adoption behavior among retailers in the four metropolitan cities. The model was statistically significant, $F(13, 186) = 25.87$, $p < .001$, explaining 72.2% of the variance in adoption behavior (Adjusted $R^2 = .690$). Five predictors significantly influenced adoption:

UPI Payment ($\beta = .310$, $p < .001$)

WhatsApp Marketing ($\beta = .276$, $p < .001$)

Influencer Marketing ($\beta = .185$, $p = .002$)

Digital Catalogue (β = .172, p = .004)

Go Green Initiative (β = .119, p = .043).

These findings suggest that digital payments, social media-driven marketing, and sustainability initiatives play the strongest role in shaping adoption behavior among urban retailers. The remaining eight predictors - including VR, AR, Voice Commerce, Loyalty Programs, Omnichannel Retailing, and Curbside Pickup - were not statistically significant, indicating low current adoption and limited influence on retailer behavior.

Managerial implications

Retail managers should prioritize investment in high-impact areas such as UPI payments, WhatsApp marketing, influencer engagement, digital catalogues, and sustainability initiatives, as these significantly drive overall adoption behavior. The results indicate that customer-facing digital tools and responsible business practices enhance competitiveness in metro markets. Managers should strengthen digital payment infrastructure and social commerce strategies to accelerate transformation. Advanced technologies such as AR, VR, and omnichannel systems may be implemented gradually, as they currently show limited influence on retailer behavior.

Implications and future research

The given study incorporates interviews and surveys of retailers in 4 metropolitan cities, namely Mumbai, Delhi, Kolkata, and Bangalore, and provide insight into emerging trend adoption. The study finds that UPI payments, VR, WhatsApp Marketing, Influencer Marketing, Go Green Initiatives, and Digital Catalogues are widely adopted, whereas curbside pickup, loyalty programs, AR, Voice Commerce, and Omnichannel retailing are less adopted. It is recommended to modernize retail business by integrating technology in various business operations, enhance efficiency, and create employment opportunities. The given study raises an awareness about the prevailing advance to modern technology adopted in retail business and contributes to prevailing academic knowledge and supports future research.

Conclusions

In conclusion, retailers in four metropolitan cities show a dynamic landscape with key trends like UPI payments, VR, WhatsApp and Influencer marketing, Contactless payment, Go Green initiatives, and e-commerce adoption. Loyalty programs, omnichannel, and voice commerce are less commonly adopted, The success of retailing business relies on innovation, digitalizing marketing and local market awareness. Regression analysis confirmed UPI payments, WhatsApp marketing, Influencer marketing, Digital Catalogues, and Go Green Initiatives as a significant predictors of adoption.

Appendices

Section 1: Qualitative Interview Question

RQ1: Which recent business trends have you adopted in your retail store, and why?

Section 2: Quantitative Research Questions

Title: Adoption of Emerging Business Trends among Retailers

Section A: Demographic Profile

City:
☐ Mumbai ☐ Delhi ☐ Kolkata ☐ Bangalore

Type of Retail Format
☐ Mom & Pop Store
☐ Supermarket/Hypermarket
☐ Specialty Store
☐ Shopping Mall Outlet

☐ Convenience Store
☐ E-tailer
☐ Department Store
☐ Category Killer (MBO)
☐ Discount Retailer
☐ Vending

Years in Business:
☐ Below 5 years ☐ 5-10 years ☐ 11-20 years ☐ Above 20 years

Number of Employees:
☐ 1-5 ☐ 6-10 ☐ 11-20 ☐ Above 20

Section B: Adoption of Emerging Business Trends

Instruction: Please indicate the level of adoption in your retail business.

Scale:
1 = Not Adopted
2 = Slightly Adopted
3 = Moderately Adopted
4 = Highly Adopted
5 = Fully Integrated

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Emerging Trend	1	2	3	4	5
UPI Payments	☐	☐	☐	☐	☐
WhatsApp Marketing	☐	☐	☐	☐	☐
Influencer Marketing	☐	☐	☐	☐	☐
Contactless Payments	☐	☐	☐	☐	☐
Go Green Initiatives	☐	☐	☐	☐	☐
Selling Local Products via E-commerce	☐	☐	☐	☐	☐
Digital Catalogue	☐	☐	☐	☐	☐
Virtual Reality (VR)	☐	☐	☐	☐	☐
Augmented Reality (AR)	☐	☐	☐	☐	☐
Loyalty Programs	☐	☐	☐	☐	☐
Omnichannel Retailing	☐	☐	☐	☐	☐
Voice Commerce	☐	☐	☐	☐	☐
Curbside Pickup & Delivery	☐	☐	☐	☐	☐

TABLE 8: Adoption of Emerging Business Trends

Table *8* illustrates the adoption patterns of emerging business trends among retailers using a five-point Likert scale. The findings reveal that digitally enabled practices such as UPI payments, WhatsApp marketing, and digital catalogues are more widely adopted, whereas advanced innovations like virtual reality and voice commerce remain in early stages of adoption. This pattern reinforces the regression findings presented in Table *7*, where digital transformation variables emerged as the most significant predictors of overall adoption behavior, highlighting the central role of digitalization in shaping retail evolution.

Section C: Overall Adoption Behavior

(Strongly Disagree = 1 to Strongly Agree = 5)

My business actively adopts new technologies.

Innovation is important for my retail growth.

I am willing to invest in future digital trends.

Emerging business trends improve my sales performance.

Digital transformation is necessary for long-term survival.

Additional Information

Author Contributions

All authors have reviewed the final version to be published and agreed to be accountable for all aspects of the work.

Concept and design: Aafreen Shah, Aparna R. Jain

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Data Availability Statements

The datasets (and/or code) supporting this study are available from the corresponding author upon reasonable request.

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