



# Future-Ready Rural Retail Marketing: Exploring Digital Inclusion, Hyperlocal Commerce, And Consumer Growth In Emerging Rural Markets

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## Abstract

The structural transformation of the rural retail markets is taking place where digital inclusion, mobile-first payments, hyperlocal commerce, and culturally relevant marketing is integral to consumer outreach and retail growth. This research paper looks at the future-ready rural retail marketing in developing rural markets with India as the analytical context. The study proposes a conceptual and empirical framework for understanding the relationship between digital inclusion, hyperlocal commerce, localized marketing, and digital trust – in rural consumer growth. The study is illustrative and analytical and will be carried out on proof-based work on recent institutional reports and peer-reviewed literature. Due to the non-supply of raw field data, a ‘mock’ survey dataset is created for 420 rural and semi-rural respondents to exhibit the statistical design, interpretation process and the hypothesis testing framework. As per the results, rural consumers’ growth will increase due to digital trust, digital inclusion, hyperlocal commerce, and localized marketing. Digital trust emerges as the most robust predictor which indicates that payment reliability grievance redressal privacy comfortability and retailer credibility are decisive conditions for expanding digital retail participation. According to the results, Hyperlocal models also retain the social benefits of kirana shops and local entrepreneurs. They further provide convenience through WhatsApp ordering, UPI payment, assisted commerce and delivery from nearby locations. According to the paper, future-ready rural retail marketing should not be seen as mere e-commerce diffusion. It must be recognized as a hybrid ecosystem of digital access, communication in local vernacular, community trust, affordable logistics and inclusive retail infrastructure.

**Keywords:** rural retail marketing; digital inclusion; hyperlocal commerce; digital payments; localized branding; rural consumer growth; emerging markets.

## 1. Introduction

Rural retail marketing no longer relies exclusively on physical distribution, adapting products at low prices, and conducting periodic village campaigns. The rural consumer in emerging markets is becoming increasingly connected through smartphones, digital payments, social media, assisted commerce, and hyperlocal delivery networks. The term “future-ready rural retail marketing” has been strategically interpreted to mean an approach with a deep understanding of evolving rural consumer behaviour, embracing both digital and physical channels to create market access designed for affordability, trust, convenience, local language communication, and last mile availability. India is an especially significant place due to its mixture of a dominant countryside demographic, greater use of mobile internet, a broad expanse of kirana stores, quick growth of real-time payments and public digital infrastructure which have eased transaction frictions (IAMAI & Kantar, 2025; MeitY, 2025; NPCI, 2026).

**1.1 Rural Market Scale and Consumption Transition.** The rural markets are important due to their demographic scale and consumption transition. Data of household consumption evidence that the average monthly per capita consumption expenditure (MPCE) in rural India is Rs. 4,122 (2023-24). First, a striking 52.96 percent of the rural MPCE went for non-food items. Rural consumption is hardly limited to substances (MoSPI, 2025). Market reports show that rural demand has emerged as a primary driver of FMCG growth. Moreover, rural volume growth has been outpacing that of urban volume growth in recent quarters (Reuters, 2025). Due to these developments, rural retail represents a strategic growth opportunity for FMCG companies, digital payment providers, local businesspersons, agribusinesses, financial service providers, and open commerce networks.

**1.2 Digital Inclusion and Rural Consumer Participation.** Digital inclusion has emerged as a key condition of participation by rural consumers. According to a report, 886 million people are using internet in India, according to the IMAI-Kantar Internet in India report 2024. This report also states that there are 488 million users in rural areas of India. It further said that now there are more internet users in rural India than in Urban India. (IAMAI & Kantar, 2025) This doesn't mean rural digital divide has vanished from existence. The same ecosystem continues to witness challenges related to shared device usage, uneven network quality, gender-based access, language issues, fear of digital fraud, and low consumer confidence. The ITU keeps flagging the challenge of urban-rural digital divide at global level. Furthermore, GSMA highlights enabling power of infrastructure, affordability, consumer readiness and relevant content for mobile internet adoption (GSMA, 2024; ITU, 2024). For rural retail, this implies that connectivity alone will not drive growth in the number of consumers. Episodes of digital inclusion must be meaningful in providing usable access, building trust, acquiring skills, ensuring affordability and having locally relevant content.

**1.3 Digital Payments and Retail Transformation.** Digital payments serve as a key apparatus in this shift. UPI has made small-value, instant, mobile-based transactions normal and improved person-to-merchant payment behaviour. According to Worldline (2025), UPI's volume of transactions grew with 93.23 billion transactions recorded during the second half of 2024. Growth was especially prominent for person-to-merchant transactions. According to the World Bank's India Findex country brief, although 78 per cent of Indian adults had an account in 2021, only 35 per cent used accounts for digital payments, while rural digital payment use was lower than urban use (World Bank, 2022). The difference between having an account and making a payment use is key to rural retail marketing. Retailers should not presume that every rural consumer who has a banking account is ready to shop on apps. We will continue to face the need for assisted payments, QR visible payments, merchant trust, vernacular instructions, cash-digital flexibility, etc.

**1.4 Hyperlocal Commerce and Rural Retail Transformation.** Future-ready rural retail is enhanced by hyperlocal commerce. Hyperlocal commerce relies on nearby sellers, local inventory, short-distance delivery and community trust, unlike traditional e-commerce, which relies on centralized warehouses and distant fulfilment. In rural and semi-urban areas, kirana stores can take orders on WhatsApp, those who can deliver within a village cluster can become local entrepreneurs, cooperative stores can use UPI QR codes, and networks like ONDC can enable small sellers to be present on digital marketplaces.

The 'ONDC: The Future of E-Commerce' reports that ONDC can help ease entry barriers for small merchants, enhance access to local hyperlocal retailers and help rural seller; connect with the larger digital commerce ecosystem (PwC India, 2024). As a result, the most successful rural retail idea will likely be hybrid: local seller plus digital visibility, familiar retailer plus clear payment, and physical trust plus digital ease.

**1.5 Localized Marketing in Rural Markets.** Rural consumers belong to a heterogeneous category. A variety of issues impact purchasing behaviour including language, caste, community networks, income cycles, agricultural seasons, migration patterns, gender roles, festivals and local retail relationships. A brand message might work in a metropolitan digital campaign. However, such communications may not translate into purchase confidence in village locations. Localized retail marketing should include vernacular content, familiar symbols, region-specific packaging, festivals-linked promotions, community influencers and store-level service assurance. According to Duvendack, Sonne, and Garikipati (2023) at the macro level in India outcomes of digital financial inclusion do not guarantee inclusive use at the micro level especially for women and marginalised groups. To be effective, rural retail marketing must be inclusive-by-design rather than merely digital-by-default.

The study looks into the impact of digital inclusion, hyperlocal commerce, localized marketing, and digital trust on rural consumer growth. This paper offers a conceptual model and an illustrative empirical framework for a full field study. The argument made in this paper is that rural retail transformation is about more than just digital payment penetration or e-commerce expansion. It requires a coordinated model of consumer accessibility, local relevance, payment assurance, retailer empowerment, logistics proximity, and institutional backing.

## **2. Problem Statement**

**2.1 Fragmented Approach to Rural Retail.** Although rural retail markets are on the rise, firms typically adopt a fragmented approach. By merely doing digital payment onboarding those firms aren't addressing digital literacy and trust. Some invest in last-mile distribution without creating digital visibility. A number of campaigns translate urban brand communication language into local dialects, but do not change the influence of local purchase cycles, community and retailer credibility. As development occurs in rural India, improving access to mobile internet, UPI payments, and awareness of online shopping, and so on, the rural retail growth potential is subdued, thus, not maximised.

**2.2 Gap Between Digital Access and Meaningful Participation.** There is a gap between having digital access and participating meaningfully in retail. Although rural consumers have access to mobile internet, they may not make online purchases because they worry about fraud, find return policies unclear, don't feel confident navigating apps, rely on shared devices or prefer familiar local retailers. People may use UPI to transfer money to other people, but choose to pay cash at retail stores. This can be either due to habit or reluctance from the retailer to accept UPI. Consumers do respond to brand messaging but depend on local shopkeepers to verify the product. The reasons for these behavioural frictions show why digital inclusion and hyperlocal commerce, and localized marketing as well as digital trust must be viewed collectively and not as independent variables (Banerjee & Sinha, 2026; Setiawan et al., 2025; 2022, World Bank).

**2.3 Managerial Need for Evidence-Based Rural Retail Strategy.** It's also a managerial problem. Evidence is needed by retailers, FMCG, payment platforms, and policymakers which factor most influencing rural consumer growth. If in the absence of such evidence rural retail strategies over-invest in app based acquisition, they may under-invest in assisted commerce, local seller training, vernacular grievance support, QR acceptance and community based trust building. To empirically test the relationships, this study proposes a future-ready framework together with demonstrating the relationships' empirical testing.

### 3. Importance of the Research Study

**3.1 Ecosystem Perspective on Rural Retail Marketing.** There are five main reasons for this study's importance. To begin with, it alters analysis of rural retail marketing from a distribution perspective to an ecosystem perspective. Rural retail considers all the elements of digital infrastructure, payment behaviour, local retail networks, cultural communication and trust. Recent scholarship has been consistent with viewing digital financial inclusion and digital public infrastructure as enabling systems (not just technologies) (Chopra et al., 2026; MeitY, 2025).

**3.2 Consumer-Centric Approach.** Rural consumers aren't passive consumers of low-price products. They are not mere recipients of messages but active agents whose decisions are guided by perceived convenience, risk, identity, social influence and platform credibility. This is important as rural consumers often have digital awareness, combined with physical verification and local help. To assess one's purchase behaviour, a future ready model must measure both digital and social dimensions.

**3.3 Benefits for Rural Retailers and Local Entrepreneurs.** The research will benefit rural retailers and local entrepreneurs. Through digital ordering and QR payments, customer data, visibility of stocks, and localized deals, hyperlocal commerce can protect and enhance the relevance of kirana stores. By showing the importance of physical shops, the 'showroom effect' can reduce a perceived conflict between e-commerce and small retail. According to PwC India (2024), smaller sellers can gain access to a wider market through open networks such as ONDC. However, the barriers to technology, logistics and onboarding must be overcome to ensure adoption.

**3.4 Policy Implications.** Digital inclusion involves a connection of financial inclusion to rural entrepreneurship and inclusive consumption. Account ownership in India is high (World Bank, 2022), but the use of digital payments remains uneven. Therefore, it is necessary for policy interventions to go one step ahead and focus on transaction confidence.

**3.5 Contribution to Research Design and Field Study.** The study offers a research design questionnaire. Thereby providing, variables, hypotheses, indicators of the questionnaire and statistics table which can guide actual field study among rural consumer, retailer and local entrepreneur. The example dataset presented here is not final proof; rather, it illustrates how a ready-for-publication empirical study could be shaped once primary data collection takes place.

## 4. Research Objectives

The study is guided by the following objectives:

1. To examine the role of digital inclusion in improving rural consumer engagement with retail markets.
2. To analyse how hyperlocal commerce affects purchase convenience and last-mile retail access in rural and semi-rural areas.
3. To evaluate the influence of digital trust on rural retail adoption, particularly in relation to payment reliability, privacy, grievance redressal, and retailer credibility.

4. To assess the effect of localized marketing strategies on rural consumer growth.
5. To develop a conceptual model linking digital inclusion, hyperlocal commerce, localized marketing, digital trust, and rural consumer growth.
6. To demonstrate an empirical testing framework using descriptive statistics, reliability analysis, correlation, regression, ANOVA, and factor analysis.

## 5. Research Questions

The paper addresses the following research questions:

1. How does digital inclusion influence rural consumer engagement?
2. To what extent does hyperlocal commerce improve rural purchase convenience?
3. How does trust in digital platforms influence rural retail adoption?
4. How do localized marketing strategies affect consumer growth in emerging rural markets?
5. Which factor among digital inclusion, hyperlocal commerce, localized marketing, and digital trust is the strongest predictor of rural consumer growth?
6. What practical strategies can retailers, FMCG companies, digital payment providers, policymakers, and rural entrepreneurs adopt to build future-ready rural retail ecosystems?

## 6. Hypotheses

The study proposes the following hypotheses:

- **H1:** Digital inclusion has a significant positive relationship with rural consumer engagement.
- **H2:** Hyperlocal commerce significantly influences rural purchase convenience.
- **H3:** Trust in digital platforms positively affects rural retail adoption.
- **H4:** Localized marketing strategies significantly influence consumer growth in rural markets.

## 7. Review of Literature

Rural Retail Marketing Literature has now shifted from the study on physical distribution and rural advertising to wider issues which includes, digital inclusion, hybrid retail, fintech, platform trust and consumer participation. The rural consumer is becoming more visible in the online environment but the visibility is not uniform, as per latest digital economy reports. A report by IAMAI and Kantar (2025) shows rural India has 488 million active internet users. However, the report also shows differences in device ownership, state-wise penetration as well as usage. These layers demonstrate how digital inclusion can take on different meanings. There is the issue of access to a device, affordability of connectivity, ability to use the app, availability of the local language, and confidence in transactions.

**7.1 Digital Accessibility and Rural Shoppers.** According to the Findex evidence of World Bank, in India, ownership of financial accounts has increased considerably, but there are usage gaps. In 2021, 35 percent of adults in India used their accounts for digital payments. Use was lower for rural than urban residents (World Bank, 2022). The differentiation between access and usage is critical for rural retail. Even if a consumer has a bank account, they may prefer cash if digital payments are considered unsafe or difficult. Duvendack and others (2023) likewise caution that gains in digital financial inclusion can occur alongside gendered and micro-level exclusions. The research illustrates that usable digital access, rather than formal access, should be the focus of inclusive rural retail.

**7.2 Digital Payments and Retail Adoption.** Digital payments made in real-time reduce transaction costs and enhance convenience.

The fact that UPI works across payment systems, is instant, and familiar to small merchants. Worldline (2025) posts significant rise in person-to-merchant UPI transactions, NPCI (2026) shows growth in UPI banks, volumes and values continues. Nonetheless, trust, usefulness, ease of use, and acceptance by merchants mediate actual adoption. Banerjee and Sinha (2026) studied the acceptance of digital payment in rural India by using the constructs related to diffusion. The findings suggest that the relative advantage, compatibility and trialability positively influence the adoption of digital payment while complexity negatively influences the adoption of digital payment. The rural consumer for whom digital payment is highly relevant must see the product as useful, compatible, and trialable.

**7.3 Local Retail Ecosystems and Hyperlocal Commerce.** Hyperlocal commerce is digital commerce focused on a local area, where nearby sellers, local delivery agents and short-distance logistics. It is different from traditional e-commerce as it draws power from proximity, local stock, and community knowledge. According to PwC India (2024), ONDC can potentially encourage digital inclusion as it allows a small and rural seller to access digital commerce while enabling the consumer to access hyperlocal retailers. In rural areas, the hyperlocal model can be especially effective as it does not require consumers to shift from trusted local retailers. It rather digitalizes the existing interactions that take place, such as order placement, payment, credit, delivery, product recommendation etc.

**7.4 Consumer Behaviour and Trust in Rural Areas.** Consumers in rural areas are not just price-sensitive but are also strongly dependent on trust, recommendation, retailer reputation, and after-sales assurance. Digital channels expose consumers to several risks like payment failure, fraud messages, fake products, uncertain returns and no immediate help. Setiawan et al. (2025) demonstrate how behavioural intention relate to the actual fintech use and financial inclusion, and that the digital financial literacy and government support can differ for urban and rural respondents. As a result, trust is not only a mental variable; it is also institutional and infrastructural. Consumers trust platforms when the payments are dependable, sellers take ownership, return policies leave no surprise and help is easy and in language they can use.

**7.5 Mobile Shopping and Social Shopping.** Smartphones take centre stage as the first and primary interface for digital retail in rural markets. Mobile commerce strategies are not confined to mobile apps alone. It includes product discovery via WhatsApp, short videos, Youtube, Facebook groups, local influencers and retailer status updates. According to IAMA and Kantar (2025), Indian users engage in a variety of internet activities such as communication, social media, digital payments, and net commerce. Mobile-first marketing is essential. Rural social commerce works better when it is conversational and community-linked and not promotional. A consumer may have more faith in a message coming from a known shopkeeper, a local self-help group or a village influencer than from a platform ad.

**7.6 Localized Marketing in Specific Areas.** Localized marketing means changing the retail offer, communication language, visual symbols, pack size, price point, channel design and service assurance as per the local conditions. Localization for rural India can include use of local content, promotions of festivals, timing product availability to local crop-cycle, demonstration in community, providing small unit packs, region specific product variants and retailer led explanation. According to evidence, retail and digital systems need local relevance to be inclusionary. According to GSMA (2024), relevant content and consumer readiness are key enablers of mobile internet adoption. However, ITU (2024) continues to highlight urban–rural divides. Localized marketing can transform general digital access into tangible retail engagement.

**7.7 Public Digital Infrastructure and Rural Retail.** Digital public infrastructure in India has impacted identity, payment and service delivery. According to Chopra et al. (2026), digital public infrastructure can allow for secure and equitable access to services and provide economic participation, which helps with financial inclusion. A far-off village might not be better off but can a rural corner of the country be brought to life? The best conditions for the digital retail sector to thrive is when public infrastructure, private innovation and local retail entrepreneurs reinforce each other.

**7.8 Knowledge Deficiency.** The current studies examine digital payments, financial inclusion, rural consumer behaviour, e-commerce, etc. either way. A small number of studies attempt to integrate digital inclusion, hyperlocal commerce, localized marketing, and digital trust into a rural retail growth framework. Moreover, a lot of discourses speak about the shift from offline to online for the digitalization of the rural when, actually, the rural behaviour is hybrid. This study addresses the gap by developing a multi-variable model and an empirical testing framework for future-ready rural retail marketing.

## 8. Conceptual Framework

The theoretical framework comprises 4 perspectives which are Technology Acceptance Model, Diffusion of Innovation, Consumer Behaviour Theory and Rural Market Development Perspective. The adoption of rural retail is not merely a model; the study applies them in this context.

**8.1 Technology Acceptance Model.** Current applications of the Technology Acceptance Model offer explanations of digital adoption through perceived usefulness, perceived ease of use, behavioural intention and actual use. In their article of 2025, Setiawan et al. reinforce the technology acceptance model (TAM) within the framework of fintech adoption. In particular, they demonstrate that behavioural intention affects use behaviour, which in turn supports financial inclusion. Perceived usefulness in rural retail refers to whether the digital channels save time, provide better access, better prices, and lesser cash dependency. Perceived ease of use refers to the ability of consumers to use without difficulty. UPI, WhatsApp ordering, mobile apps, QR codes and return process. The statement theoretically supports H1 and H3 which states that digital inclusion and trust influence perceived usefulness and ease of use.

**8.2 Diffusion of Innovations.** The relative advantage, compatibility, complexity, trialability and observability help explain the diffusion logic. Banerjee and Sinha (2026) established that relative advantage, compatibility, and trialability show a positive influence towards the adoption of digital payment while complexity negatively influenced the outcome. Local retailers as well as family members and peers can spread rural retail technologies down through social networks. Seeing a trusted trader successfully accept UPI makes the innovation less remote and easier to accept by the consumer. When hyperlocal commerce remains aligned with existing retailer relationships, it propagates faster.

**8.3 Consumer Behaviour Theory.** The process of rural consumer behaviour involves the recognition of a need, information search, evaluation of alternatives, purchase decision and post-purchase experience. Nevertheless, the rural context alters these stages. The local retailers and social media provide information that may impact evaluation; brand familiarity and peer use may affect evaluation; cash availability, crop income, festival and household authority may influence purchase decision; after-sale service and replacement decision may impact satisfaction. This theory advocates for including trust, localized marketing, and convenience as growth determining for rural consumers.

**8.4 Rural Market Development Perspective.** When infrastructure, income, enterprise networks, financial inclusion, logistics, and institutional support improve, markets grow in rural area. Changes have occurred in consumption capacity of rural households as revealed by MoSPI (2025) data. The IAMAI report (2025) published by MeitY and Kantar indicates the proliferation of digital infrastructure

and internet usage. By viewing retail growth through the lens of rural market development, we make a case that retail development may depend on ecosystem readiness rather than firm-level promotion alone.

## 9. Conceptual Model

The proposed conceptual model positions rural consumer growth as the dependent variable. Digital inclusion, hyperlocal commerce, localized marketing, and digital trust are treated as independent variables. Affordability, digital literacy, infrastructure quality, and social influence are treated as mediating or moderating variables. The model assumes that rural consumer growth occurs when consumers can access digital channels, trust transactions, find nearby fulfillment options, and receive culturally relevant communication.

**Figure 1. Textual Conceptual Model for Future-Ready Rural Retail Marketing**

Independent Variables	Mediating/Moderating Conditions	Outcome
Digital inclusion	Digital literacy, smartphone access, network quality	Rural consumer engagement
Hyperlocal commerce	Last-mile logistics, local seller participation, delivery proximity	Purchase convenience
Localized marketing	Local language, cultural fit, community influence, price-pack fit	Consumer growth
Digital trust	Payment reliability, privacy, grievance redressal, retailer credibility	Rural retail adoption

*Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.*

**9.1 Interaction Effects in the Proposed Model.** The model further assumes interaction effects. For example, localized marketing can improve the effect of digital inclusion because vernacular content makes digital channels easier to understand. Hyperlocal commerce can improve trust because known sellers reduce perceived risk. Digital trust can mediate the relationship between digital inclusion and consumer growth because access without confidence may not convert into purchase behaviour. This model is consistent with recent findings that adoption is shaped by behavioural, infrastructural, and institutional variables rather than by technology availability alone (Banerjee & Sinha, 2026; Chopra et al., 2026; Setiawan et al., 2025).

## 10. Research Methodology

The research design employed is descriptive, analytical and empirical. The profiling of rural consumers, access to digital technology, payment behaviour, and shopping patterns is described as hyperlocal. This is because it explains the linking relationship between digital inclusion and hyperlocal commerce/localised marketing/digital trust/rural consumer growth. The model is designed to facilitate field testing based on questionnaire methods verified statistically.

**10.1 Proposed Study Area.** The proposed study area is rural and semi-rural markets in India. A thorough field version may select villages and semi-urban clusters from two or more districts to capture variations in income, connectivity, distance to market and exposure to digital payment. The indicative dataset presented in this paper assumes respondents from a combination of rural and semi-rural settings, with respondents being consumers, small retailers, local entrepreneurs, and digital commerce users.

**10.2 Target Population and Sample.** The rural consumer, small retailer, local entrepreneur, kirana store-owner, digital payment user, and assisted-commerce user are the target. It is recommended that a sample size is 300-500. An illustrative sample of 420 respondent was utilized to demonstrate the analysis. The sample does not purport to be genuine field evidence but rather a structured hypothetical set to illustrate how the study can be statistically presented once actual data are secured.

**10.3 Sampling Method.** Purposive sampling and convenience sampling are appropriate for exploratory studies in rural retail because the respondent must have some previous exposure to retail purchases, digital payments or local shopping networks. To improve rigor, future fieldwork could be conducted through stratified sampling of the respondents based on age, gender, education, occupation, and distance of the respondents from the market centre. By comparison to one subgroup, stronger generalization will be possible.

**10.4 Data Collection.** A structured questionnaire utilizing a five-point Likert scale may be used to elicit primary data, where 1 = strongly disagree and 5 = strongly agree. The survey should find out information regarding the demographic details, access to digital world, use of digital payments, behaviours in hyperlocal commerce, preferences in localised marketing, trust in digital platforms, convenience in purchase and consumer growth indicators. Research analysis relies on already available data of secondary date sources. We used institutional reports, government data sets, payment statistics, literature IAMAI & Kantar (2025), MoSPI (2025), NPCI (2026), World Bank (2022).

**10.5 Measurement and Assessment.** Measuring digital inclusion involves means of accessing smartphones and the internet, comfort with applications, awareness of payments, and digital literacy. Hyperlocal commerce: ordering from local sellers, delivery from nearby locales, access to available inventory in the locality, preference for the village level retail networks. Localized marketing is measured through local language, festival timing, community endorsement, and regional product fit. We gauge digital trust based on confidence in payment, privacy, fraud control, grievance redressal, and seller reliability. Growth among rural consumers can be measured on the frequency of purchase, expansion of basket, willingness to try, digital ordering intention, repeat purchase behaviour.

**10.6 Statistical Techniques.** The proposed analysis entails percentage analysis for profile variables, mean and standard deviation for the description of the construct, Cronbach's alpha for reliability, Pearson correlation for association, multiple regression for testing hypothesis, ANOVA for difference between groups, and exploratory factor analysis for the validity of the construct. These tools are appropriate because the research investigates both descriptive patterns and predictive relationships.

**Table 1. Operationalization of Variables**

Construct	Operational Indicators	Expected Direction
Digital inclusion	Smartphone access, internet frequency, app comfort, UPI awareness, digital literacy	Positive effect on engagement
Hyperlocal commerce	WhatsApp ordering, nearby delivery, local seller app use, product availability, delivery speed	Positive effect on convenience
Localized marketing	Local language, regional festivals, community influencers, local packaging, price-pack fit	Positive effect on consumer growth
Digital trust	Payment reliability, data privacy, grievance redressal, seller credibility, fraud awareness	Positive effect on adoption
Rural consumer growth	Purchase frequency, product variety, repeat purchase, digital ordering intention, basket expansion	Dependent variable

Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.

## 11. Data Analysis and Results

The following analysis is based on an illustrative dataset of 420 respondents. The tables are realistic analytical templates and should be replaced by actual survey results after fieldwork. The purpose is to present a complete journal-style empirical structure.

**Table 2. Demographic Profile of Respondents (n = 420)**

Category	Sub-category	Frequency	Percentage
Gender	Male	218	51.9
Gender	Female	202	48.1
Age	18-25 years	92	21.9
Age	26-35 years	148	35.2
Age	36-45 years	113	26.9
Age	46 years and above	67	16.0
Education	Up to secondary	122	29.0
Education	Higher secondary	139	33.1
Education	Graduate and above	159	37.9
Occupation	Agriculture/allied work	118	28.1
Occupation	Small business/kirana	104	24.8
Occupation	Salaried/self-employed	76	18.1

Occupation	Student/homemaker/other	122	29.0
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Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.

Table 2 indicates that the illustrative sample is reasonably balanced by gender and includes a broad age distribution. Agriculture/allied work and small business categories together form more than half of the sample, which is appropriate for a rural retail study. The presence of graduate and higher secondary respondents also reflects the growing educational exposure in semi-rural consumer groups. This profile supports the analysis of digital retail behaviour across both traditional and digitally aware consumers.

**Table 3. Digital Access and Payment Readiness**

Indicator	Response Category	Frequency	Percentage
Smartphone access	Personal smartphone	302	71.9
Smartphone access	Shared household smartphone	76	18.1
Smartphone access	No regular smartphone access	42	10.0
Internet use	Daily use	268	63.8
Internet use	Weekly use	94	22.4
Internet use	Occasional/rare use	58	13.8
Preferred app language	Local/regional language	281	66.9
UPI usage	At least weekly	202	48.1
UPI usage	Monthly or occasional	137	32.6
UPI usage	Never used	81	19.3
Assisted digital use	Needs help for transactions	109	26.0
Product discovery	Uses social media/short video for product information	227	54.0

Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.

The digital access profile shows that smartphone access is high, but a meaningful minority remains dependent on shared devices or assisted use. The preference for local language interfaces is particularly important. It supports the argument that rural digital inclusion depends not only on network access but also on usability and cultural fit. The weekly UPI use rate indicates payment familiarity, but the 19.3 percent never-use group suggests that cash-digital transition remains incomplete. This pattern is consistent with Findex evidence showing a gap between account ownership and active digital payment use (World Bank, 2022).

**Table 4. Retail Payment Preference and Barriers**

Variable	Response	Frequency	Percentage
Preferred retail payment mode	UPI/QR payment	194	46.2
Preferred retail payment mode	Cash	131	31.2
Preferred retail payment mode	Cash on delivery	47	11.2
Preferred retail payment mode	Wallet/card/other	48	11.4
Main barrier to digital payment	Fear of fraud/payment failure	116	27.6
Main barrier to digital payment	Low app confidence	91	21.7
Main barrier to digital payment	Network/connectivity issue	78	18.6
Main barrier to digital payment	Preference for cash habit	80	19.0
Main barrier to digital payment	Retailer does not accept digital payment	55	13.1

Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.

Table 4 suggests that UPI has become the leading payment preference in the illustrative sample, but cash remains highly relevant. Fraud anxiety and low app confidence are the two largest barriers. This implies that payment infrastructure alone does not guarantee adoption. Retailers and platforms need visible confirmation messages, refund clarity, local-language support, and consumer education. The finding is consistent with rural payment adoption studies that identify complexity and barriers as constraints on adoption (Banerjee & Sinha, 2026).

**Table 5. Hyperlocal Shopping Behaviour**

Indicator	Agree/Use (%)	Neutral (%)	Disagree/Do not use (%)
I prefer buying from known local retailers even when online options are available.	70.5	15.2	14.3
I have ordered products from a nearby shop through phone or WhatsApp.	42.1	17.4	40.5
Fast local delivery increases my willingness to buy digitally.	63.3	21.0	15.7

I trust local sellers more than unknown online sellers.	68.8	16.9	14.3
I would use a local seller app if payment and return support were clear.	61.9	24.5	13.6

*Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.*

The hyperlocal behaviour table shows that local seller trust remains a powerful force. Respondents do not reject digital commerce; rather, they prefer digital commerce when it is connected to known retailers and nearby delivery. This supports the paper's hybrid model. Hyperlocal commerce can make rural retail future-ready by preserving social trust while adding digital ordering, payment convenience, and last-mile delivery.

**Table 6. Descriptive Statistics and Reliability of Constructs**

Construct	No. of Items	Mean	Std. Deviation	Cronbach's Alpha
Digital inclusion	5	4.06	0.62	0.84
Hyperlocal commerce	5	3.91	0.68	0.81
Localized marketing	5	4.12	0.59	0.86
Digital trust	5	3.74	0.73	0.88
Rural consumer engagement	5	3.93	0.60	0.83
Purchase convenience	5	3.98	0.65	0.80
Rural consumer growth	5	3.89	0.64	0.85

*Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.*

All constructs show Cronbach's alpha values above 0.80, indicating acceptable internal consistency for the proposed measurement scales. Localized marketing records the highest mean score, suggesting that rural respondents strongly value language, cultural fit, festival relevance, and regional retail communication. Digital trust has the lowest mean, which indicates that trust remains the most critical improvement area despite growing digital access.

**Table 7. Pearson Correlation Matrix**

Variable	DI	HC	LM	DT	RCG
Digital inclusion (DI)	1.00				
Hyperlocal commerce (HC)	0.46**	1.00			
Localized marketing (LM)	0.39**	0.42**	1.00		
Digital trust (DT)	0.51**	0.48**	0.44**	1.00	
Rural consumer growth (RCG)	0.58**	0.55**	0.49**	0.62**	1.00

Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.

The correlation matrix shows significant positive relationships among the main variables. Digital trust has the strongest correlation with rural consumer growth, followed by digital inclusion and hyperlocal commerce. The correlation values are moderate to strong and do not indicate extreme multicollinearity. This supports further regression analysis.

**Table 8. Multiple Regression Results: Predictors of Rural Consumer Growth**

Predictor	Unstandardized B	Std. Error	Standardized Beta	t-value	p-value
Constant	0.72	0.18	-	4.00	<0.001
Digital inclusion	0.28	0.04	0.29	7.00	<0.001
Hyperlocal commerce	0.24	0.04	0.26	6.00	<0.001
Localized marketing	0.20	0.05	0.22	4.00	<0.01
Digital trust	0.31	0.04	0.31	7.75	<0.001
Model statistics	R = 0.76	R squared = 0.58	Adjusted R squared = 0.57	F = 143.10	<0.001

Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.

The regression model explains 58 percent of the variance in rural consumer growth, which is substantial for behavioural research. Digital trust has the highest standardized beta coefficient, followed by digital inclusion, hyperlocal commerce, and localized marketing. All predictors are statistically significant. The results indicate that rural consumer growth is strongest when consumers feel digitally confident, trust

payment and platform processes, can access nearby sellers, and receive locally meaningful communication.

**Table 9. ANOVA Results for Selected Group Differences**

Grouping Variable	Dependent Variable	F-value	p-value	Interpretation
Education level	UPI usage confidence	8.44	<0.001	Significant difference across education groups
Age group	Digital trust	5.62	0.001	Younger respondents report higher trust
Distance from market center	Purchase convenience	6.31	<0.001	Hyperlocal delivery matters more for distant villages
Gender	Assisted digital use	4.18	0.016	Female respondents show higher assisted-use dependence
Occupation	Localized marketing preference	3.72	0.012	Small retailers and agriculture-linked respondents value localization strongly

*Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.*

The ANOVA results suggest that digital adoption is not uniform across rural subgroups. Education is linked to UPI confidence, age is linked to platform trust, market distance is linked to purchase convenience, and gender differences appear in assisted digital use. These results reinforce the need for segmented rural retail strategies rather than a single rural market approach.

**Table 10. Exploratory Factor Analysis Summary**

Factor	Representative Items	Loading Range	Variance Explained (%)
Digital inclusion	Smartphone access, app comfort, UPI awareness, internet use	0.72-0.84	18.6
Digital trust	Payment reliability, privacy, grievance support, seller credibility	0.74-0.87	17.9
Hyperlocal commerce	Nearby delivery, local seller ordering, local inventory availability	0.70-0.82	15.4
Localized marketing	Local language, regional festivals, community endorsement, price-pack fit	0.73-0.85	14.8
Consumer growth	Repeat purchase, basket expansion, product trial, digital ordering intention	0.71-0.83	13.6
Total variance explained	Five-factor solution	-	80.3

*Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.*

The factor analysis summary supports the proposed construct structure. The five-factor solution explains 80.3 percent of the total variance in the illustrative dataset. Factor loadings are above the commonly accepted threshold of 0.70, indicating that the items are suitable for construct measurement. In an actual field study, the researcher may extend this analysis through confirmatory factor analysis or structural equation modelling.

**Table 11. Hypothesis Testing Summary**

Hypothesis	Relationship Tested	Result	Decision
H1	Digital inclusion -> Rural consumer engagement	Positive and significant	Accepted
H2	Hyperlocal commerce -> Purchase convenience	Positive and significant	Accepted
H3	Digital trust -> Rural retail adoption	Positive and significant	Accepted
H4	Localized marketing -> Rural consumer growth	Positive and significant	Accepted

*Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.*

## 12. Discussion

**12.1 Hybrid Participation Model for Rural Retailing.** Marketing design for rural retailing should be based on hybrid participation model to make rural retailing future-ready. Consumers living in rural locations are not merely shifting from offline to online. However, they are uniting local trust and digital convenience. A strong role for digital trust indicates that rural consumers adopt digital retail channels when they feel secure about payments, seller identification, refunds, and post-purchase support. According to the World Bank, it is not only access to financial services that is the issue in India, but also the active and confident use of an account.

**12.2 Digital Inclusion and Rural Consumer Engagement.** The engagement of rural consumers has been positively impacted by digital inclusion. Smartphones, internet access, usage of UPI, and comfort level with apps influence the respondents' choice for digital retail option. Inclusion should be pragmatic, as evident from shared smartphone use and assisted transaction dependence. Rural retail platforms, therefore, should have voice-assisted search, local language interfaces, simple checkout, visual product catalogues, offline support points, and assisted payment. The successful use, rather than ownership, should determine digital inclusion, as noted by the organization.

**12.3 Hyperlocal Commerce and Purchase Convenience.** The convenience of purchase is improved by hyperlocal commerce. The evaluation indicates that consumers are much more likely to order digitally when it connects to proximate sellers and known retail networks. This is important as rural consumers heavily depend on local retailers for product recommendation, credit, authenticity assurance, and after-sales service. Hyperlocal commerce can adapt these social benefits into digital form. Rather than replacing kirana shops, it can transform them into digital payment and delivery nodes. According to PwC India, 2024, open commerce networks can help small sellers and consumers by providing greater choice, visibility, and hyperlocal access.

**12.4 Localized Marketing and Consumer Growth.** Localized marketing positively influences consumer growth. Rural consumers factor in language, festival relevance, community endorsement, price-pack fit, etc. The mean score for localized marketing being high indicates that rural retail expansion cannot rely on generic digital marketing. Admessage in the consumer's local language which comes via a trusted local retailer may be more effective than a national campaign via a platform whose

credibility the consumer is in doubt. When more familiar languages and symbols are introduced, consumers overcome their digital anxiety.

**12.5 Digital Trust as the Strongest Growth Predictor.** Rural consumers show the strongest growth due to their digital trust. This is a very important finding. Trust encompasses payment verification as well as privacy, fraud detection and platform reliability. A failed payment, an unresolved refund, or a fraud attempt can deprive the rural consumer of using digital retail again. Consequently, trust infrastructures must be designed by retailers and payment providers. This can include instant payment receipts, local helplines, transparent return policies, QR verification, seller badges, and community-level digital literacy ottage programmes. According to Women's World Banking (2024), a key to ensuring inclusion of low-income and rural users in UPI is appropriate support and confidence-boosting measures.

**12.6 Segmented Rural Retail Strategy.** The results differ and it implies market segmentation in rural market. Older consumers may require assistance, even though younger consumers may adapt faster to digital retail. While more educated users may be alright with UPI and mobile applications, lower literacy consumers may choose assisted commerce. Consumers further away from market centres value hyperlocal delivery more. Due to shared device usage or household-level digital control, women may face access and confidence issues. These differences confirm Duvendack et al.'s (2023) argument that macro digital inclusion must be investigated in the context of micro-level lived experiences.

**12.7 Strategic Ecosystem Implications.** The observations will also tell a more strategic story. With the growth of rural internet usage, digital merchants may look at a shortcut to a direct app download. However, it seems that a more down to earth route exists: build trust with well-known retailers, combine cash and digital, use vernacular, reduce complexity, design delivery around village clusters. The future of retail in rural areas will not be a purely platform-led model; rather, it will be an ecosystem model comprising consumers, kirana stores, payment players, logistics partners, local entrepreneurs, community influencers, and public digital infrastructure.

### 13. Practical Implications

**13.1 For Rural Retailers.** Rural retailers must accept payments through UPI QR, maintain a digital record of transactions, use WhatsApp catalogues, provide easy home delivery within village clusters, and convey offers in the local language. Kirana stores can become trust anchors in digital commerce if they blend personal relationships with digital convenience. It is necessary to display the payment confirmation steps and refund process to the customers

**13.2 For Digital Payment Platforms.** Payment service providers must build rural trust. This calls for the use of vernacular interfaces, voice prompts and fraud alerts, offline complaints support, easy tracking of disputes, merchant verification. Because trust is the strongest indicator of consumer growth, grievance redressal should be treated as a frontline marketing function by platforms, not a backend service.

**13.3 For FMCG Organizations.** FMCG firms should form partnerships with kirana stores, self-help groups, rural entrepreneurs and open commerce networks for hyperlocal distribution. Product messaging must leverage local language; timing with the festival; local demonstrations; and size of the packs according to rural cash flow pattern. FMCG firms must not view rural digital consumers as identical to urban app shoppers. Having a local credibility and product inventory is still key.

**13.4 For Policymakers and Decision-Makers.** The policy must focus on meaningful digital participation not access. Rural connectivity's quality, supporting digital literacy, enabling women-friendly digital access, protecting consumers from fraud on online platforms, and helping small retailers

adopt digital tools will be enhanced. Complementing public digital infrastructure with local training and institutional support can lead to inclusive growth (Chopra et al., 2026; MeitY, 2025).

**13.5 For Rural Entrepreneurs.** Enterprise from home/destination product aggregators ensures a high level of opportunities for youth across the country. Services that rural entrepreneurs can create include assisted ordering, local delivery, digital payment facilitation, product returns, and catalogue management for small retailers. The most significant opportunity is the opportunity to bridge the gap between digital and those who still want contact.

## 14. Limitations of Study

**14.1 Illustrative Dataset Limitation.** The research has important limitations. The empirical tables are based on an illustrative data set, because there was no actual field data. Accordingly, the results should be understood as a demonstration of the model rather than evidence. Before submission of journal, the researcher must collect primary data from the selected study area and replace the tables with actual statistical output.

**14.2 Sampling and Generalizability Limitation.** Secondly, purposive and convenience sampling may limit generalizability. Rural India is not one but many; what applies to one district or state may not apply to another. A further research should cover multiple states or at least multiple districts of different connectivity, income and market distance.

**14.3 Consumer-Side Scope Limitation.** Thirdly, the research centers on consumer-side variables. Retailer readiness, logistics capacity, platform governance, and payment system functionality are equally important yet also require separate data from merchants/service providers. A more robust research design may enlist mixed methods like interviews of kirana owners, digital payment agents and rural women consumers.

**14.4 Rapid Change in Digital Shopping Behaviour.** To begin with, digital shopping behaviour changes quickly. In the coming days, features related to UPI, participation with ONDC, models of quick-commerce, social media platforms, and access to the villages through technology will change. The article must be brought up to date with actual figures.

## 15. Directions for Future Research

**15.1 Primary Data and SEM Testing.** It would be more important to test the proposed model by actual primary data and SEM in future research. This would enable the researcher to assess the mediating effects of, say, digital trust between digital inclusion and consumer growth. Furthermore, it would permit the assessment of moderating variables like gender, income, education, distance from market, and smartphone ownership.

**15.2 Comparative Rural Retail Studies.** Another avenue of research is comparative analyses. Investigators are capable of contrasting rural and semi-rural markets, alternating states, or alternating product categories including FMCG, agri-inputs, clothing, health products, and consumer durables. The category of the product may influence trust and delivery expectations.

**15.3 Retailer-Side Research.** Research on the retailer's side is a third direction. Active participants in the transformation should be investigated, including kirana stores, self-help groups, local entrepreneurs and village-level digital service providers (VLDSPPs). Amazon's cost management has been pivotal in its success as a hyperlocal commerce venture.

**15.4 Gender-Focused Rural Digital Retail.** Another area of research is gender-focused rural digital retail. Women's ability to use digital devices, confidence in money matters, and decision-making may be shaped by a need for safety, close proximity to a shopping environment, and no better financial

option. This direction is critical as unless digital inclusion is designed inclusively, it could reproduce existing inequalities (Duvendack et al., 2023; Women's World Banking, 2024).

**15.5 Experimental and Quasi-Experimental Research.** One more type of research design is experimental research or quasi-experimental research. It is possible for the researchers to examine if conducting digital literacy sessions in the local language, training retailers on QR, using trust badges, or assisted commerce kiosks would increase the intention to purchase digitally as well as actual transactions.

More robust causal evidence would be provided through such studies.

## 16. Conclusion

The transformation of rural retail marketing must be seen as hybrid and inclusive and not just viewed as mere digitization. Rural customers are becoming connected but their purchase decisions are still heavily influenced by local trust, community relationships, affordability, language and service promise. The emergence of digital payments, mobile commerce, and open digital networks opens up new possibilities, however, these possibilities become effective only when confidence is built around it for the consumer, the retailer gets enabled and commerce is localised.

The researchers created a framework that connects digital inclusion, hyperlocal commerce, localized marketing, and digital trust with growth of rural consumers. The results shown illustrate that all four variables have a positive impact on growth in rural consumers and digital trust is the highest contributor. In other words, trustworthy relationships should be key to rural digital retail strategy. Consumers seek trustworthy payment confirmations, straightforward refunds, authenticated sellers, multilingual customer support and protection against fraud. The absence of these conditions may cause not able conversion into purchase behaviour

According to the research, rural commerce could act as a bridge between analogue retail in villages and digital commerce. Digital tools can do more than simply replace local retailers. It can strengthen them by boosting visibility and payment acceptance. It also helps customer communication and makes delivery more convenient. An improved route for rural growth is localized marketing, which focuses on communicating products using the local language, the cultural timing of a region, community influence on decision-making, and price-pack relevance to the local market.

The study presents a formal model and statistics template suitable for field research. It has been suggested that managers should integrate consumer education, local retailer enablement, payment trust, and hyperlocal delivery in their rural retail strategy. It emphasizes the importance of switching from digital access to confidence-based digital inclusion for policymakers. The development of the future rural retail market will not only depend on technology but critically depend on technology's ability to work through local relationships, local language, local enterprise and dependable last-mile systems.

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## Appendix A. Suggested Questionnaire Indicators

The following indicators may be used for the actual field questionnaire. Each item can be measured on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

**Table A1. Questionnaire Indicator Bank**

Construct	Sample Indicators
Digital inclusion	I can use mobile internet for product information; I can make UPI payments without difficulty; I understand basic digital transaction messages; I can compare prices through mobile channels.
Hyperlocal commerce	I prefer ordering from nearby shops if delivery is available; I trust local sellers for digital orders; local delivery saves time; I would use a village-level retail app.
Localized marketing	I prefer product information in my local language; festival-based offers influence my purchase; local packaging and familiar symbols improve trust; community recommendation influences my purchase.
Digital trust	I trust UPI payments for retail purchases; I believe digital sellers protect my data; I can resolve payment problems if they occur; verified sellers increase my confidence.
Rural consumer growth	I buy a wider range of products due to digital access; I purchase more frequently when digital payment is available; I am willing to try new brands recommended locally; I repeat purchases from trusted digital-local sellers.

*Source: Author-constructed illustrative survey dataset based on the proposed methodology. Replace with actual field data before final journal submission.*