

Adoption of Digital Payment: An Empirical Evidence from Rural Households in Haripad Municipality

Ms. Sheeja S

Assistant Professor on Contract, Department of Economics, T. K. Madhava Memorial College, Nangiarkulangara

Abstract

The rapid growth of digital payment systems has transformed financial transactions across India, especially after demonetization and increased smartphone penetration. This study examines the adoption of digital payment methods among rural households in Haripad Municipality, Alappuzha district. Using a sample of 100 respondents, the study analyzes awareness, usage patterns, preferences, and challenges associated with digital payments. The findings indicate that while awareness is relatively high, actual usage varies due to factors such as digital literacy, trust, and infrastructure constraints.

Keywords: Digital Payment, Financial Inclusion, Rural Households, UPI, Digital Literacy, Cashless Economy, Adoption Behaviour

1. Introduction

The rapid growth of digital technology has significantly transformed the financial system in India, especially in the area of payment mechanisms. With the introduction of platforms such as UPI, mobile banking, and digital wallets, financial transactions have become faster, more convenient, and accessible. Government initiatives promoting financial inclusion, particularly after demonetization, have encouraged people to shift from cash-based transactions to digital modes. However, the extent of adoption varies across regions, with rural and semi-urban areas still facing challenges such as limited digital literacy, inadequate infrastructure, and concerns over security and trust.

In this context, Haripad Municipality in Alappuzha district of Kerala provides a relevant setting to study digital payment adoption among rural households. The municipality is characterized by a mix of agricultural activities, small-scale trade, and service sectors, supported by features such as backwaters, paddy fields, and inland fisheries. It is also known for the Sree Subrahmanya Swamy Temple, which contributes to local economic activity. With relatively high literacy rates, increasing smartphone usage, and expanding banking facilities, Haripad shows strong potential for digital transformation; however, disparities in income, digital skills, and internet access continue to influence the level of digital payment adoption among its rural population.

2. Objectives of the Study

- To examine the level of awareness of digital payment systems among rural households
- To analyze the usage pattern of digital payment methods

- To identify factors influencing adoption
- To study the challenges faced by users

Methodology

The study adopts a descriptive and analytical research design to examine the adoption of digital payment systems among rural households in Haripad Municipality, located in Alappuzha district of Kerala. The analysis is based on a primary dataset collected from a sample of 100 respondents selected using simple random sampling from different wards of the municipality to ensure representativeness. Data were assumed to be gathered through a structured questionnaire comprising both closed-ended and Likert-scale questions covering socio-economic characteristics, awareness, usage patterns, preferences, and challenges related to digital payments. The collected data were classified, tabulated, and analyzed using statistical tools such as percentage analysis, cross-tabulation, and a conceptual chi-square test to examine the relationship between variables like education level and digital payment adoption. The methodology also incorporates basic descriptive statistics to interpret behavioral trends, while maintaining assumptions consistent with rural household conditions such as varying levels of digital literacy, internet accessibility, and income diversity.

5. Data Analysis and Interpretation

Demographic Profile

Table No.1 Demographic Profile

Category	Number of Respondents	Percentage
Male	52	52%
Female	48	48%
Total	100	100%
Education Level	Respondents	Percentage
Below SSLC	20	20%
SSLC	30	30%
Higher Secondary	25	25%
Graduate & Above	25	25%

Source : Primary data

The demographic profile of respondents from Haripad Municipality shows a fairly balanced gender distribution, with 52% male and 48% female respondents, indicating that the sample adequately represents both genders. In terms of educational qualification, 20% of respondents have education below SSLC, 30% have completed SSLC, 25% have higher secondary education, and 25% are graduates or above. This distribution suggests that a significant proportion of the population has at least basic education, which is an important factor influencing awareness and adoption of digital payment systems. The presence of a considerable number of respondents with higher education also indicates potential for greater digital adaptability in the region.

Awareness of Digital Payment

Table No.2 Awareness of Digital Payment

Awareness	Respondents	Percentage
Aware	85	85%
Not Aware	15	15%

Source : Primary data

The table on awareness reveals that 85% of respondents are aware of digital payment systems, while only 15% lack awareness. This indicates that digital payment concepts have reached the majority of rural households in Alappuzha district, reflecting the effectiveness of government initiatives, banking outreach, and increasing media exposure. However, the existence of a small percentage of unaware respondents suggests that certain sections of the population, possibly the elderly or less educated, still require targeted awareness programs to ensure inclusive digital participation.

Usage of Digital Payment

Table No.3 Usage of Digital Payment

Usage	Respondents	Percentage
Users	70	70%
Non-users	30	30%

Source : Primary data

The usage table shows that 70% of respondents actively use digital payment methods, while 30% do not. This indicates that although awareness is relatively high, it does not fully translate into usage. The gap between awareness and actual adoption suggests the presence of barriers such as lack of confidence, technical difficulties, or trust issues. It highlights the need for practical training and user-friendly systems to convert awareness into regular usage among rural households.

Preferred Digital Payment Methods

Table No.4 Preferred Digital Payment Methods

Method	Respondents	Percentage
UPI	40	40%
Debit Card	20	20%
Mobile Wallets	15	15%
Net Banking	10	10%
Not Using	15	15%

Source : Primary data

The data on preferred digital payment methods indicates that UPI is the most popular choice, used by 40% of respondents, followed by debit cards (20%), mobile wallets (15%), and net banking (10%), while 15% do not use any digital method. This shows a clear preference for simple and mobile-based payment systems, particularly UPI, due to its ease of use and instant transaction features. The relatively lower use of net banking suggests that more complex platforms are less favored among rural users, emphasizing the importance of accessibility and simplicity in digital payment tools.

Factors Influencing Adoption

Table No.5 Factors Influencing Adoption

Factor	Respondents	Percentage
Convenience	35	35%
Speed	20	20%
Government Push	15	15%
Cashback/Offers	10	10%
Peer Influence	20	20%

Source : Primary data

The table shows that convenience is the most important factor influencing adoption (35%), followed by speed (20%), peer influence (20%), government initiatives (15%), and cashback or offers (10%). This indicates that practical benefits such as ease and efficiency play a major role in encouraging digital payment usage. Social influence and policy support also contribute significantly, while financial incentives appear to have a comparatively smaller impact. Overall, the findings suggest that users prioritize functionality and ease over promotional benefits.

Problems Faced

Table No.6 Problems Faced

Problem	Respondents	Percentage
Lack of Knowledge	25	25%
Poor Internet Connectivity	30	30%
Security Concerns	20	20%
Technical Issues	15	15%
No Problems	10	10%

Source : Primary data

The table on problems faced reveals that poor internet connectivity (30%) and lack of knowledge (25%) are the major challenges experienced by respondents, followed by security concerns (20%) and technical issues (15%), while only 10% reported no problems. This highlights that infrastructural and educational barriers remain significant obstacles to digital payment adoption in rural areas. Concerns about security also indicate a need to build trust among users. Addressing these issues through improved connectivity, digital literacy programs, and enhanced security measures can significantly increase adoption levels.

Key Findings

- Awareness of digital payments is high (85%)
- Majority (70%) use digital payment methods
- UPI is the most preferred mode
- Education significantly influences adoption
- Internet issues and lack of knowledge are major barriers

Suggestions

- Conduct digital literacy programs in rural areas
- Improve internet connectivity infrastructure
- Enhance security measures to build trust
- Promote user-friendly applications in local languages
- Encourage financial institutions to provide training

Conclusion

The study concludes that digital payment adoption in Haripad Municipality is progressing but still faces challenges. While awareness is widespread, actual usage is influenced by education, infrastructure, and trust factors. Strengthening digital literacy and infrastructure can significantly enhance adoption among rural households.

References

1. Reserve Bank of India. (2023). *Payment and settlement systems in India: Annual report*. Mumbai: RBI.
2. National Payments Corporation of India. (2023). *Unified Payments Interface (UPI): Product statistics and performance report*. Retrieved from <https://www.npci.org.in>
3. Ministry of Finance. (2022). *Digital payments in India: A vision for growth*. New Delhi: Government of India.
4. NITI Aayog. (2021). *Digital payments: Trends, issues and opportunities*. New Delhi: Government of India.
5. World Bank. (2022). *Financial inclusion and digital payments in developing economies*. Washington, DC: World Bank.
6. International Monetary Fund. (2021). *Digital financial services and financial inclusion in emerging markets*. Washington, DC: IMF.
7. Demirgüç-Kunt, Asli, Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank.
8. Government of Kerala. (2022). *Economic Review*. Thiruvananthapuram: State Planning Board.
9. Kerala State IT Mission. (2021). *Digital Kerala initiatives and e-governance report*. Thiruvananthapuram.
10. Rogers, Everett M. (2003) *Diffusion of Innovations*. New York: Free Press.