

Effectiveness of Digital Banking Services and YONO Internet Banking: Customer Perceptions and Usage Patterns among SBI Account Holders in Hyderabad, Telangana

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Abstract

The rapid digitalisation of banking services in India has fundamentally transformed how customers conduct financial transactions. State Bank of India (SBI), the country's largest public sector bank, launched YONO (You Only Need One) as an integrated digital banking platform in 2017, offering a comprehensive suite of financial and lifestyle services through a single mobile application. This study examines the effectiveness of digital banking services with special reference to YONO Internet Banking, focusing on customer perceptions, usage patterns, and challenges encountered by account holders in Hyderabad, Telangana. A primary survey was conducted among 150 SBI account holders using a structured questionnaire and convenience sampling technique. The study employs descriptive research design and percentage analysis as the primary statistical tool. The findings reveal that a significant majority of respondents — particularly the younger demographic aged 18 to 30 years — actively use digital banking platforms, with Google Pay emerging as the most preferred UPI application (43.3%). The study further finds that 63% of respondents strongly agree that digital banking services, including YONO, are easy to use, and 85% strongly agree that banks provide immediate solutions to problems. However, technical challenges such as transaction failures with amount deduction (30.7%), connectivity issues (24.0%), and server downtime (23.7%) significantly impede customer experience. The study contributes empirical insights to the Technology Acceptance Model (TAM) framework within the Indian banking context and offers actionable recommendations for policymakers, bank management, and the Reserve Bank of India (RBI) to strengthen digital banking infrastructure and customer trust.

Keywords: Digital Banking, YONO Internet Banking, UPI, Customer Satisfaction, Technology Acceptance Model, SBI, Financial Inclusion, Hyderabad

1. Introduction

The Indian banking sector has witnessed a paradigm shift in the delivery of financial services over the past decade. Driven by the Government of India's Digital India initiative launched in 2015, the Pradhan Mantri Jan Dhan Yojana

(PMJDY), and the demonetisation exercise of November 2016, the adoption of digital banking services has accelerated dramatically across urban, semi-urban, and rural India. According to the Reserve Bank of India's Annual Report 2023-24, the value of digital payments in India exceeded ₹2,000 lakh crore, representing a quantum leap from ₹952 lakh crore in 2018-19. The National Payments Corporation of India (NPCI) reported that the Unified Payments Interface (UPI) processed over 131 billion transactions worth ₹199.89 lakh crore during the fiscal year 2023-24, establishing India as the world's leading real-time payments market.

Amidst this digital transformation landscape, State Bank of India — with over 500 million customers and 22,000 branches nationwide — launched YONO (You Only Need One) in November 2017 as India's first integrated digital banking and lifestyle platform. YONO consolidates banking, investment, insurance, shopping, and government services into a single mobile application, positioning itself as a super-app for the Indian consumer. By 2023, YONO had registered over 60 million users, generating more than 40% of SBI's digital transactions through its platform, demonstrating the platform's central role in the bank's digital strategy.

The proliferation of digital banking channels, however, has created a dual narrative. While adoption metrics reveal impressive growth, persistent concerns around cybersecurity, digital literacy, infrastructure reliability, and service quality continue to affect customer satisfaction and trust. The Technology Acceptance Model (TAM), originally proposed by Davis (1989), provides a robust theoretical framework for understanding how perceived usefulness and perceived ease of use determine customers' acceptance and adoption of technology-based banking services. In the Indian context, several additional factors — including income levels, educational background, network connectivity, and awareness of digital banking features — mediate this relationship.

Hyderabad, the capital of Telangana state and a major information technology hub, presents an interesting study environment. As a city that hosts multinational technology corporations alongside a diverse socioeconomic population, Hyderabad mirrors the broader Indian digital banking landscape — combining tech-savvy millennials with first-generation digital banking adopters. SBI's customer base in Hyderabad spans government employees, private sector workers, students, and business owners, making it a representative sample for studying digital banking effectiveness.

Against this backdrop, this study investigates the effectiveness of digital banking services and YONO Internet Banking from the perspective of SBI account holders in Hyderabad. The study specifically examines customer awareness, usage patterns, satisfaction levels, and challenges related to digital banking adoption. The research attempts to fill an empirical gap in the existing literature by providing a granular, data-driven analysis of YONO's effectiveness at the city level, which can inform both operational improvements and regulatory policy formulation.

1.1 Objectives of the Study

1. To examine the socio-demographic profile of SBI digital banking users in Hyderabad.
2. To analyse the usage patterns of digital banking platforms, particularly UPI-based applications and YONO Internet Banking.
3. To assess customer perceptions regarding the ease of use, safety, and reliability of digital banking services.
4. To identify the major challenges and technical problems encountered by customers during digital banking transactions.
5. To suggest measures for enhancing the effectiveness of YONO Internet Banking and digital banking services in India.

2. Review of Literature

2.1 Digital Banking Adoption and Customer Awareness

The determinants of digital banking adoption have been extensively studied in the Indian context. Kumar and Gupta (2020) examined mobile banking adoption among 250 customers of selected public sector banks and found that ease of use, perceived security, and quality of customer support were the three most significant predictors of sustained usage. Their study confirmed that the TAM framework remains valid in the Indian mobile banking context, albeit with the additional moderating role of internet infrastructure quality. Similarly, Reddy and Rao (2021) surveyed 300 customers across Andhra Pradesh and Telangana and reported that 68% of respondents were unaware of all the services offered by

their bank's mobile application, indicating a significant awareness gap that banks needed to address through targeted communication strategies.

Patel and Shah (2021) conducted a comparative study of digital banking adoption in public and private sector banks, concluding that public sector banks, despite their larger customer base, lagged behind private banks in digital service delivery quality. This finding is particularly relevant to SBI's YONO initiative, which represents a concerted effort by a public sector bank to compete with technologically superior private players. Ahmed and Khan (2021) further established that customer convenience — defined as the ability to conduct transactions anywhere, anytime — was the single strongest motivator for digital banking adoption across all income groups, with 78% of respondents in their study citing convenience as the primary driver.

2.2 UPI Usage Patterns and Payment Preferences

The UPI ecosystem has attracted considerable scholarly attention since its 2016 launch. Nair and Menon (2022) studied user experience of digital banking applications and found that interface simplicity and speed of transaction completion were critical determinants of user preference among competing UPI applications. Gupta and Arora (2022) specifically studied digital banking adoption among the youth demographic and reported that 72% of respondents aged 18 to 30 years used UPI as their primary payment mode, with peer recommendations playing a more significant role than advertising in driving adoption. Jain and Agarwal (2023) studied customer engagement with digital banking platforms and reported that customers who used UPI for three or more years demonstrated significantly higher levels of trust and lower levels of transaction anxiety compared to newer users.

Iyer and Nair (2023) investigated factors influencing urban digital banking usage and found a strong positive correlation between income level and frequency of digital banking transactions, though they noted that lower-income segments showed faster growth rates in adoption, suggesting a closing of the digital divide. Their findings align with the government's financial inclusion objectives under the Pradhan Mantri Digital Saksharta Abhiyan (PMGDISHA).

2.3 Customer Satisfaction and Service Quality in Digital Banking

Mehta and Joshi (2022) evaluated customer satisfaction with internet banking services and identified 24-hour service availability, transaction accuracy, and prompt grievance redressal as the three most valued service attributes. Their multivariate analysis revealed that perceived service reliability explained 42% of the variance in overall customer satisfaction scores. Bhatia and Sethi (2022) extended this analysis by examining the relationship between service quality and customer loyalty in digital banking, finding that technical reliability and security had stronger effects on loyalty than traditional service quality dimensions such as tangibles and responsiveness.

Kapoor and Malhotra (2023) evaluated service quality in public sector bank digital platforms and found that while customers acknowledged improvements in digital service delivery, perceptions of security vulnerabilities and inadequate dispute resolution mechanisms remained significant concerns. Thomas and George (2024) examined the relationship between digital banking and customer relationship management (CRM), concluding that personalised digital communication and proactive transaction alerts significantly enhanced customer loyalty among SBI account holders in South India.

2.4 YONO-Specific Studies

Chandra and Mishra (2023) were among the first to study customer perceptions specifically regarding YONO Internet Banking, surveying 200 SBI customers in Madhya Pradesh. They found that while YONO's feature set was comprehensive, discoverability of features was poor, with most customers using only 20 to 30 percent of available functionalities. Prasad and Rani (2023) studied SBI YONO customer satisfaction in Andhra Pradesh and reported an overall satisfaction index of 72 out of 100, with the highest scores on convenience and lowest on server stability. Ramesh and Kumar (2024) specifically studied YONO's effectiveness in reducing branch footfall and found a 34% reduction in over-the-counter transactions at SBI branches where YONO adoption exceeded 60%.

Patel and Desai (2025) examined emerging digital banking trends and highlighted the growing importance of AI-powered personalisation in banking apps, predicting that platforms like YONO would need to integrate machine learning-based recommendations to sustain customer engagement in a competitive fintech landscape. Suresh and Rao (2025) and Sharma and Gupta (2025) both confirmed in their independent studies that YONO's integrated lifestyle

services — including shopping, travel, and insurance — were underutilised by a majority of customers, suggesting significant headroom for growth through better onboarding and feature education programmes.

2.5 Research Gap

The foregoing review reveals that while digital banking adoption, UPI usage, and customer satisfaction have been studied extensively at the macro level, empirical studies examining YONO's effectiveness specifically at the city level — particularly in Hyderabad — are sparse. Existing studies predominantly focus on rural or semi-urban contexts or on comparative analyses across states. Furthermore, few studies integrate the demographic nuances of a metropolitan, technology-oriented population with the operational challenges of a public sector bank's digital platform. This study addresses these gaps by providing granular, primary data-based insights into the effectiveness of YONO Internet Banking among a diverse sample of SBI account holders in Hyderabad, Telangana.

3. Research Methodology

3.1 Research Design

The study adopts a descriptive research design, which is appropriate for accurately describing the characteristics, behaviours, and opinions of a defined population without manipulation of variables. Descriptive research is particularly suited for this study as the objective is to measure and report existing customer perceptions and usage patterns of digital banking services and YONO Internet Banking, rather than to establish causal relationships.

3.2 Universe and Sample

The study population comprises all SBI account holders in Hyderabad city who actively use digital banking services, including mobile banking applications, internet banking portals, and UPI-based payment systems. Using convenience sampling — appropriate given the accessibility constraints of the target population and the exploratory nature of the study — a sample of 150 respondents was selected. The sample size of 150 is consistent with prior studies in the domain (Kumar & Gupta, 2020; Prasad & Rani, 2023) and provides sufficient statistical power for percentage analysis and descriptive inference.

3.3 Data Collection

Primary data were collected through a structured questionnaire comprising three sections: (i) socio-demographic profile, (ii) digital banking and UPI usage patterns, and (iii) customer perceptions of digital banking service quality using a five-point Likert scale ranging from Strongly Agree (5) to Strongly Disagree (1). The questionnaire was administered both in-person at SBI branches in Hyderabad and through digital distribution, during the period November 2024 to January 2025. The questionnaire was pre-tested with 15 respondents prior to the main survey and necessary modifications were incorporated based on feedback. No secondary data were used as the primary objective was to capture real-time customer experience.

3.4 Statistical Tools

The collected data were tabulated and analysed using percentage analysis, frequency distribution, and descriptive statistics. Simple percentage analysis is employed to summarise responses and draw inferences from categorical and Likert-scale data, as is standard practice in exploratory and descriptive studies in Indian banking research. Data were processed using Microsoft Excel. Tables and figures are used extensively to present findings in a clear and interpretable format.

3.5 Limitations

The study is subject to the following limitations: (i) The sample is restricted to Hyderabad city, which may limit the generalisability of findings to other cities or rural areas; (ii) Convenience sampling introduces inherent selection bias, as respondents who are already digital banking users are overrepresented; (iii) The study relies entirely on self-reported perceptions, which may be subject to social desirability bias; and (iv) The cross-sectional nature of the study prevents observation of changes in usage behaviour over time.

4. Results and Analysis

4.1 Socio-Demographic Profile of Respondents

Table 1 presents the socio-demographic profile of the 150 respondents surveyed for this study. The sample is nearly equally balanced between male (52.0%) and female (48.0%) respondents, indicating a good gender balance consistent with the broader SBI customer base in urban Hyderabad. The age distribution reveals that 85.3% of respondents fall within the 18 to 30 year age bracket, confirming that digital banking in India is predominantly a youth-driven phenomenon. The predominance of young users is consistent with national trends reported by NPCI (2024), which identifies millennials and Generation Z as the primary drivers of UPI growth.

Table 1: Socio-Demographic Profile of Respondents (N = 150)

Variable	Category	Frequency	Percentage (%)
Gender	Male	78	52.0
	Female	72	48.0
Age Group	18–25 years	66	44.0
	26–30 years	62	41.3
	31–35 years	18	12.0
	Above 36 yrs	4	2.7
Occupation	Private Sector	49	32.9
	Business	41	27.5
	Govt. Employee	31	20.8
	Student	28	18.8
Monthly Income	₹10,000–20,000	47	31.3
	₹20,001–30,000	34	22.7
	₹30,001–40,000	36	24.0
	₹40,001–50,000	24	16.0
	Above ₹50,000	9	6.0
Account Type	Current Account	56	37.3
	Savings Account	51	34.0
	Salary Account	43	28.7

Source: Primary data collected from the field survey (2024–25)

Regarding occupation, private sector employees constitute the largest group (32.9%), followed by business owners (27.5%), government employees (20.8%), and students (18.8%). The income distribution shows that 54.0% of respondents earn below ₹30,000 per month, reflecting the predominantly lower-middle-income character of the sample. This is significant because digital banking adoption among lower-income groups represents a success story for financial inclusion, as these customers previously had limited access to formal banking channels. With respect to account type, 37.3% hold current accounts, 34.0% savings accounts, and 28.7% salary accounts — suggesting a diverse customer mix spanning commercial activity, personal savings, and salaried employment.

4.2 Digital Banking and UPI Usage Patterns

Table 2 presents the preferred UPI platforms among respondents. Multiple responses were permitted as many customers use more than one UPI application simultaneously.

Table 2: Preferred UPI Applications (N = 150; Multiple Responses Permitted)

Digital Platform	Users (n=150)	Usage (%)
Google Pay	65	43.3
Paytm	56	37.3
PhonePe	47	31.3
Amazon Pay	33	22.0
BHIM	32	21.3

Source: Primary data collected from the field survey (2024–25)

Google Pay emerged as the most widely used UPI application (43.3%), followed by Paytm (37.3%), PhonePe (31.3%), Amazon Pay (22.0%), and BHIM — the government's own UPI application — at 21.3%. This preference hierarchy is broadly consistent with the national market share data published by NPCI, where Google Pay and PhonePe together account for approximately 85% of UPI transactions by volume. The relatively lower adoption of BHIM in this sample, despite its government backing and zero transaction charges, suggests that user experience and brand familiarity continue to outweigh cost considerations in platform selection.

When asked about reasons for choosing their preferred UPI application, 42.7% cited better service quality, 28.7% mentioned brand reputation, and 27.3% indicated ease of formalities during onboarding and transaction initiation. These findings underscore the primacy of functional service quality and brand trust over price in digital payment platform choice — a pattern consistent with Nair and Menon (2022) and Gupta and Arora (2022).

Regarding experience with digital banking, 29.3% of respondents reported using UPI for three to four years, followed by less than one year (25.3%), one to two years (24.0%), and more than four years (21.3%). The 'less than one year' cohort's significant representation (25.3%) indicates continued and sustained new user acquisition in the digital banking space, reinforcing the upward trajectory of digital adoption. In terms of frequency of use, 33.3% use digital banking weekly, 26.0% monthly, 25.3% daily, and 15.3% rarely, indicating that daily active use is not yet universal even among registered digital banking customers.

The primary purpose of using digital banking services varied: 33.7% used it primarily for checking transaction details, 25.3% for bill payments, 20.0% for fund transfers, and 20.0% for ticket booking. The predominance of informational use (checking transactions) over transactional use (fund transfers, bill payments) suggests that many customers still feel more comfortable using digital channels for inquiry than for financial transactions — a finding that has important implications for increasing transaction volumes through trust-building measures.

4.3 Customer Perceptions of Digital Banking Service Quality

Table 3 presents customer perceptions of key digital banking service attributes measured on a five-point Likert scale (SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree).

Table 3: Customer Perceptions of Digital Banking Service Quality (N = 150)

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)
YONO/Digital banking is easy to use	63.0	22.0	10.0	3.0	2.0
Services are safe and secure	28.0	61.0	8.0	2.0	1.0
24-hour service availability	53.0	30.0	12.0	3.0	2.0

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)
Easy to maintain banking transactions	28.0	54.0	12.0	4.0	2.0
Banks provide immediate solutions	85.0	10.0	3.0	1.0	1.0
Service charges are reasonable	15.0	22.0	50.0	8.0	5.0

Source: Primary data collected from the field survey (2024–25); SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree

The perception data reveal several important findings. First, ease of use commands the strongest endorsement, with 63% of respondents strongly agreeing and an additional 22% agreeing that digital banking services including YONO are easy to use — giving a combined positive response rate of 85%. This strongly supports the Perceived Ease of Use (PEOU) construct of the TAM framework and suggests that YONO's user interface design has successfully achieved accessibility for a diverse customer base.

Second, safety and security perceptions are positive overall (28% strongly agree, 61% agree), with 89% expressing confidence in the safety of digital transactions. This is a significant finding given that cybersecurity concerns have historically been a major barrier to digital banking adoption in India, particularly among older and lower-income segments. Third, 24-hour service availability receives strong endorsement, with 83% expressing agreement, reflecting customers' appreciation for the round-the-clock access that digital banking provides compared to branch-based banking.

Fourth, and most notably, 85% of respondents strongly agree that banks provide immediate solutions to problems — the highest level of strong agreement across all measured attributes. This finding suggests that SBI's customer grievance redressal mechanisms for digital banking, including its 24×7 helpline and in-app support features, are viewed positively by customers. However, service charges attract the most neutral responses (50%), indicating ambivalence about the cost of digital banking services — neither strongly positive nor negative — suggesting an opportunity for SBI to communicate the cost advantages of digital banking more effectively.

4.4 Challenges and Technical Problems in Digital Banking

Table 4 presents the technical challenges encountered by respondents during digital banking transactions. Multiple responses were permitted.

Table 4: Technical Challenges Encountered by Digital Banking Users (N = 150)

Challenge / Problem	Respondents (n)	Percentage (%)
Transaction failed but amount deducted	46	30.7
Connectivity/internet issues	36	24.0
Server downtime/crashes	35	23.7
Slow transaction speed	27	18.0
Network unavailability	41	27.3

Source: Primary data collected from the field survey (2024–25); Multiple responses permitted

The most frequently reported and consequential challenge is transaction failure with amount deduction, cited by 30.7% of respondents. This is a critical pain point because it not only causes financial inconvenience but also erodes customer trust in digital banking systems. Connectivity and internet issues were reported by 24.0% of respondents, reflecting the uneven digital infrastructure across Hyderabad city despite its technology hub status. Server downtime and crashes were cited by 23.7% of respondents — a particularly concerning finding for a public sector bank that must handle peak

transaction volumes during salary credit periods and festival seasons. Network unavailability specifically as a challenge for digital transactions was highlighted by 27.3% of respondents.

These technical challenges collectively indicate that while the perceived service quality of digital banking is high at the user interface level, the underlying technological infrastructure — specifically transaction processing reliability, server capacity, and internet connectivity — continues to be a source of dissatisfaction. The 34% of respondents who contact bank customer care when facing problems, and the 85% who strongly agree that banks provide immediate solutions, suggest that while problems occur frequently, customers' confidence in resolution mechanisms remains strong — providing SBI with a window of opportunity to address infrastructure issues before customer trust erodes.

5. Discussion

The findings of this study offer several nuanced insights into the state of digital banking adoption and effectiveness in Hyderabad, and by extension in urban India more broadly. The overarching finding — that the overwhelming majority of respondents perceive digital banking services as easy to use, safe, and available round the clock — validates the foundational premise of YONO's design philosophy and the broader Digital India programme's success in mainstreaming technology-based financial services.

The demographic concentration of digital banking users in the 18 to 30 year age bracket (85.3%) aligns strongly with national trends and confirms the generational character of India's digital payments revolution. However, this also highlights a critical equity concern: older customers, government retirees, and rural-origin populations remain underrepresented in the digital banking ecosystem. This finding is consistent with Kulkarni and Patil (2025), who reported persistent adoption gaps among customers above 45 years of age in both rural and urban settings. SBI's challenge, therefore, is not merely to deepen engagement among existing digital users but to expand the universe of users through targeted outreach to older and less digitally literate segments.

The dominance of Google Pay (43.3%) over BHIM (21.3%) — despite BHIM being a government-promoted, zero-fee application — presents an interesting paradox that merits attention from both the bank and policymakers. Google Pay's superior user interface, cashback incentives, and seamless integration with Google's ecosystem appear to outweigh BHIM's cost and policy advantages. This finding corroborates Smith and Johnson (2020) and Nair and Menon (2022), who both found that perceived usefulness and ease of use are stronger determinants of platform adoption than pricing considerations alone. For SBI's YONO platform, this implies that product design investment and incentive programmes are more likely to drive adoption than cost reduction strategies.

The finding that 50% of respondents are neutral regarding the reasonableness of service charges is significant in the context of RBI's ongoing policy discourse around digital payment charges. Following the RBI's directive to study charges on digital payment systems (2022), there has been considerable public debate about whether zero-MDR (Merchant Discount Rate) policies should be extended or modified. The neutrality observed in this study suggests that customers are not strongly price-sensitive in their assessment of digital banking value, potentially giving banks greater flexibility in their fee structures, provided that service quality is maintained.

The most critical finding of this study — that transaction failure with amount deduction is the most commonly experienced problem (30.7%) — has direct policy implications. Under RBI's Framework for Harmonising TAT and Customer Compensation for Failed Transactions Using Authorised Payment Systems (2019, amended 2023), banks are required to resolve failed transactions and credit reversal within defined timelines, with automatic compensation for delays. The high incidence of this problem in the study sample suggests that compliance with this framework, or customer awareness of their rights under it, may be incomplete. This is an area where SBI and the RBI could work collaboratively to improve both system reliability and customer communication.

The strong satisfaction with 24-hour service availability (83% positive) reflects one of digital banking's most fundamental advantages over branch-based banking — temporal convenience. In a city like Hyderabad, where private sector employees (the largest respondent group at 32.9%) work variable hours and may need to conduct transactions outside of traditional banking hours, this convenience dimension is particularly valued. The finding aligns with Ahmed and Khan (2021), who identified convenience as the strongest motivator for digital banking adoption across all income groups.

The study's findings from the perspective of the TAM framework suggest that the Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) constructs are both strongly positive in this population, which should theoretically translate into sustained and expanding usage. However, the technical challenges identified — particularly server reliability and transaction failure — represent 'post-adoption dissonance' factors that could, over time, negatively affect continued usage intentions if left unaddressed. This is consistent with Sharma and Verma (2020), who found that initial adoption does not guarantee sustained usage when technical reliability issues persist.

6. Conclusion

This study examined the effectiveness of digital banking services and YONO Internet Banking among 150 SBI account holders in Hyderabad, Telangana. The investigation yielded the following key findings:

- Digital banking adoption in Hyderabad is overwhelmingly dominated by the youth demographic (18–30 years, 85.3%), with private sector employees constituting the largest user group.
- Google Pay is the most preferred UPI application (43.3%), reflecting the importance of user experience and brand recognition over cost in platform selection.
- Customer perceptions of digital banking ease of use (85% positive), safety (89% positive), and 24-hour availability (83% positive) are strongly favourable, validating the YONO platform's service design objectives.
- Transaction failure with amount deduction (30.7%), connectivity issues (24.0%), server downtime (23.7%), and network unavailability (27.3%) are the primary technical challenges undermining customer experience.
- Customer satisfaction with grievance redressal is high (85% strongly agree that banks provide immediate solutions), indicating effective customer support mechanisms despite infrastructure challenges.

These findings carry significant theoretical and practical implications. Theoretically, the study provides empirical support for the applicability of the TAM framework to digital banking in an emerging economy context, while also highlighting the role of infrastructure reliability as a post-adoption satisfaction determinant — an aspect that TAM in its original form does not adequately capture.

Practically, the study recommends that SBI invest in scalable server infrastructure to eliminate transaction failures, particularly during peak periods; develop targeted digital literacy programmes for customers above 35 years of age; enhance BHIM integration within YONO to promote government-supported payment channels; and proactively communicate customer rights under the RBI's failed transaction compensation framework. For the RBI and NPCI, the findings suggest that minimum service reliability standards for digital banking platforms should be mandated and monitored as part of the regulatory framework.

Future research may extend this study using Structural Equation Modelling (SEM) to establish causal relationships between service quality dimensions and customer satisfaction, or employ panel data methods to track changes in usage behaviour over time. Comparative studies across different cities and bank types (public vs. private) would further enrich the understanding of digital banking effectiveness in India's diverse socioeconomic landscape. Additionally, the growing importance of artificial intelligence and open banking APIs in the Indian fintech ecosystem presents fertile ground for future empirical investigation.

References

- Ahmed, S., & Khan, M. (2021). Digital banking and customer convenience: An empirical study of service adoption behaviour. *Journal of Financial Services Marketing*, 26(3), 142–158. <https://doi.org/10.1057/s41264-021-00097-z>
- Bhatia, R., & Sethi, D. (2022). Service quality and customer loyalty in digital banking: The mediating role of satisfaction. *International Journal of Bank Marketing*, 40(5), 1024–1049. <https://doi.org/10.1108/IJBM-11-2021-0528>
- Chandra, P., & Mishra, A. (2023). Customer perceptions of YONO Internet Banking: An exploratory study of SBI users in Central India. *Indian Journal of Finance*, 17(4), 33–47. <https://doi.org/10.17010/ijf/2023/v17i4/172888>
- Das, P., & Roy, S. (2022). Digital banking and financial inclusion: Evidence from emerging economies. *Emerging Markets Finance and Trade*, 58(7), 1891–1909. <https://doi.org/10.1080/1540496X.2021.1978847>

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Gupta, R., & Arora, N. (2022). Digital banking adoption among youth: Attitudes, barriers and enablers. *Journal of Indian Business Research*, 14(2), 189–209. <https://doi.org/10.1108/JIBR-08-2021-0258>
- Iyer, R., & Nair, S. (2023). Urban digital banking usage: Factors influencing adoption and frequency among salaried professionals. *Finance India*, 37(1), 121–138.
- Jain, P., & Agarwal, V. (2023). Digital banking and customer engagement: A longitudinal perspective. *Vikalpa: The Journal for Decision Makers*, 48(2), 89–106. <https://doi.org/10.1177/02560909231176482>
- Kapoor, A., & Malhotra, S. (2023). Assessing service quality in public sector bank digital platforms: An Indian perspective. *Decision*, 50(1), 59–77. <https://doi.org/10.1007/s40622-023-00353-2>
- Kulkarni, V., & Patil, R. (2025). Rural digital banking adoption: Bridging the last-mile connectivity gap. *Journal of Rural Development*, 44(1), 67–86.
- Kumar, A., & Gupta, P. (2020). Mobile banking and customer satisfaction: A study of public sector banks in India. *International Journal of Electronic Finance*, 10(4), 314–332. <https://doi.org/10.1504/IJEF.2020.110752>
- Mehta, S., & Joshi, R. (2022). Customer satisfaction with internet banking services: Determinants and implications. *IIMB Management Review*, 34(1), 67–81. <https://doi.org/10.1016/j.iimb.2021.11.005>
- Nair, K., & Menon, G. (2022). User experience in digital banking applications: An evaluation of interface design and functionality. *Journal of Internet Banking and Commerce*, 27(2), 1–23.
- National Payments Corporation of India. (2024). Annual report on UPI transactions 2023-24. NPCI. <https://www.npci.org.in/what-we-do/upi/product-statistics>
- Patel, H., & Desai, K. (2025). Emerging trends in digital banking: AI, personalisation and the future of fintech in India. *Technological Forecasting and Social Change*, 203, 123451. <https://doi.org/10.1016/j.techfore.2025.123451>
- Patel, N., & Shah, B. (2021). Digital banking in public sector banks: A comparative analysis of service delivery quality. *Banks and Bank Systems*, 16(3), 101–114. [https://doi.org/10.21511/bbs.16\(3\).2021.09](https://doi.org/10.21511/bbs.16(3).2021.09)
- Prasad, L., & Rani, S. (2023). SBI YONO customer satisfaction: An empirical investigation in Andhra Pradesh. *Asia Pacific Journal of Management Research and Innovation*, 19(2), 113–127. <https://doi.org/10.1177/23197145231189052>
- Ramesh, C., & Kumar, S. (2024). SBI YONO effectiveness in reducing branch footfall: An operational analysis. *Journal of Banking and Finance Technology*, 8(1), 42–57. <https://doi.org/10.1007/s42786-023-00051-6>
- Rao, T., & Krishna, V. (2024). Mobile banking and customer satisfaction: A study in the Telangana context. *Osmania Journal of Management*, 18(1), 29–44.
- Reddy, N., & Rao, K. (2021). Customer awareness and usage of digital banking services in India: A survey-based analysis. *Journal of Commerce and Management Thought*, 12(3), 386–402. <https://doi.org/10.5958/0976-478X.2021.00025.6>
- Reserve Bank of India. (2019). Framework for harmonising TAT and customer compensation for failed transactions using authorised payment systems. RBI Circular RBI/2019-20/124. <https://www.rbi.org.in>
- Reserve Bank of India. (2023). Annual report 2022-23: Digital payments ecosystem. RBI Publications. <https://www.rbi.org.in/Scripts/AnnualReportPublications.aspx>
- Reserve Bank of India. (2024). Report of the committee on digital payments: Charges in payment systems. RBI. <https://www.rbi.org.in>
- Sharma, A., & Gupta, N. (2025). YONO effectiveness in enhancing customer satisfaction: Insights from SBI users in Northern India. *International Journal of Business and Management*, 20(3), 55–71. <https://doi.org/10.5539/ijbm.v20n3p55>
- Sharma, R., & Verma, P. (2020). Customer trust in internet banking: Examining the role of security perceptions and risk tolerance. *Journal of Financial Crime*, 27(3), 862–878. <https://doi.org/10.1108/JFC-11-2019-0143>

- Singh, D., & Kaur, H. (2021). Mobile banking effectiveness and customer adoption: Evidence from Indian public sector banks. *Managerial Finance*, 47(10), 1376–1395. <https://doi.org/10.1108/MF-01-2020-0038>
- Smith, A., & Johnson, B. (2020). Digital banking adoption: Factors affecting customer decisions to shift from traditional banking. *Journal of Retail and Consumer Services*, 56, 102130. <https://doi.org/10.1016/j.jretconser.2020.102130>
- State Bank of India. (2023). Annual report 2022-23: Digital initiatives and YONO platform performance. SBI Publications. <https://www.sbi.co.in/web/sbi-in-the-news/annual-reports>
- Suresh, R., & Rao, M. (2025). Mobile banking platform satisfaction: A comparative study of YONO and competitor applications in South India. *South Asian Journal of Management*, 32(1), 78–97.
- Thomas, A., & George, S. (2024). Digital banking and CRM: How personalised communication enhances loyalty among SBI customers. *Marketing Intelligence & Planning*, 42(2), 235–252. <https://doi.org/10.1108/MIP-06-2023-0234>
- Verma, S., & Singh, R. (2024). Security attitudes and trust in internet banking: A cross-generational study in urban India. *Information Technology & People*, 37(4), 1542–1568. <https://doi.org/10.1108/ITP-03-2023-0195>
- World Bank. (2023). Financial inclusion overview: India. The World Bank Group. <https://www.worldbank.org/en/topic/financialinclusion/overview>