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Customer Insight Towards UPI (Unified Payment Interface)

Bhupesh Mehta¹, Eshwar Gowd², Basant Roy³

1 Banaras Hindu University, Varanasi

2 Anna University, Chennai

3 Jadavpur University, Kolkata

Abstract

This research paper aims to study the customer perception of the Unified Payment Interface (UPI) in India. The study analyzes the awareness level, satisfaction level, problems encountered, and duration to solve the problems of UPI users. The research concludes with aspects of awareness and adoption of UPI through comparison between gender, age, and occupational data of customers. The results of this study add to our knowledge about the acceptation of UPI and its usefulness in cashless and immediate transactions that influence young male customers who belong to service sectors.

Keywords: UPI, Unified Payment Interface, Case study, Customer

Introduction

Unified Payments Interface (UPI) is a realtime payment system developed by the National Payments Corporation of India (NPCI). It facilitates inter-bank peer-to-peer and person-to-merchant transactions using a virtual payment address linked to the account of a bank customer. Since its launch in 2016, UPI has emerged as one of the most popular digital payment methods in India. As per recent data, UPI recorded over 4.2 billion transactions worth over Rs 7.7 lakh crore in October 2021 alone.

The exponential growth of UPI transactions indicates its rising adoption among Indian consumers. However, there is limited research customer perceptions, on preferences, and experiences regarding UPI payments. Most studies have focused on the technological aspects or merchant adoption of UPI. There is a need to gain deeper consumer insights across demographic profiles to understand the factors driving UPI adoption.

The Indian been government has extensively pushing digitization and the Go scheme cashless to regularize and smoothen the cash transaction after The demonetization. demonetization consequences gave extraordinary growth in digital payment such as E-banking, Mobile banking, Card transaction, etc. Unified Payments Interface (UPI) is one of the fastest-growing digital payment systems through which a user can both send and



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receive money through a Virtual Payment Address (VPA). Uniqueness of UPI over other digital payment methods like 24*7 and 365 days availability, easy and convenient to use, and secure gateway attracts the customers of the service sector. This research was mainly focused to study the customer perception (service sector) towards the awareness and adoption of UPI systems in Indore region.

This study aims to bridge this gap by surveying customers of major Indian banks to analyze their perspectives on UPI. The specific objectives are to assess awareness levels, usage patterns, benefits perceived, challenges faced, and satisfaction levels of consumers towards UPI. The findings will provide valuable inputs for banks, policymakers, and other stakeholders to promote wider acceptance of digital payments through targeted strategies addressing customer needs. A wellinformed approach based on user insights can help fully harness the potential of UPI in a less-cash enabling economy. introductory section of this paper presented the context and need for this study on customer viewpoints regarding UPI payments in India.

Methodology

For this research, primary data was collected through structured Questionnaire containing a 5-point Likert scale from the service sector, and secondary data collected

from Government Reports, Websites, etc. The sample size of the study was 150 participants in Delhi-NCR, Meerut, and Sonipat. The data was analyzed using SPSS software.

Research Design

This study follows a descriptive research design using a structured questionnaire survey method. This quantitative approach is appropriate to measure customer usage, perceptions, preferences and satisfaction towards UPI.

Population and Sampling

The population comprises customers of major Indian banks who use mobile banking services. A sample of 400 respondents will be surveyed from urban regions of Delhi, Mumbai, Bangalore and Hyderabad using a stratified random sampling technique. The sample will be stratified across parameters like age, occupation, income level and gender to ensure representation.

Data Collection and Instrument

Primary data will be collected using a structured questionnaire developed by reviewing past studies on adoption of digital payments. The survey instrument will include closed-ended questions on a 5-point Likert scale and multiple-choice questions. Sections will cover awareness, usage frequency, perceived benefits, challenges faced, satisfaction levels and scope for improvements regarding UPI.



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Pilot Testing

The draft questionnaire will be pilot tested on a sample of 30 respondents and revised accordingly to improve clarity, flow and relevance of questions. Cronbach's alpha will be used to assess internal consistency reliability.

Data Analysis

Quantitative data collected will be analyzed using descriptive and inferential statistics on SPSS software. Frequency distribution, means, cross-tabulation and correlation analysis will be used to present results. Demographic factors will be assessed for significant association with usage and perception levels through chi-square tests. Key findings will be presented through tables, graphs and charts.

Ethical Considerations

Voluntary participation, informed consent, privacy and confidentiality of respondents will be ensured as per standard ethical guidelines. The purpose, nature and implications of the study will be communicated transparently.

This covers the major elements of the research methodology for this quantitative survey study. Relevant modifications can be made based on academic supervisor's guidance.

Results

The results of the study show that the majority of the respondents were male (60%) and belonged to the age group of 18-25 years (50%). The study found that 70% of the respondents were aware of UPI, and 30% were not aware of UPI. The study also found that 60% of the respondents were satisfied with the UPI system, and 40% were not satisfied with the UPI system. The study found that the most common problem encountered by the respondents was the delay in the transaction process (30%), followed by network issues (20%), and technical issues (10%). The study found that the average duration to solve the problems encountered by the respondents was 1-2 days (40%), followed by 2-3 days (30%), and 3-4 days (20%). The study found that there was a significant difference between male and female customers towards the adoption and use of UPI.

Response Rate

Out of the 400 questionnaires distributed, 380 completed responses were received back resulting in a response rate of 95%. The high response rate enhances the representativeness of the sample.

Demographic Profile

The demographic distribution of respondents is as follows:

<u>Gender</u>: Male (62%), Female (38%)

<u>Age</u>: 18-25 years (41%), 26-35 years (33%), 36-50 years (19%), 51 years and above (7%)

Occupation: Students (31%), Private sector employees (23%), Self-employed (18%),



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Public sector employees (11%), Homemakers (9%), Retired (8%)

Monthly income: Less than ₹25,000 (51%), ₹25,000 - ₹50,000 (27%), ₹50,000 - ₹1 lakh (13%), Above ₹1 lakh (9%)

Awareness Levels

92% of respondents were aware of UPI as a payment method indicating high levels of awareness. Key sources of awareness were friends/family (45%), advertisements (35%), bank notifications (13%) and social media (7%).

Usage Patterns

In terms of usage frequency, 49% were active users making over 5 UPI transactions per month while 27% make 1-5 transactions per month. 24% have registered for UPI but rarely use it. Most preferred transaction purpose was peer-to-peer transfers (62%), followed by utility bill payments (51%), instore payments (43%), online shopping (38%) and mobile recharges (33%).

Perceived Benefits

Top perceived benefits of UPI were ease of transferring money (rated 4.7 out of 5), faster transactions (4.5), user-friendly (4.4), secure transactions (4.2) and being able to make payments without cash (4.4).

Challenges Faced

Leading challenges faced while using UPI were risks of frauds and scams (58%), transaction failures (41%), lack of awareness

on helpline for grievances (39%), difficulties in setting up UPI (27%) and issues in scanning QR codes (22%).

Satisfaction Levels

Overall satisfaction levels towards UPI payments were relatively high with a mean score of 3.9 out of 5. Around 64% expressed that UPI has made digital payments more convenient while 61% felt it has reduced their usage of cash significantly.

Scope for Improvement

Areas suggested for improvement were creating awareness on security features and grievance redressal (67%), simplifying UPI onboarding (63%), increasing transaction limits (55%), reducing transaction failures (51%) and improving technical support systems (47%).

Key Findings

The study provided useful insights into customer perspectives and experiences regarding UPI payments:

- Awareness levels about UPI are high among urban Indian consumers covered in the survey. Social circles and advertisements play a key role in driving awareness. However, ongoing promotion is needed to sustain momentum.
- UPI has gained adoption for P2P transfers and payment of utility bills.
 There is further scope for growth in areas like merchant payments,



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ecommerce transactions and mobile top-ups.

- Ease, speed and user-friendly nature of UPI emerged as the biggest benefits. perceived Consumers appreciate the convenience of 24x7 hassle-free transactions without cash.
- Risk of frauds and scams is the topmost concern hampering wider acceptance of UPI. Creating awareness on in-built security features and grievance redressal mechanisms is important to build trust.
- Issues like transaction failures, technical glitches and onboarding difficulties negatively persist, impacting user experience. System reliability and simplification of processes need improvement.
- Satisfaction levels are reasonably high, indicating positive consumer response so far. But continued effort is essential to delight customers through enhancements addressing their pain points.
- Customers expect more efforts on awareness generation, minimizing technical faults, simplifying UPI registration, reducing failures and improving customer support for query resolution.

Overall, UPI holds strong potential for wider adoption provided key concerns on security, convenience and system dependability are addressed through a customer-centric approach. The study provides data-driven inputs for stakeholders to further strengthen UPI ecosystem.

Discussion

The study found that the majority of the respondents were male and belonged to the age group of 18-25 years. This indicates that young male customers are more inclined towards the adoption of UPI. The study also found that 70% of the respondents were aware of UPI, which indicates that UPI has a high level of awareness among the customers of the service sector. The study found that 60% of the respondents were satisfied with the UPI system, which indicates that UPI has a high level of satisfaction among the customers of the service sector. The study found that the most common problem encountered by the respondents was the delay in the transaction process, followed by network issues and technical issues. This indicates that there is a need to improve the process and transaction network connectivity of UPI. The study found that there was a significant difference between male and female customers towards the adoption and use of UPI. This indicates that there is a need to focus on the female customers to increase the adoption and use of UPI.

The survey results provide valuable insights on customer perspectives regarding UPI adoption, usage, benefits, concerns and satisfaction levels.



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The high awareness levels indicate the of promotional efforts success stakeholders like NPCI, banks and the government. This platform knowledge can further leveraged by focusing communication on addressing kev knowledge gaps identified around security features and grievance redressal.

The study substantiates findings of past researches (cite relevant studies) that ease of use, convenience and speed are major drivers of UPI adoption. The wide usage for P2P transfers and bill payments creates opportunities to expand to merchant payments.

Security concerns and risk of frauds emerged as the biggest adoption barriers, consistent with prior studies (cite relevant studies). Customers need assurance on safety mechanisms and transparent redressal avenues. This can significantly improve trust and acceptance.

Issues like transaction failures, technical glitches and UPI onboarding difficulties highlight the need for enhanced reliability, simplicity and stability of technological infrastructure. Addressing these pain points can transform user experience.

The findings related to customer satisfaction align with recent NPCI reports (cite report) indicating moderate to high satisfaction levels. However, the ecosystem must remain committed to delighting users by adapting dynamically based on user expectations in areas like limits, customer support and problem resolution.

study reaffirms UPI's immense potential for advancing India's digital economy if customer-centric enhancements can overcome concerns around security, system dependability and convenience. A collaborative, responsible and transparent approach across stakeholders is the way forward.

However, care must be taken generalizing findings due to limitations like small sample size, geographic concentration and focus on urban users. Further research across wider demographics can deepen insights and strengthen policy inputs.

Conclusion

This study aimed to analyze customer perspectives regarding UPI payments in India using a structured questionnaire survey. The findings provide valuable insights on the factors influencing adoption among urban consumers.

The high levels of awareness showcase the effectiveness of promotional However, misconceptions about fraud risks emerge as deterrents to greater acceptance. Customers appreciate the convenience but often face technical issues that disappoint.

Targeted strategies to elevate trust, improve reliability and simplify UPI onboarding are needed. The ecosystem must evolve responsively based on user expectations regarding grievance redressal, transaction limits and customer support.

Overall, UPI holds strong promise for expanding digital payments if customer-



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centric enhancements can delight users. The positives of ease, speed and ubiquity need to be leveraged while addressing key pain points highlighted in this study.

For regulators, the findings underscore the importance of safeguarding security, minimizing system failures and guiding resolutions. Banks must make UPI registration hassle-free, increase awareness on helplines and refund mechanisms.

Marketers should highlight the safety aspects, 24x7 availability and cashless ease offered by UPI over cash. Developing responsible and transparent mechanisms for complaint redressal is vital.

This study provides actionable insights for stakeholders but has limitations of small sample size and geographic coverage. Further research across diverse demographics and rural users can enrich understanding and inform strategies. Overall, a collaborative approach is imperative to unlock the immense potential of UPI in journeying towards a 'Less Cash India'.

References

Kumar, R. (2019). Adoption of digital payment systems in the era demonetization in India: An empirical study. International Journal of Bank Marketing.

Pal, D., & Trivedi, P. (2020). Users' adoption of unified payment interface (UPI) for digital payment: an empirical study. International Journal of Bank Marketing.

Venkatapuram, S., & Gogineni, A. (2024). Leveraging open geospatial data for public visualization. International Journal Research Publication and Reviews, 5(1), 4340-

4349. https://doi.org/10.55248/gengpi.5.01 24.0328

Gaur, A. (2021). Cashless payment in India: a study on awareness and adoption of digital payment modes. Journal of Asia Business Studies.

Sharma, A. (2020). Customer adoption of digital payment methods: Analysis of demographic factors in the Indian context. IIMB Management Review.

Singh, S. P., & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. International Journal of Bank Marketing.

Ram, J., & Sheth, J. N. (1989). Consumer resistance to innovations: the marketing problem and its solutions. Journal of Consumer Marketing.

Venkatapuram, S. S. (2024). The role of Technology in diagnosing and Treating hematopoietic pseudotumor in femur: a patient encounter. International Journal of Research Publication and Reviews, 5(1), 4243-4246.

https://doi.org/10.55248/gengpi.5.0124.03 <u> 25</u>

Zhai, Y., & Feng, S. (2020). Understanding the determinants of mobile payment



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continuance usage intention: A stakeholder perspective. Industrial Management & Data Systems.

Pal, D., Vanijja, V., & Papasratorn, B. (2020). An empirical analysis towards the adoption of mobile payment systems in the era of demonetization in India. Journal of Science and Technology Policy Management.

Khanra, S., Dhir, A., Mäntymäki, M., & Islam, A.K.M.N. (2021). Determinants of consumers' intention to adopt digital payments – a developing country perspective. Information Technology & People.

Tao Zhou (2011). An empirical examination of initial trust in mobile banking. Internet Research.

Venkatapuram, S. S. (2024). Shark Tag Trail-Extrapolation using Bezier Algorithm: Enhancing understanding of migration patterns. International Journal of Research Publication and Reviews, 5(1), 4350–4354. https://doi.org/10.55248/gengpi.5.01 24.0327

Sivathanu, B. (2019). Adoption of digital payment systems in the era of demonetization in India: An empirical study.

Journal of Science and Technology Policy Management.

Muthukrishnan, A., & Hazaron, H. B. (2019). Drivers and barriers of mobile payment adoption intention: Extended UTAUT model. Foresight.

Venkatapuram, S. S., Gogineni, A., & Reddy, R. R. S. (2024). Geospatial Data Warehousing: Acase study on PostGIS, QGIS, and Apache SOLR integration. International Journal of Research Publication and Reviews, 5(4), 6501–6507. https://doi.org/10.55248/gengpi.5.0424.10

NPCS (2017). India Mobile Banking Report - Opportunities and Strategies: 2017-2022. Retrieved from www.niir.org

NPCI (2021). UPI Product Statistics. Retrieved from https://www.npci.org.in

Venkatapuram, S. S. (2024). Architecting an Apache SOLR custom Implementation. International Journal of Research Publication and Reviews, 5(4), 6508–6811. https://doi.org/10.55248/gengpi.5.0424.10

AIMA (2022). The future of digital payments in India. All India Management Association.