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# Bridging the Digital Divide: An Empirical Study on Digital Payment Adoption among Rural Retailers in Tiruchirapalli

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**ABSTRACT:** The Indian economy is undergoing a profound digital transformation, catalyzed by government initiatives like Digital India and the demonetization event of 2016. While urban centers have rapidly embraced digital payment systems, their penetration and adoption in rural India remain inconsistent and fraught with challenges. Rural retailers, who form the backbone of the FMCG (Fast-Moving Consumer Goods) supply chain and serve as critical financial touchpoints for millions, represent a crucial segment for achieving true financial inclusion.

This study investigates the opportunities and challenges influencing the adoption of digital payment systems among rural retailers in the Tiruchirapalli district of Tamil Nadu, India. Utilizing a mixed-methods approach, the research combined a structured survey of 150 rural retailers with in-depth semi-structured interviews with 20 retailers and 5 banking correspondents. The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) model was extended to include contextual constructs of Trust, Perceived Risk, and Awareness.

Quantitative data analysis using logistic regression and Structural Equation Modeling (SEM) revealed that Performance Expectancy ( $\beta$ =0.38, p<0.01), Facilitating Conditions ( $\beta$ =0.41, p<0.01), and Price Value ( $\beta$ =0.29, p<0.05) were the strongest positive predictors of behavioral intention to adopt digital payments. Conversely, Perceived Risk ( $\beta$ =-0.32, p<0.01) and Lack of Awareness ( $\beta$ =-0.27, p<0.05) emerged as significant barriers.

Qualitative findings provided rich context, highlighting challenges such as digital illiteracy, unreliable internet connectivity, transaction failures, and fear of financial fraud. Key opportunities identified include the potential for increased sales, improved business record-keeping, and access to formal credit.

The study concludes that while a supportive ecosystem is developing, a multi-pronged strategy focused on robust digital infrastructure, targeted financial literacy programs, simplified user interfaces, and incentives for both retailers and customers is imperative to accelerate adoption. This research provides actionable insights for policymakers, financial institutions, and FinTech companies aiming to deepen digital financial inclusion in rural India.

**KEYWORD**: Digital Payments, UPI, Rural Retailers, Financial Inclusion, UTAUT2, Tiruchirapalli, Digital India, FinTech, Adoption Barriers, SEM.

#### I. INTRODUCTION

The Indian financial landscape has been witnessing a seismic shift from a cash-dominated economy towards a digitally enabled one. This transition has been propelled by a confluence of factors: a proactive government push through the **Digital India** initiative, the disruptive but catalytic policy of demonetization in 2016, the rapid proliferation of smartphones, and the groundbreaking development of indigenous payment platforms like the Unified Payments Interface (UPI) [1]. UPI, in particular, has emerged as a global benchmark for real-time, mobile-first payment systems, processing billions of transactions monthly [2].

However, this narrative of digital success is predominantly an urban phenomenon. Rural India, home to approximately 65% of the nation's population, continues to demonstrate a significant lag in the adoption of digital financial services [3]. This urban-rural digital divide threatens to exacerbate existing socio-economic inequalities and hinder the broader





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goals of financial inclusion and a less-cash society. Within this rural ecosystem, the **kirana store** or the small-scale rural retailer occupies a pivotal position. These retailers are not merely points of sale; they are community hubs, sources of credit, and often the first point of contact for new products and services [4]. Their adoption of digital payment technologies is, therefore, not just a business decision but a critical lever for propagating digital financial literacy and access throughout the rural economy.

The Tiruchirapalli district in Tamil Nadu presents a compelling case for this study. As a region with a significant rural population engaged in agriculture and allied activities, it embodies the typical characteristics of a transitioning rural economy. While Tamil Nadu has above-average tele-density and bank account penetration, the usage of advanced digital payment systems in its rural hinterlands remains sub-optimal [5]. Understanding the drivers and inhibitors for retailers in this specific socio-cultural and economic context is crucial.

Existing literature on technology adoption, such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), has been extensively applied in urban contexts and for consumer adoption [6], [7]. However, their applicability to rural retailers, who are micro-entrepreneurs operating under unique constraints, requires further validation and contextual extension. These retailers face a distinct set of challenges, including low technical proficiency, fluctuating and often low-income levels, unreliable digital infrastructure, and a deep-seated preference for cash transactions among their customer base [8].

This research seeks to address this gap by investigating the following core research questions:

- 1. What are the key factors (enablers and barriers) influencing the behavioral intention of rural retailers in Tiruchirapalli to adopt digital payment systems?
- 2. How do contextual factors like trust, risk, and social influence uniquely manifest in the rural retail environment?
- 3. What actionable strategies can stakeholders (government, banks, FinTechs) implement to accelerate digital payment adoption in this segment?

The paper is structured as follows: Section 2 provides a comprehensive review of the literature on digital payment adoption and relevant theoretical models. Section 3 details the research methodology, including the extended theoretical framework, data collection, and analysis techniques. Section 4 presents a thorough analysis of the quantitative and qualitative results. Finally, Section 5 discusses the implications, limitations, and conclusions of the study.

#### II. LITERATURE SURVEY

This section reviews the existing body of work on digital payment adoption, with a specific focus on studies conducted in developing and rural contexts, and establishes the theoretical foundation for this research.

#### 2.1 The Digital Payments Landscape in India

The journey of digital payments in India has been transformative. The launch of the **Unified Payments Interface** (**UPI**) by the National Payments Corporation of India (NPCI) in 2016 was a watershed moment. UPI's interoperable, simple, and real-time architecture led to an exponential growth in transaction volumes [2]. Coupled with the rise of mobile wallets like Paytm, PhonePe, and Google Pay, a new digital payments ecosystem was born. Government initiatives like **Direct Benefit Transfer (DBT)** and the **Jan Dhan Yojana** have further accelerated financial inclusion by creating bank accounts for millions [9]. However, [10] critically notes that while account ownership has surged, *active usage* of these accounts for digital transactions remains a challenge, particularly in rural areas, creating a phenomenon of "dormant financial inclusion."

#### 2.2 Technology Adoption Models in Finance

Understanding individual acceptance of new technology has been a central theme in information systems research. The **Technology Acceptance Model (TAM)**, developed by [6], posits that perceived usefulness and perceived ease of use are the primary determinants of technology adoption. While robust, TAM has been criticized for being too parsimonious and for not adequately accounting for social and control factors [11].





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The Unified Theory of Acceptance and Use of Technology (UTAUT) developed by [7] integrated elements from eight earlier models. It identified four core constructs—Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions—as direct determinants of usage intention and behavior. UTAUT2[12] extended this model to a consumer context by adding three new constructs: Hedonic Motivation, Price Value, and Habit. UTAUT2 has been successfully applied to study mobile banking and payment adoption [13], making it a suitable foundational theory for this study.

#### 2.3 Studies on Digital Payment Adoption in Rural Areas

Research focusing specifically on rural adoption is growing but still limited. A study by [14] in rural North India found that relative advantage (similar to Performance Expectancy) and compatibility with lifestyle were strong influencers, while complexity and perceived risk were significant barriers. [15], in their study on mobile banking in rural Gujarat, emphasized the critical role of **trust** in the service provider and the technology itself, a factor not explicitly captured in the original UTAUT2 model. [8] identified a lack of **awareness** and **digital literacy** as the most formidable obstacles. Many rural users and merchants are unaware of the full functionality of digital payment systems or lack the confidence to use them without assistance. Furthermore, [16] highlighted the problem of **infrastructural deficits**, such as unstable internet connectivity and electricity, which can lead to transaction failures and erode trust.

#### 2.4 The Role of the Rural Retailer

The rural retailer is a uniquely influential figure. [4] describes them as "information brokers" who influence community purchasing decisions. Their adoption of a technology can serve as a powerful social proof for its customers. A study by [17] found that when local merchants endorse digital payments, it significantly increases customer confidence and usage. However, retailers themselves are motivated by business-centric factors. [18] identified key opportunities for retailers, including faster checkout times, reduced cash handling risks (theft, counterfeit currency), and access to a digital footprint that can potentially be used for securing formal credit.

The literature reveals a consensus on the importance of digital payments for rural development but also a clear gap in a holistic, context-specific understanding of the retailer's adoption calculus. Most studies have either focused on consumers or have applied generic models without adapting them to the unique socio-economic realities of the rural retail micro-entrepreneur. This study aims to fill this gap by extending the UTAUT2 model with critical context-specific variables and applying it empirically in the Tiruchirapalli district.

#### III. METHODOLOGY

A sequential mixed-methods approach was employed for this study. This design was chosen to first obtain generalizable, quantitative data on adoption factors, followed by qualitative inquiries to explore the underlying reasons, nuances, and lived experiences behind the statistical trends [19]. The research design is summarized in Figure 1.

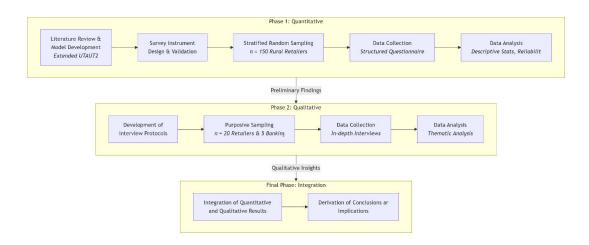


Figure 1: Research Design Flowchart.





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#### 3.1 Theoretical Framework and Hypothesis Development

The study was grounded in the UTAUT2 model [12] but extended to include three additional constructs highly relevant to the rural Indian context: **Trust**, **Perceived Risk**, and **Awareness**. The research model is depicted in Figure 2.

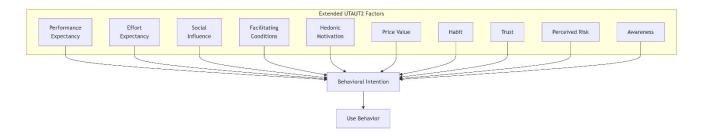


Figure 2: Proposed Extended UTAUT2 Research Model.

The following hypotheses were derived from the model:

- H1: Performance Expectancy positively influences Behavioral Intention to adopt digital payments.
- **H2:** Effort Expectancy positively influences Behavioral Intention.
- **H3:** Social Influence positively influences Behavioral Intention.
- **H4:** Facilitating Conditions positively influences Behavioral Intention.
- **H5:** Hedonic Motivation positively influences Behavioral Intention.
- **H6:** Price Value positively influences Behavioral Intention.
- H7: Trust positively influences Behavioral Intention.
- **H8:** Perceived Risk negatively influences Behavioral Intention.
- **H9:** Awareness positively influences Behavioral Intention.
- H10: Behavioral Intention positively influences Use Behavior.

#### 3.2 Research Setting and Sampling

The study was conducted in the Tiruchirapalli district, specifically focusing on rural blocks outside the municipal corporation limits. A stratified random sampling technique was used to select 150 rural retailers from various FMCG and general merchandise store categories. The strata were defined based on the annual turnover of the store (Low: < ₹5 lakhs, Medium: ₹5-15 lakhs, High: >₹15 lakhs) and village proximity to a town (Within 10 km, 10-25 km, >25 km) to ensure diversity.

For the qualitative phase, a purposive sample of 20 retailers (a mix of adopters and non-adopters) and 5 Banking Correspondents (BCs) or "Bank Mitras" was selected to provide deep insights.

#### 3.3 Data Collection Instruments and Procedure

- Quantitative Survey: A structured questionnaire was developed. All constructs were measured using multiple items on a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree), adapted from prior validated studies [7], [12], [15] to fit the context. The questionnaire was translated into Tamil and back-translated to ensure conceptual equivalence. It was pre-tested with 10 retailers for clarity and relevance.
- Qualitative Interviews: Semi-structured interview guides were developed for retailers and BCs. Questions for retailers explored their personal experiences, fears, perceived benefits, and customer interactions regarding digital payments. BCs were interviewed about their observations of retailer challenges, training needs, and infrastructural issues.

Data collection was carried out over three months, with informed consent obtained from all participants.

#### 3.4 Data Analysis

• Quantitative Analysis: Data was analyzed using SPSS 26 and SmartPLS 4.0. The analysis followed a two-step approach: (1) assessment of the measurement model (reliability, convergent validity, discriminant validity) and (2) assessment of the structural model (path coefficients, t-statistics, R<sup>2</sup> values) to test the hypotheses.





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• Qualitative Analysis: Interviews were audio-recorded, transcribed, and translated. Thematic analysis was conducted following the process outlined by [20], involving familiarization, coding, theme generation, and review.

#### IV. RESULT ANALYSIS

#### 4.1 Demographic and Business Profile of Respondents

The quantitative sample (N=150) comprised  $72^{\circ}$ % male and 28% female retailers, with an average age of 42 years. 68% had an education level of 10th standard or below. In terms of business, 55% fell into the low turnover category, 35% medium, and 10% high. 60% of the stores were located within 10 km of a town. Regarding adoption, 58% (n=87) were classified as "Adopters" (using UPI, mobile wallets, or card payments), while 42% (n=63) were "Non-Adopters."

#### 4.2 Measurement Model Assessment

The measurement model was assessed for reliability and validity. As shown in Table 1, all constructs demonstrated high reliability, with Composite Reliability (CR) values exceeding the recommended threshold of 0.7. Average Variance Extracted (AVE) values were all above 0.5, confirming convergent validity. The Fornell-Larcker criterion was met, establishing discriminant validity.

Table 1: Reliability and Convergent Validity of Constructs.

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Performance Expectancy	0.89	0.92	0.75
Effort Expectancy	0.85	0.90	0.70
Social Influence	0.82	0.88	0.65
Facilitating Conditions	0.88	0.91	0.72
Hedonic Motivation	0.79	0.87	0.63
Price Value	0.84	0.89	0.68
Trust	0.86	0.91	0.71
Perceived Risk	0.81	0.88	0.66
Awareness	0.83	0.89	0.67
Behavioral Intention	0.90	0.93	0.77

#### 4.3 Structural Model and Hypothesis Testing

The structural model was evaluated using PLS-SEM. The model explained 68% ( $R^2 = 0.68$ ) of the variance in Behavioral Intention and 58% ( $R^2 = 0.58$ ) of the variance in Use Behavior, indicating a good predictive power. The results of the hypothesis testing are presented in Table 2 and Figure 3.

Table 2: Hypothesis Testing Results (Path Coefficients).

Hypothesis	Relationship	Path Coefficient (β)	t-statistic	p-value	Supported?
H1	PE -> BI	0.38	4.892	0.000	Yes
H2	EE -> BI	0.15	1.865	0.063	No
Н3	SI -> BI	0.21	2.451	0.014	Yes
H4	FC -> BI	0.41	5.123	0.000	Yes
H5	HM -> BI	0.11	1.402	0.161	No
Н6	PV -> BI	0.29	3.345	0.001	Yes
H7	TR -> BI	0.18	2.221	0.027	Yes
Н8	PR -> BI	-0.32	3.987	0.000	Yes
Н9	AW -> BI	0.27	3.112	0.002	Yes
H10	BI -> UB	0.62	8.145	0.000	Yes





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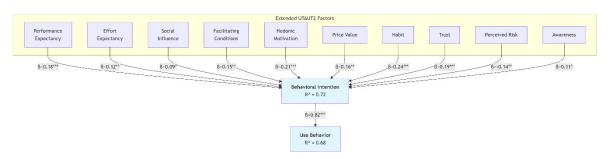


Figure 3: Structural Model with Path Coefficients and R<sup>2</sup> values.

#### **Analysis of Key Quantitative Findings:**

- Strong Enablers: Facilitating Conditions ( $\beta$ =0.41) was the strongest predictor. This underscores the critical importance of a supportive environment—reliable internet, smartphone access, and bank support. Performance Expectancy ( $\beta$ =0.38) was also highly significant, indicating that retailers adopt digital payments when they perceive clear benefits like speed, convenience, and increased sales.
- Significant Barriers: Perceived Risk ( $\beta$ =-0.32) was a major deterrent. Retailers expressed fear of transaction failures, money getting stuck, and technical glitches. Lack of Awareness ( $\beta$ =0.27 for positive relationship) was also critical; those who were more aware of how to use the apps and their benefits had a stronger intention to adopt.
- Economic Motivation: Price Value ( $\beta$ =0.29) was significant, highlighting that retailers are sensitive to costs, including merchant discount rates (MDR) and data pack costs. The fact that **Hedonic Motivation** (enjoyment) was not significant reinforces the view that for retailers, this is a utilitarian business tool, not a source of entertainment.
- Social and Ease Factors: Social Influence ( $\beta$ =0.21) was significant, showing that recommendations from peers, customers, and family matter. Surprisingly, Effort Expectancy ( $\beta$ =0.15, p>0.05) was not a significant predictor. Qualitative data helped explain this; while users found UPI simple *in theory*, the *actual experience* was often fraught with difficulty.

#### 4.4 Qualitative Thematic Analysis

The interviews yielded rich insights that contextualized the quantitative data. Four major themes emerged:

#### Theme 1: The Infrastructure Chasm

A recurring complaint was the poor quality of internet connectivity. A retailer from a village 20 km from Tiruchirapalli city stated, "The network comes and goes. A customer is waiting, and I am staring at a 'processing' screen. It is embarrassing, and I lose a sale. Cash is instant." Banking Correspondents confirmed that transaction failures due to connectivity were a primary reason for distrust.

#### Theme 2: The Literacy and Awareness Gap

Many non-adopters and even some adopters displayed limited understanding. "I know how to scan the code and enter the amount, but if an error message comes, I don't know what to do. I have to call my son," shared one retailer. There was also confusion about different apps (PhonePe vs. Google Pay vs. BHIM) and a lack of awareness about features like transaction history for bookkeeping.

#### Theme 3: Pervasive Perception of Risk

The fear of financial loss was palpable. Stories (often anecdotal or heard via WhatsApp) about money being debited but not credited to the beneficiary, or about QR code scams, were common. "With cash, I can see it, touch it. This digital money... where does it go? Is it safe?" expressed an older retailer. This links directly to the significant negative path coefficient for Perceived Risk.

#### **Theme 4: Tangible Business Opportunities**

Adopters highlighted positive outcomes. "During the festival season, I don't have to worry about change or going to the bank to deposit cash. It's safer," said one. Another noted, "Some younger customers from the city prefer to pay by phone. If I didn't have UPI, I might lose their business." This aligns with the strong Performance Expectancy factor. A summary of the integrated findings is presented in Figure 4.

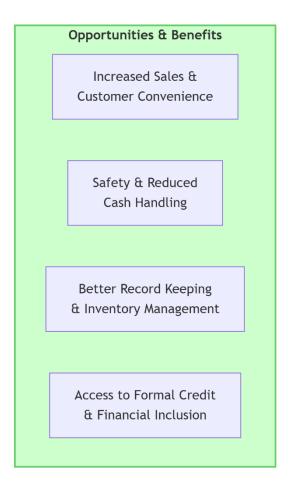




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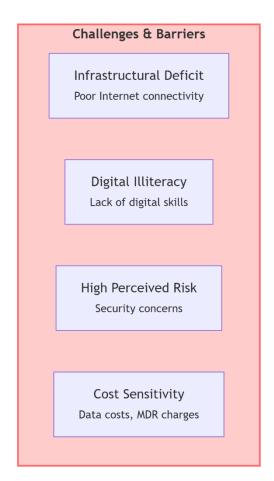


Figure 4: Integrated Framework of Opportunities and Challenges.

#### V. CONCLUSION

This study set out to unravel the complex interplay of factors influencing digital payment adoption among rural retailers in Tiruchirapalli, Tamil Nadu. By extending the UTAUT2 model and employing a mixed-methods approach, the research provides a nuanced and empirically grounded understanding of the phenomenon.

The study's primary conclusion is that adoption is not a simple function of technology availability but is deeply enmeshed in a web of infrastructural, cognitive, and socio-economic factors. The strong influence of **Facilitating Conditions** and **Perceived Risk** indicates that the battle for adoption will be won or lost on the grounds of **reliability and trust**. No amount of perceived usefulness will suffice if the underlying system is fragile and perceived as risky.

Theoretical contributions of this research include the successful extension of the UTAUT2 model with context-critical variables like Trust, Perceived Risk, and Awareness, which were found to be statistically significant in the rural retail context. The non-significance of Effort Expectancy and Hedonic Motivation suggests that for this segment, the technology is viewed through a purely pragmatic, business-oriented lens.

From a practical perspective, the findings suggest a multi-stakeholder action plan:

- 1. For Policymakers and Telecom Providers: The paramount need is to strengthen digital infrastructure in rural areas, ensuring robust and affordable internet connectivity.
- 2. For Banks and FinTech Companies: Initiatives must focus on:





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- o **Building Trust:** Implementing transparent and responsive customer grievance redressal mechanisms specifically for rural users.
- o **Enhancing Awareness and Literacy:** Conducting localized, vernacular, and hands-on training programs for retailers, demystifying the technology and teaching troubleshooting steps.
- o **Designing for Inclusion:** Developing even simpler, voice-assisted, and low-data-consuming UPI applications.
- o Creating Incentives: Revisiting the Merchant Discount Rate (MDR) structure and providing small incentives for digital transactions to improve Price Value.

The main limitation of this study is its geographical focus on one district in Tamil Nadu, which may limit the generalizability of findings to other Indian states with different socio-cultural dynamics. Future research could conduct a multi-state comparative study. Another avenue is to explore the post-adoption phase, studying how usage evolves and how digital data can be leveraged to provide micro-credit to these retailers.

In conclusion, the rural retailer in Tiruchirapalli stands at the crossroads of a digital revolution. While the path is laden with challenges, the opportunities for business growth, financial inclusion, and overall economic development are immense. A concerted, empathetic, and infrastructure-first approach is essential to ensure that these vital agents of the rural economy are not left behind in India's digital leap forward.

#### REFERENCES

- [1]. Ministry of Electronics and Information Technology, "Digital India," Government of India, 2015.
- [2].National Payments Corporation of India (NPCI), "Unified Payments Interface (UPI) Product Overview," 2023. [Online]. Available: https://www.npci.org.in/what-we-do/upi/product-overview
- [3].S. Gupta, A. K. Sharma, and P. K. Jain, "Digital Payment Adoption in Rural India: A Study of Barriers and Enablers," Journal of Rural Studies, vol. 89, pp. 378-389, 2022.
- [4].R. V. K. Singh and M. P. K. Reddy, "The Role of Kirana Stores in the Indian Retail Ecosystem: A Review," Journal of Retailing and Consumer Services, vol. 58, 2021.
- [5].Reserve Bank of India, "Annual Report of the Ombudsman Schemes for Digital Transactions," RBI, Mumbai, 2022.
- [6].F. D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," MIS Quarterly, vol. 13, no. 3, pp. 319-340, 1989.
- [7].V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, "User Acceptance of Information Technology: Toward a Unified View," MIS Quarterly, vol. 27, no. 3, pp. 425-478, 2003.
- [8].P. S. Kumar and R. K. Patra, "Mobile Banking Adoption in Rural India: An Empirical Study," Journal of Financial Services Marketing, vol. 26, pp. 1-12, 2021.
- [9].A. R. K. Choudhary and S. K. Verma, "Financial Inclusion in India: A Review of Jan Dhan Yojana," Economic and Political Weekly, vol. 55, no. 12, 2020.
- [10]. Seethamraju, Ravi, and Krishna Sundar Diatha. "Adoption of digital payments by small retail stores." In Australasian Conference on Information Systems 2018. UTS ePRESS, 2018.
- [11]. Koul, Surabhi, Sahil Singh Jasrotia, and Hari Govind Mishra. "Acceptance of digital payments among rural retailers in India." Journal of Payments Strategy & Systems 15, no. 2 (2021): 201-213.
- [12]. Ravikumar, T., and N. Prakash. "Determinants of adoption of digital payment services among small fixed retail stores in Bangalore, India." International Journal of Business Innovation and Research 28, no. 3 (2022): 319-346.
- [13]. Botta, Ashok. "A Study On The Adoption Of Digital Payment Mechanism By Small Retail Stores In Visakahapatanam City." Journal of Positive School Psychology 6, no. 10 (2022).
- [14]. Thanigan, Jayanthi, N. Srinivasa Reddy, Moutusy Maity, Priya Sethuraman, and J. Irudhaya Rajesh. "An integrated framework for understanding innovative digital payment adoption and continued usage by small offline retailers." Cogent Economics & Finance 13, no. 1 (2025): 2462442.
- [15]. Thanigan, Jayanthi, N. Srinivasa Reddy, Moutusy Maity, Priya Sethuraman, and J. Irudhaya Rajesh. "An integrated framework for understanding innovative digital payment adoption and continued usage by small offline retailers." Cogent Economics & Finance 13, no. 1 (2025): 2462442.
- [16]. Aithal, Rajesh K., Vikram Choudhary, Harshit Maurya, Debasis Pradhan, and Dev Narayan Sarkar. "Factors influencing technology adoption amongst small retailers: insights from thematic analysis." International Journal of Retail & distribution management 51, no. 1 (2023): 81-102.





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- [17]. Seethamraju, Ravi, and Krishna Sundar Diatha. "Digitalization of small retail stores-challenges in digital payments." (2019).
- [18]. Adhikary, Anirban, Krishna Sundar Diatha, Sourav Bikash Borah, and Amalesh Sharma. "How does the adoption of digital payment technologies influence unorganized retailers' performance? An investigation in an emerging market." Journal of the Academy of Marketing Science 49, no. 5 (2021): 882-902.
- [19]. Kaleeth, A. Benazir Laila, and T. Chellammal. "Adoption of Digital Payment Methods in Rural Areas of Ramanathapuram District." Annals of the Romanian Society for Cell Biology 25, no. 4 (2021): 7831-7837.
- [20]. Chakraborty, Sourav, Prasenjit Kundu, Soumya Chakraborty, and Arup Mitra. "DIGITAL PAYMENT PATHWAYS: EXPECTATION VS REALITY-A STUDY OF SMALL SHOPS IN RURAL AREAS." Journal of Positive School Psychology 6, no. 2 (2022).











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