



“A STUDY ON CUSTOMER PERCEPTION TOWARDS DIGITAL BANKING IN BALLARI”

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ABSTRACT

Digital banking has become one of the most significant transformations in the Indian financial services sector, reshaping how customers access, manage, and transact money through mobile applications, internet banking, UPI, ATMs, and other electronic channels. This study examines customer perception towards digital banking among 201 respondents in Ballari city, Karnataka, focusing on the demographic profile of users, their usage patterns, the factors that drive adoption, the problems they encounter, and their overall satisfaction with security, availability, speed, usability, trust, and customer support. Using primary data collected through a structured questionnaire and analysed with percentage analysis, tables, and a Chi-Square test, the study finds that respondents in the 21–30 age group, salaried employees, and graduates form the dominant user base, that Canara Bank is the most widely used institution, and that daily usage driven by time-saving and convenience is the norm. Customers expressed broadly favourable perceptions of the security, availability, speed, and usability of digital banking, although transaction failures and poor internet connectivity remain notable concerns. The Chi-Square test found no statistically significant association between respondents' age group and their trust in the bank's handling of data security, indicating that confidence in digital banking security is broadly consistent across age groups. The study concludes that while digital banking enjoys strong acceptance in Ballari, banks need to keep strengthening connectivity, transaction reliability, cybersecurity, and customer support to sustain and widen adoption further.

I. INTRODUCTION

Digital banking has reshaped how financial services reach customers. Rapid gains in information technology and wider internet access now put banking within reach through mobile applications, online banking, UPI, ATMs, and digital wallets, letting customers manage money transfers, bill payments, account upkeep, and online purchases without ever stepping into a branch.

India's digital banking industry has experienced significant growth, propelled by the Digital India programme, rising smartphone ownership, and expanding internet connectivity. Government-backed systems such as UPI, IMPS, NEFT, and RTGS have played a major role in driving customers toward digital payments.

As one of Karnataka's major commercial centres, Ballari district has seen adoption of digital banking climb among students, salaried employees, business owners, and homemakers alike. Even so, customers' perceptions of digital banking hinge on convenience, security, ease of use, trust, service quality, awareness, and comfort with technology. This study sets out to examine how customers in Ballari perceive digital banking services and to identify the factors that shape their satisfaction and usage patterns.

Industry Profile: Indian Digital Banking Sector

India's banking sector underpins the country's economic progress by channelling savings into credit, supporting investment, and advancing financial inclusion. It comprises public sector banks, private sector banks, regional rural banks, cooperative banks, small finance banks, and foreign banks. With customers expecting fast, secure, and convenient service, digital transformation has become a core strategic focus for banks across the country, and affordable internet together with growing smartphone



ownership has pushed digital banking adoption forward across urban and semi-urban areas, Ballari included.

Key Features of the Indian Digital Banking Sector

- Common digital offerings include internet banking, mobile banking, UPI payments, QR code payments, debit and credit card services, and digital account opening.
- Government-backed systems such as UPI, IMPS, NEFT, and RTGS have driven the shift toward cashless transactions.
- Banks combine core banking systems, data centres, cyber security systems, and cloud computing to deliver round-the-clock digital services.
- Adoption is expanding steadily across urban, semi-urban, and rural areas, supported by rising smartphone penetration.
- Competition among banks centres on user-friendly mobile applications, transaction security, service quality, and customer support.
- Key risks facing the sector include cybersecurity threats, digital illiteracy among some customers, and dependence on internet connectivity.

II. REVIEW OF LITERATURE

Udagi (2023) studied customer perception towards e-banking services with reference to SBI Bank in Ballari city and found that customers generally viewed digital banking favourably given its convenience and accessibility, while calling for greater customer awareness, stronger security, and quicker service responses to lift satisfaction further.

Roopa and Nagaraja (2023) examined investors' perception towards e-banking at Karnataka Gramina Bank, Ballari, and found that most customers favoured digital channels for fund transfers, online shopping, and investment transactions, citing satisfaction with usability, safety, and reliability, and recommended continued technological upgrades and awareness drives.

Rajasulochana, Murthy, and R. (2022) examined e-banking and customer satisfaction across public and private sector banks in Karnataka and found that service quality dimensions such as effectiveness, responsiveness, privacy, and system reliability each made a positive contribution to customer satisfaction.

Kasilingam and Thanuja (2023) explored customers' perception of the challenges of digital banking in select public sector banks in Karnataka and identified cybersecurity concerns, technical glitches, failed transactions, and limited digital awareness as key barriers, recommending stronger security, customer education, and technical support.

Bhaskar and Hebbar (2023) studied customer satisfaction with electronic banking in Dakshina Kannada district and found that website quality, service quality, and security lifted customer satisfaction, while privacy concerns pulled it down.

Vasudeva and Paramashivaiah (2023) examined awareness and problems of customers regarding online banking services in Karnataka and found customers well aware of ATM and mobile banking options but struggling with complicated transaction steps.

Kanagaraju and Ganesha (2023) studied customer perception and satisfaction with banking services in Bengaluru Urban and found that digital banking quality, staff support, and online services meaningfully shaped customer satisfaction.

Tyapi and Tiwari (2024) studied digital banking adoption and customer perception in Bagalkot and concluded that perceived usefulness, security, and technological readiness are key drivers of digital banking adoption.

Pooja and Shashidhar (2024) studied the adoption of digital banking among rural customers and reported that financial inclusion, digital literacy, and ease of use encourage rural customers toward digital banking.



Safeena et al. (2011) discovered that security, usefulness, ease of use, and social influence meaningfully shape online banking adoption, building on Davis's (1989) Technology Acceptance Model, which showed that perceived usefulness and perceived ease of use drive technology adoption more broadly.

Research Gap

Existing studies on Ballari tend to centre on individual banks, such as SBI or Karnataka Gramina Bank, typically assessing perception or satisfaction within a single institution. Few studies compare customers across multiple public and private banks in the district or examine trust, security, convenience, digital literacy, and overall perception together. This study seeks to address that gap by examining customer perception of digital banking across different banks in Ballari, offering a fuller picture of adoption patterns and customer experience.

III. RESEARCH METHODOLOGY

Statement of the Problem

Digital banking now plays a central role in modern banking, giving customers convenient, fast, and secure ways to manage their finances. Yet even though services such as UPI, online banking, mobile banking, NEFT, RTGS, and IMPS are widely accessible, customers do not all perceive or use them the same way. Security concerns, digital literacy, trust, ease of use, internet connectivity, and service quality all feed into how satisfied and confident customers feel. Digital banking adoption has grown considerably in Ballari, yet many customers still encounter challenges while using these services, making it worthwhile to study how customers perceive digital banking, what drives their satisfaction, and what challenges they encounter.

Need for the Study

- Digital banking is central to how customers manage their finances, given its growing reach across Ballari district.
- The study examines customer perception across multiple banks operating in Ballari, rather than a single institution.
- It offers insight into the factors driving satisfaction and adoption, and the challenges customers face.
- The results are useful to banks, policymakers, and other stakeholders seeking to strengthen digital banking services.
- The study contributes to the limited body of research on digital banking perception in Ballari district.

Objectives of the Study

Primary Objective

- To examine customer perception of digital banking in Ballari.

Secondary Objectives

- To identify the factors shaping customers' perception of digital banking.
- To determine the level of customer satisfaction with digital banking services.
- To examine usage patterns across various digital banking services.
- To identify the difficulties customers encounter while using digital banking.
- To offer suggestions for strengthening digital banking services.

Scope of the Study

The study is limited to customers in Ballari district, Karnataka, who use digital banking services, covering both public and private sector banks and services including debit cards, UPI, NEFT, RTGS, IMPS, internet banking, and mobile banking. It focuses on customer perceptions of convenience, security, availability, usability, and overall satisfaction, and relies on primary data collected directly from 201 respondents.

Research Design and Data Collection



The study adopts a descriptive research design, since the objective is to describe and analyse how customers perceive digital banking services. Primary data were collected directly from customers through a structured questionnaire covering demographic details and perception-related questions, while secondary data were drawn from RBI publications, annual reports, journals, and other published material. Respondents were selected using the convenience sampling technique, and the collected data were analysed using percentage analysis, tables, charts, and a Chi-Square test in Microsoft Excel.

Sample of the Study

The study is based on 201 respondents from Ballari district, Karnataka, who use digital banking services across public and private sector banks including the State Bank of India, Canara Bank, HDFC Bank, ICICI Bank, and other banks.

Tools Used for Data Analysis

1. Percentage Analysis: Used to express the distribution of respondents across demographic categories, usage patterns, and perception-based responses.

2. Tables and Charts: Used to present and compare the survey responses in an organised, readable form.

3. Chi-Square Test: Used to test whether an association exists between a demographic variable (respondent age) and a perception variable (trust in the bank's data security practices).

Hypotheses

H0: There is no significant association between respondents' age group and their trust in the bank's handling of data security.

H1: There is a significant association between respondents' age group and their trust in the bank's handling of data security.

Limitations of the Study

1. The study is confined to Ballari district and may not reflect perceptions elsewhere.
2. The sample size is limited to 201 respondents selected through convenience sampling.
3. Findings reflect the opinions respondents held at the time of data collection.
4. The time available for the study constrained the depth of analysis possible.
5. The results rely on how honestly and clearly respondents answered the questionnaire.

IV. DATA ANALYSIS AND INTERPRETATION

This section presents the demographic profile, banking usage pattern, and perception of the 201 sampled respondents in Ballari district, followed by an interpretation of each table and the results of the Chi-Square test.

Table 1: Demographic Profile of Respondents

Particulars	Category	Percentage
Age	Below 20 years	20.9%
	21–30 years	48.3%
	31–40 years	15.4%
	Above 41 years	15.4%
Gender	Male	60.7%
	Female	37.3%
	Prefer not to say	2.0%
Education	SSLC	18.9%
	PUC	21.9%
	Graduate	46.8%
	Post graduate	12.4%
Occupation	Student	30.8%
	Salaried employee	46.8%

Particulars	Category	Percentage
	Business owner	13.9%
	Other	8.5%
Monthly Income	Below ₹20,000	38.3%
	₹20,001–₹30,000	43.3%
	₹30,001–₹40,000	12.9%
	Above ₹40,000	5.5%

Interpretation

The demographic profile shows that respondents aged 21–30 form the largest age bracket (48.3%), and men make up a majority of the sample (60.7%). Graduates are the most common education level (46.8%), and salaried employees form the biggest occupational group (46.8%). About 81.6% of respondents earn ₹30,000 or less each month, indicating that the sample is broadly a low- to middle-income group of young, educated, working respondents.

Table 2: Banking Usage Profile of Respondents

Particulars	Category	Percentage
Bank Used	State Bank of India	17.9%
	Canara Bank	46.3%
	HDFC Bank	21.9%
	ICICI Bank	7.5%
	Other	6.5%
Duration of Use	Less than 1 year	29.9%
	1–3 years	31.8%
	3–5 years	20.9%
	More than 5 years	17.4%
Frequency of Use	Daily	83.5%
	Weekly	9.5%
	Monthly	4.0%
	Rarely	3.0%
Primary Purpose	Fund transfer	43.3%
	Bill payment	29.9%
	Online shopping	12.4%
	Investment	8.0%
	Other	5.5%

Interpretation

Canara Bank is the most-used bank among respondents (46.3%), followed by HDFC Bank and SBI. A majority of respondents (61.7%) have used digital banking for under three years, indicating that adoption has accelerated recently, and long-term users with more than five years of experience are comparatively few. As many as 83.5% of respondents use digital banking daily, and fund transfer is the leading purpose behind its use (43.3%), followed by bill payment (29.9%), showing that digital banking is used chiefly as a tool for routine money movement.

Table 3: Factors Influencing Use and Problems Faced in Digital Banking

Particulars	Category	Percentage
Influencing Factors	Time saving	42.8%
	Convenience	32.8%
	Security and safety	20.4%
	Cash back rewards and offers	4.0%



Particulars	Category	Percentage
Problems Faced	Poor internet connection	33.8%
	Transaction failure	39.3%
	Lack of customer support	22.4%
	Difficulty using the mobile app	4.5%

Interpretation

Time saving (42.8%) and convenience (32.8%) are what draw respondents to digital banking most, cited far more often than security or promotional offers, suggesting that speed and ease matter more than anything else in this decision. On the other hand, transaction failures (39.3%) and poor internet connectivity (33.8%) are the problems respondents encounter most, with gaps in customer support and app usability trailing behind, indicating that reliability, rather than design, remains the primary source of friction.

Table 4: Customer Perception towards Digital Banking (Likert Scale Responses)

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Transactions are secure	31.8%	48.8%	15.9%	3.5%	0.0%
Services are available whenever needed	35.3%	43.8%	14.9%	3.0%	3.0%
Satisfied with transaction speed	36.3%	40.8%	16.9%	5.0%	1.0%
Mobile banking app is user-friendly	31.8%	43.3%	17.9%	4.5%	2.5%
Trust bank to protect personal/financial data	27.9%	41.3%	26.4%	3.0%	1.5%
Customer support resolves issues effectively	34.3%	38.8%	19.9%	6.0%	1.0%
Overall satisfied with digital banking	36.8%	40.3%	18.4%	2.0%	2.5%
Would recommend digital banking to others	28.4%	51.2%	15.4%	2.5%	2.5%

Interpretation

The perception analysis shows that a large majority of respondents view digital banking positively across every dimension measured. Around 80.6% of respondents (Strongly Agree and Agree combined) consider digital banking transactions secure, 79.1% feel that services are available whenever they need them, and 77.1% are satisfied with transaction speed. About 75.1% find their bank's mobile app user-friendly, and 69.2% trust their bank to protect their personal and financial information — the comparatively lower figure and higher neutral share here suggest trust in data handling is the area with the most room for improvement. Satisfaction with customer support (73.1%) and overall satisfaction with digital banking (77.1%) are both strong, and 79.6% of respondents said they would recommend digital banking services to others, reflecting broad acceptance of these services among customers in Ballari.

Table 5: Chi-Square Test – Age Group and Trust in Data Security

Parameter	Computed Value
Calculated Chi-Square Value	6.42
Degrees of Freedom	12
Significance Level	0.05
p-value	0.89
Decision	H0 Accepted

Interpretation



Since the p-value of 0.89 exceeds the 0.05 significance threshold, the null hypothesis is accepted. The analysis points to no meaningful statistical association between respondents' age and their confidence in the bank's ability to protect personal and financial information, suggesting that customers across age groups in Ballari share a broadly similar level of trust in digital banking security.

V. FINDINGS, SUGGESTIONS AND CONCLUSION

Findings

6. Respondents aged 21–30 form the largest age bracket in the sample, at 48.3%, indicating that digital banking adoption in Ballari skews toward younger customers.
7. Men make up 60.7% of the sample, the majority gender group, while graduates form the most common education level at 46.8%.
8. Salaried employees form the biggest occupational group (46.8%), and about 81.6% of respondents earn ₹30,000 or less each month, indicating a broadly low- to middle-income customer base.
9. Canara Bank is the most-used bank among respondents (46.3%), well ahead of HDFC Bank (21.9%) and SBI (17.9%).
10. 61.7% of respondents have used digital banking for under three years, and 83.5% use it on a daily basis, pointing to both recent and heavy adoption.
11. Fund transfer (43.3%) and bill payment (29.9%) are the leading purposes behind digital banking use, ahead of shopping and investment activity.
12. Time saving (42.8%) and convenience (32.8%) are the strongest drivers of adoption, well ahead of security and promotional offers.
13. Transaction failure (39.3%) and poor internet connectivity (33.8%) are the biggest problems respondents encounter while using digital banking.
14. A large majority of respondents hold favourable perceptions of security (80.6%), availability (79.1%), transaction speed (77.1%), and app usability (75.1%).
15. Trust in the bank's handling of personal and financial data (69.2%) is comparatively the weakest-rated dimension, with the highest neutral share among all statements measured.
16. 77.1% of respondents are satisfied overall with digital banking services, and 79.6% would recommend these services to others.
17. The Chi-Square test found no statistically significant association between respondents' age group and their trust in the bank's data security practices ($p = 0.89$), indicating that confidence in digital banking security is consistent across age groups.

Suggestions / Recommendations

18. Banks should strengthen internet connectivity and transaction reliability so that fewer transactions fail.
19. Cybersecurity measures should be tightened further to build greater customer confidence, particularly around data protection.
20. Digital banking awareness and training initiatives should be run, with special attention to less experienced and rural customers.
21. The quality and responsiveness of customer support should be sharpened to resolve issues more effectively.
22. Mobile banking applications should be made simpler so that every age group is able to use them comfortably.
23. Banks should roll out customer-friendly features and keep their applications regularly updated.
24. Digital literacy should be built through workshops and awareness drives, especially for less digitally confident customers.
25. Grievance redressal for digital banking complaints should be made faster.
26. Customers should be guided toward secure digital payment habits through ongoing education.



27. Banks should keep upgrading their underlying technology to deliver faster, more dependable service.

Conclusion

This study examined customer perception towards digital banking among 201 respondents in Ballari district, Karnataka, covering their demographic profile, usage patterns, the factors driving adoption, the problems they face, and their perception of security, availability, speed, usability, trust, and customer support. The findings indicate that customers in Ballari hold a broadly favourable view of digital banking: convenience, time savings, and quick transactions keep most respondents using it regularly, and satisfaction runs high on security, availability, speed, and ease of use. That said, transaction failures, connectivity issues, and comparatively lower trust in data protection still weigh on the customer experience, and the Chi-Square test confirms that this pattern of trust holds broadly across age groups rather than varying with them. Banks would do well to keep strengthening digital infrastructure, cybersecurity, and customer awareness to lift satisfaction further and widen adoption, since the efficient, reliable delivery of digital banking services, rather than their availability alone, is what ultimately shapes how customers in Ballari perceive and engage with them.

BIBLIOGRAPHY

Books and Journals

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Kumbhar, V. M. (2011). Factors affecting customer satisfaction in e-banking services.
- Reserve Bank of India. (2024). Annual Report 2023–24. Reserve Bank of India.
- Safeena, R., Date, H., Kammani, A., & Hundewale, N. (2011). Factors affecting the adoption of online banking in India.
- Sharma, S. K., & Govindaluri, S. M. (2014). Internet banking adoption in India.
- Singh, S., & Srivastava, R. K. (2018). Predicting the intention to use internet banking.

Websites

- www.rbi.org.in
- www.npci.org.in
- scholar.google.com

REFERENCES

- Udagi, K. (2023). Perception of customers towards e-banking services with reference to SBI Bank in Ballari city.
- Roopa, B., & Chippolu Nagaraja. (2023). Investors' perception towards e-banking – Karnataka Gramina Bank, Ballari.
- Rajasulochana, Murthy, S., & R., Sneha. (2022). E-banking and customers' contentment in banks in the public and private sectors, Karnataka.
- Kasilingam, R., & Thanuja, V. (2023). Customers' perception on challenges of digital banking system in relation to select public sector banks in Karnataka.
- Bhaskar, A., & Hebbar, K. (2023). Understanding customer satisfaction of electronic banking: Dakshina Kannada district.
- Vasudeva, D. M., & Paramashivaiah. (2023). Awareness and problems of clients regarding online banking services in Karnataka.
- Kanagaraju, P., & Ganesha, B. (2023). Customer perceptions and satisfaction with banking services in Bengaluru Urban.
- Tyapi, R., & Tiwari, A. (2024). Digital banking adoption and customer perception: Bagalkot.
- Pooja, P. R., & Shashidhar. (2024). Adoption of digital banking among rural customers.
- Sathye, M. (1999). Adoption of internet banking by Australian consumers: An empirical investigation.



- Polatoglu, V. N., & Ekin, S. (2001). An empirical investigation of the Turkish consumers' acceptance of internet banking services.
- Karjaluo, H., Mattila, M., & Pento, T. (2002). Factors underlying attitude formation towards online banking in Finland.
- Pikkarainen, T., Pikkarainen, K., Karjaluo, H., & Pahnla, S. (2004). Consumer acceptance of online banking: An extension of the technology acceptance model.
- Reserve Bank of India. (2023). Report on trend and progress of banking in India 2022–23.