

The Exponential Growth of Digital Payments: Assessing UPI Accessibility Among Consumers in Ammapet Area, Salem

Ms. Deepa P¹, Dr. Vennila A²

¹Ph.D Research Scholar (Full-time) PG and Research Department of Commerce Government Arts College for Women Salem-636008. Periyar University.

²Assistant Professor, PG and Research Department of Commerce Government Arts College for Women, Salem-636008. Periyar University.

Abstract—The Unified Payments Interface (UPI) has drastically changed India's retail economic framework over the past decade. While macro-level growth numbers are staggeringly high, localized, semi-urban pockets present unique dynamics regarding structural and behavioral accessibility. This study assesses UPI accessibility among 60 consumers in the Ammapet area of Salem, Tamil Nadu. Adopting a descriptive research design, primary data was collected using a structured questionnaire. The findings reveal that while technical accessibility (smartphone ownership and internet connectivity) is near-universal, behavioral and situational barriers—such as network downtime, fear of transactional fraud, and lack of digital literacy among older cohorts—persist. The study concludes with practical recommendations for payment service providers to improve offline UPI features and simplify interfaces for broader financial inclusion.

Index Terms—Digital Payments, UPI Accessibility, Consumer Behavior, Salem, Financial Inclusion.

I. INTRODUCTION

The transition of the Indian economy from a cash-heavy system to a digital-first ecosystem is one of the fastest financial evolutions globally. Led by the National Payments Corporation of India (NPCI), the Unified Payments Interface (UPI) has emerged as the structural backbone of daily retail trade. By early 2026, UPI accounted for more than 85% of total digital payment volumes across the country, handling billions of micro-transactions monthly.

However, macro statistics often mask the operational reality at the micro-level, especially in traditional

trading neighbourhoods. Ammapet, located in Salem, Tamil Nadu, serves as an excellent microscale representation. Historically characterized by handloom weaving units, small-scale industries, and bustling local marketplaces, Ammapet features a highly diverse demographic mix of traditional traders, daily wage workers, and corporate employees. For digital financial systems to be truly accessible, they must bridge the gap between urban technological convenience and semi-urban retail realities. This research paper aims to evaluate how easily consumers in Ammapet access, navigate, and maintain trust in UPI platforms amidst this massive digital transformation.

II. REVIEW OF LITERATURE

- Technology Acceptance Model (TAM): Davis (1989) posited that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are the two fundamental pillars governing any new technology adoption. In the context of UPI, accessibility hinges heavily on PEOU, as interfaces require minimal cognitive effort compared to traditional mobile banking apps.
- Infrastructure and Digital Divide: Bagde (2026) pointed out that while digital finance has expanded remarkably across tier-2 and tier-3 locations, the operational stability of networks remains a localized issue.
- Consumer Behavior in Tier-2 Cities: Regional studies focusing on western Tamil Nadu highlight that convenience and transactional speed are

primary drivers for mobile wallet adoption. However, localized consumer friction arises frequently from hidden terminal charges, transaction timeouts, and security concerns.

III. RESEARCH METHODOLOGY

This study employs a quantitative, descriptive research design to measure UPI accessibility.

- **Sampling Frame:** The target population consists of retail consumers residing or frequently shopping in the Ammapet locality of Salem.
- **Sample Size:** A sample size of 60 respondents was selected using a convenient random sampling method to capture diverse age groups and occupations.
- **Data Collection:** Primary data was gathered through a structured questionnaire distributed both physically and digitally. Secondary data was pulled from official NPCI reports and existing academic literature.
- **Data Analysis:** Descriptive statistics, including frequency distribution and percentage analysis, were used to break down the primary dataset.

IV. RESULTS AND ANALYSIS

The demographic structure of the 60 surveyed individuals provides vital context regarding digital baseline capabilities.

4.1 Demographic Profile of the Respondents

Demographic Variable	Classification	Number of Respondents	Percentage (%)
Age	18 – 30 Years	26	43.3%
	31 – 50 Years	22	36.7%
	Above 50 Years	12	20.0%
Occupation	Salaried / Professional	18	30.0%
	Business Owners / Traders	15	25.0%
	Students	12	20.0%
	Homemakers / Wage Workers	15	25.0%
Monthly Income	Below ₹20,000	21	35.0%
	₹20,000 – ₹50,000	27	45.0%
	Above ₹50,000	12	20.0%

4.2 Frequency of UPI Usage

The penetration of UPI into everyday transactions in Ammapet is clearly visible in the data. Out of the 60 respondents, 48 individuals (80%) stated they use UPI apps multiple times every single day for microscale transactions (under ₹500). Meanwhile, 8 respondents (13.3%) use it a few times a week, and only 4

respondents (6.7%)—mostly over the age of 55—rely on cash, using UPI less than once a week or not at all.

4.3 Determinants of UPI Accessibility

To understand what makes UPI accessible, respondents evaluated key metrics on a scale ranging from Highly Satisfied to Dissatisfied.

Interface Ease of Use (Scanning QR / Entering PIN)	Respondents	Percentage
Smooth & Accessible	51	85.0%
Mildly Confusing	9	15.0%

Language Localization (Availability of Tamil UI)	Respondents	Percentage
Actively Helpful	38	63.3%
Indifferent / English	22	36.7%

Bank Linkage & Account Setup Ease	Respondents	Percentage
Easy Setup	44	73.3%
Experienced Hurdles	16	26.7%

4.4 Major Barriers Faced by Consumers

True accessibility cannot be calculated without evaluating the pain points. When asked about their primary operational challenges while executing digital payments in the Ammapet area, respondents highlighted several structural issues:

1. **Network Infrastructure Bottlenecks (41.7%):** Bank server downtimes and cellular network dropouts in congested bazaar areas of Ammapet cause timed-out transactions, leaving users stranded at cash counters.
2. **Psychological Security Fears (28.3%):** Anxieties regarding phishing links, wrong UPI ID entry, fraudulent requests, and money being debited without the merchant receiving it.
3. **Digital Literacy Gaps (20.0%):** Difficulty navigating complex application updates, promotional pop-ups, and understanding scratch card/reward ecosystems.
4. **Merchant Reluctance & Surcharges (10.0%):** Occasional pushback from micro-vendors for low-value trades or hidden demands for cash to maintain quick liquidity.

V. DISCUSSION AND FINDINGS

The field study indicates that UPI has largely moved past the "early adoption" phase in Ammapet and is now firmly embedded in everyday commerce. The absolute core of its value proposition is simplicity—

the action of scanning a QR code cuts across educational and demographic divides effortlessly.

However, the research highlights a critical inflection point for accessibility. While young adults and working professionals utilize it without friction, structural drop-offs occur among senior citizens and the low-income segment. The structural friction is twofold:

5. **The Telecommunication Layer:** Ammapet's high-density market zones suffer from localized cellular network congestion, turning digital payments into a stressful waiting game during peak shopping hours.
6. **The Behavioral Layer:** A high percentage of non-regular users express deep anxiety over "money hanging mid-air" due to pending bank processes. Unlike cash, which offers instantaneous finality, a failed or pending UPI transaction creates social and economic awkwardness at the point of sale.

VI. RECOMMENDATIONS AND CONCLUSION

Based on empirical data from the 60 respondents in Ammapet, the following steps are recommended to optimize UPI accessibility:

- **Promote and Standardize Offline UPI Features:** Fintech platforms and regulatory bodies must widen access to voice-based and native offline (UPI Lite) solutions. This ensures that retail transactions can clear locally even during severe network drops.

- Streamline Application Design: Developers should offer a clean "Lite Mode" within apps, stripping out promotional ads, loans, and gaming banners, leaving only the core functional options: Scan, Pay, and Balance Check. This would significantly benefit the older demographic.
- Localized Customer Redressal Cells: Setting up accessible localized mechanisms to resolve "stuck payments" will go a long way in turning skeptical cash-preferred citizens into confident digital transaction users.

In conclusion, the growth of digital payments in the Ammapet area of Salem is highly impressive, driven by organic convenience and excellent merchant acceptance. By methodically addressing localized network bottlenecks and demystifying transaction safety, financial institutions can transition UPI from a widely used tool into a fully inclusive, universal utility.

REFERENCES

- [1] Bagde, R. (2026). Digital payments, financial inclusion and rural development in India: Evidence from UPI adoption. Munich Personal RePEc Archive, Paper No. 128929, 1-18.
- [2] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- [3] National Payments Corporation of India. (2026). UPI Product Statistics: Yearly and Monthly Growth Trends. NPCI India.
- [4] Rajeswari, P. V., Pirakatheeswari, P., & Vadivel, M. (2021). Tremendous growth in the usage of digital payments in semi-urban sectors. *Journal of Financial Technology and Analysis*, 9(2), 112-125.
- [5] Senthil, K. (2021). The role of digital wallets in shifting consumer choices in western Tamil Nadu. *International Journal of Retail Management*, 14(4), 45-58.