



Consumer Preferences and Digital Awareness in UPI Adoption Trends in Nallasopara

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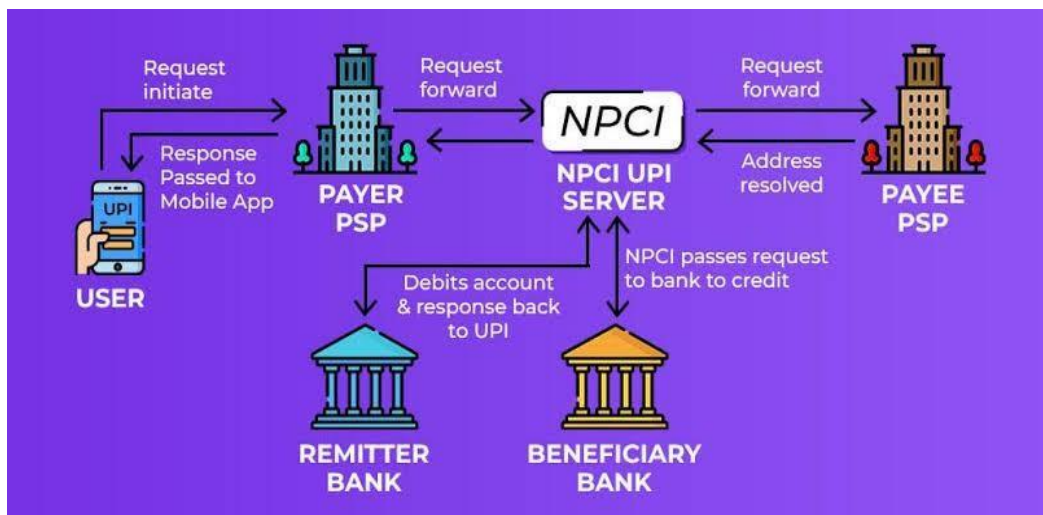
ABSTRACT :

The emergence of Unified Payments Interface (UPI) has revolutionized digital transactions in India by offering seamless, real-time bank-to-bank transfers. While extensive research exists on UPI adoption in major urban centers, there remains a significant gap regarding semi-urban areas like Nallasopara. This study investigates consumer awareness, preferences, and challenges in UPI usage in Nallasopara through a structured survey of over 100 respondents. The findings reveal that although youth and students are active users, elderly participation is relatively strong but cautious, with concerns around fraud and security being major barriers. Rewards such as cashback and promotional offers emerged as key motivators for continued usage. Awareness largely spreads through friends, family, and advertisements rather than formal digital literacy initiatives. The study highlights the importance of trust-building, targeted education, and local engagement strategies to deepen UPI adoption in semi-urban areas. These insights contribute to a better understanding of digital payment behavior beyond metropolitan regions, providing valuable recommendations for policymakers and financial technology providers.

Keywords: UPI adoption, digital payments, semi-urban consumers, Nallasopara, consumer awareness, security concerns, financial inclusion

Introduction

The digital revolution in India has witnessed remarkable metamorphoses in the fiscal services sector, particularly after the launch of the Unified Payments Interface (UPI) by the National Payments Corporation of India (NPCI) in 2016. UPI enables instant, real-time bank-to-bank deals via smartphones, bypassing the need for traditional banking details like IFSC canons or account figures. With over 11 billion yearly deals reported in 2023, UPI has come a foundation of India's trip toward a cashless frugality. While studies on UPI relinquishment have generally concentrated on metropolitan regions with robust digital structure and high internet penetration, semi-urban areas present a different script. Areas like Nallasopara, part of the Mumbai Metropolitan Region (MMR), combine both ultramodern digital bourns and traditional cash- grounded actions. Despite having access to smartphones and internet services, numerous consumers in these regions face unique walls similar as digital ignorance, trust issues, and infrastructural limitations. This study aims to bridge the research gap by exploring the consumer behavior, digital awareness, preferences, and challenges in adopting UPI services in Nallasopara. The research not only relies on secondary sources but is also strengthened by primary data collected through a structured survey of over 100 respondents. By understanding local nuances, the study offers practical insights into promoting digital payments in India's semi-urban landscapes.



Statement of the Problem

Despite the exponential growth of Unified Payments Interface (UPI) transactions across India, a noticeable gap persists in its uniform adoption, particularly in semi-urban regions. While urban populations have embraced digital payment systems swiftly, users in semi-urban areas like Nallasopara continue to display caution, hesitation, or limited usage. This is especially true among elderly citizens, homemakers, and individuals with lower levels of education, who often prefer traditional cash-based transactions due to perceived security risks, lack of digital literacy, and minimal exposure to awareness campaigns.

Likewise, although UPI offers convenience, speed, and cashless operation, several psychological and demographic factors such as age, occupation, trust in technology, and familiarity with mobile apps play a critical role in influencing user behavior. There is also a significant concern regarding fraud, failed transactions, and technical reliability, which discourages regular use even among those aware of the platform. Hence, it becomes essential to examine these underlying barriers and identify how various factors affect the adoption and continued usage of UPI in semi-urban localities. This understanding can support the formulation of targeted strategies and policy interventions aimed at promoting digital financial inclusion.

Objectives

1. To examine demographic factors influencing UPI adoption in Nallasopara
2. To assess digital awareness and security perceptions among users
3. To identify usage preferences and most-valued features
4. To highlight challenges faced by users (e.g., fraud, transaction failures)
5. To suggest strategies to improve adoption in semi-urban regions

Review of Literature

The sudden rush of digital payments in India has been primarily fueled by the introduction of UPI, which offers seamless, real-time financial transactions. Numerous studies have investigated the factors influencing UPI adoption, though research focusing specifically on semi-urban areas remains limited.

UPI Adoption Trends

Ghosh (2023) observed that UPI became a household name post-demonetization, with urban areas adapting rapidly while suburban regions like Nallasopara experienced gradual but steady adoption. NPCI (2023) reported that UPI transactions surpassed 11 billion monthly, overtaking card-based and wallet-based transactions.

Digital Awareness and Financial Inclusion

Digital literacy plays a critical role in financial inclusion. Qing Pan (2019) and Sultana (2021) emphasized that while smartphone penetration is high, limited awareness about digital payment security remains a key challenge, particularly in semi-urban areas. IAMA (2022) and World Bank (2021) further highlight the need for targeted digital literacy programs to increase adoption among marginalized populations.

Consumer Preferences and App Usage

Studies by Sowbarnika and Vasanthakumar (2019) and Kolte and Humbe (2019) revealed that consumers prefer UPI apps like Google Pay and PhonePe due to their user-friendly interfaces, promotional rewards, and reliability. Branding and customer experience (Bhanot & Bapat, 2021) are significant factors influencing app choice, especially among youth demographics.

Technology Acceptance and Behavioural Theories

The Technology Acceptance Model (Davis, 1989) and UTAUT model (Venkatesh et al., 2003) serve as theoretical frameworks for understanding UPI adoption. Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) are key determinants. In semi-urban regions, social influence such as trust in shopkeepers or family members also significantly impacts digital payment behaviour (Ajzen, 1991; Kumar, 2022).

Security Concerns

Security remains a significant barrier to adoption. Kumar and Kavya (2020) and Mishra (2022) noted that fear of fraud and transaction failures discourages wider use, especially among less digitally literate consumers. RBI (2023) guidelines and recent biometric authentication measures have aimed to strengthen security but challenges persist.

Demographic and Cultural Factors

Youth (18–25 years) are the leading adopters of UPI services, as noted by Arora (2016) and PayNearby (2022), primarily driven by convenience and reward programs. However, elderly users (46 and above) show comparatively lower engagement, partially due to cultural affinity toward cash transactions (Tripathi, 2022; Deloitte India, 2022). Gender gaps also exist, with women facing more barriers due to lower digital literacy (UNDP India, 2022).

Policy Support and Infrastructure Development

Government initiatives like Digital India and the RBI's Zero MDR policy have been pivotal in expanding UPI services to small merchants and rural consumers (Philip, 2019; Ministry of Electronics and IT, 2022). Yet infrastructure gaps, such as inconsistent internet connectivity, continue to challenge widespread adoption in semi-urban locales (Roy & Sinha, 2014).

Global Comparisons

International interest in replicating UPI models in countries like Singapore and UAE reflects the system's success (NPCI, 2023; GSMA, 2022). Comparative studies show that India's mobile-first, low-cost digital payment model offers valuable lessons for emerging economies.

Research Gap

While ample research exists on UPI usage in metropolitan India, there remains limited focus on semi-urban adoption patterns. This study addresses the gap by offering fresh primary data insights from Nallasopara, a semi-urban locality that reflects broader Tier 2–3 city dynamics.

Hypothesis

Based on the research objectives, the following hypotheses were framed:

Hypothesis 1:

H₀₁ (Null): There is no significant relationship between digital awareness and the adoption of UPI in semi-urban areas.

H₁₁ (Alternative): There is a significant relationship between digital awareness and the adoption of UPI in semi-urban areas.

Hypothesis 2:

H₀₂ (Null): Security concerns do not influence the frequency of UPI usage.

H₁₂ (Alternative): Security concerns have a negative impact on the frequency of UPI usage.

Hypothesis 3:

H₀₃ (Null): There is no significant difference in UPI usage between young adults (18–25) and older individuals (46 and above).

H₁₃ (Alternative): Young adults (18–25) use UPI more frequently than older individuals (46 and above).

Hypothesis 4:

H₀₄ (Null): Occupation and education level have no effect on the choice of UPI apps.

H₁₄ (Alternative): Occupation and education level significantly influence the choice of UPI apps.

Hypothesis 5:

H₀₅ (Null): Cashback and reward features do not impact user satisfaction with UPI services.

H₁₅ (Alternative): Cashback and reward features positively influence user satisfaction with UPI services.

Research Methodology

Research Design: Descriptive research using both primary and secondary data

Primary Data Collection: Google Form survey with structured questions

Sample Size: 100+ respondents from Nallasopara

Sampling Technique: Convenience sampling

Tools Used: Google Forms, Google Sheets, MS Excel

Data Type: Quantitative data on demographic factors, awareness, preferences, and challenges

Analysis Technique: Pie charts, frequency distribution, percentage analysis

Data Analysis and Interpretation

64.4% of respondents were male; 35.6% female

Age groups 18–25 (35%) and 46+ (35.9%) were almost equally represented

Students (36.9%) were the largest user group followed by business owners (27.2%)

Key reasons for UPI usage: cashless convenience (55.3%), speed (37.9%), and rewards

Main concerns: fraud (60.2%), network failure (37.9%)

Security awareness level mostly moderate (rated 3/5 by 92.2%)

UPI was mostly learned through family/friends (35.9%) and advertisements (58.3%)

Findings and Discussion

Youth Lead Usage: Students and young adults use UPI actively due to convenience and tech familiarity

Elderly Hesitance: Despite high representation in the survey (35.9% aged 46+), elderly respondents showed limited enthusiasm for using UPI

Gender Gap: Lower female participation in digital payments

Security Concerns: Fear of scams and technical issues still prevents some from trusting the platform

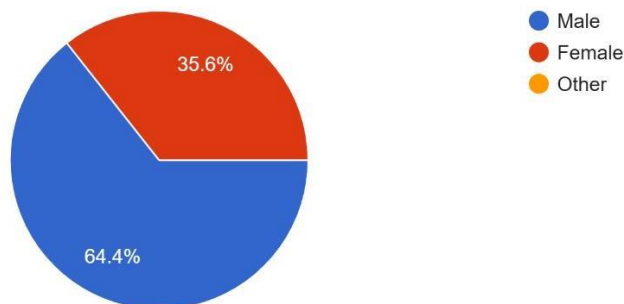
Trust via Word of Mouth: Most users adopted UPI based on suggestions from family or peers

Preference for Google Pay: 65% chose this app due to ease of use and cashback

Policy Impact: Zero MDR policy encouraged small merchants to adopt UPI

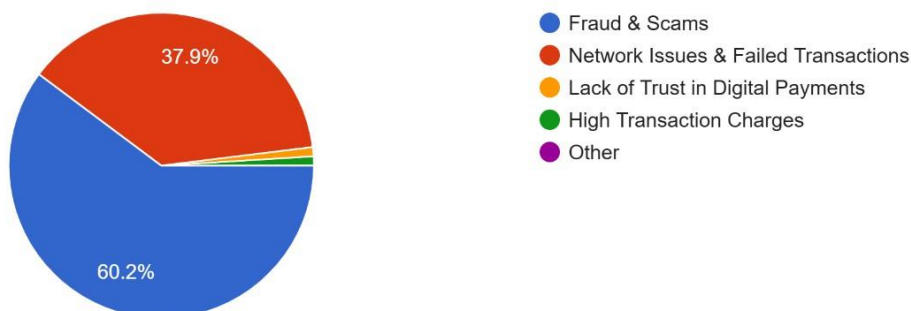
2. What is your gender?

87 responses



Section 4: Challenges & Concerns in UPI Adoption 13. What concerns do you have about using UPI?

103 responses



Recommendations

- Conduct local digital literacy workshops in Nallasopara
- Increase UPI fraud awareness campaigns
- Promote simplified and regional-language UPI interfaces
- Encourage gender-inclusive fintech outreach
- Strengthen customer support systems in UPI apps

Conclusion

This study confirms that UPI adoption in semi-urban India, though rising, still faces gaps in awareness, security perception, and usability. While younger, student populations lead adoption, elderly and less digitally savvy users remain underrepresented. UPI's future in India depends on inclusivity, trust-building, and localized awareness strategies. The findings serve as a roadmap for fintech companies and government bodies to make digital payments more universal.

Implications of the Research

This research provides valuable insights into the patterns and barriers of UPI adoption in a semi-urban area like Nallasopara. The findings have several implications:

1. Practical Implications

- For Policymakers: The government and regulatory bodies like NPCI and RBI can design more targeted awareness campaigns, especially for older adults, homemakers, and less digitally literate users.
- For FinTech Companies: Companies like Google Pay, PhonePe, and Paytm can optimize their interfaces and reward systems to suit semi-urban consumers, focusing on trust-building and education.
- For Local Merchants: Understanding the rising acceptance of UPI allows merchants to cater better to consumer preferences and boost their own digital readiness.

2. Theoretical Implications

- The study supports the Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) by proving that perceived ease of use, social influence, and trust are key drivers of digital payment adoption in semi-urban settings.
- It contributes to the limited literature available on digital payment behavior in non-metro and semi-urban areas, filling a crucial research gap.

3. Social Implications

- Promoting digital literacy and addressing fears of fraud can significantly improve financial inclusion, especially among marginalized groups such as elderly users and women.
- Encouraging digital payment adoption contributes to broader goals like a cashless economy, financial transparency, and economic modernization.

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