

**A STUDY ON THE EFFECTIVENESS OF TECHNOLOGY-BASED SERVICES ON CUSTOMER SATISFACTION IN SMALL FINANCE BANKS**

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**ABSTRACT**

The present study examines the effectiveness of technology-based services and their impact on customer satisfaction in Small Finance Banks. It focuses on understanding how digital banking services influence customer convenience, trust, service quality perception, and overall satisfaction levels in the banking sector. The study adopts a descriptive research design and uses both primary and secondary data sources. Primary data is collected through a structured questionnaire based on a five-point Likert scale from customers of selected Small Finance Banks, and the data is analysed using statistical tools such as percentage analysis, mean scores, and correlation to evaluate the relationship between technology-based services and customer satisfaction. The results of the study indicate that technology-based banking services significantly enhance customer satisfaction by improving convenience, speed, accessibility, and efficiency of financial transactions through services such as mobile banking, internet banking, ATM services, and UPI payments. Customers generally show a high level of satisfaction with the ease of use and reliability of digital banking platforms; however, issues such as cybersecurity concerns, occasional technical errors, and service interruptions slightly affect overall satisfaction levels. The study concludes that technology-based services play a vital role in improving customer satisfaction in Small Finance Banks, as they enhance service delivery and operational efficiency. At the same time, continuous improvements in security systems, system reliability, and technical infrastructure are essential to strengthen customer trust and ensure sustained usage of digital banking services.

**Keywords:** Technology-based services, customer satisfaction, Small Finance Banks, digital banking, mobile banking, internet banking, service quality, customer experience.

**INTRODUCTION**

In the modern banking environment, technology-based services play a vital role in transforming the way financial institutions operate and deliver services to customers. The rapid growth of digitalization has significantly influenced the banking sector, especially Small Finance Banks, by enabling them to provide efficient, fast, and convenient banking solutions. Technology-based services such as mobile banking, internet banking, Unified Payments Interface (UPI), Automated Teller Machines (ATMs), and digital wallets have become essential tools that enhance customer experience and improve service delivery. Small Finance Banks are increasingly adopting digital banking platforms to expand their reach, reduce operational costs, and improve customer engagement. These technological advancements allow customers to perform various banking transactions anytime and anywhere without visiting bank branches, thereby saving time and effort. As a result, customer expectations have also evolved, with greater emphasis on speed, reliability, security, and ease of use of banking services. Customer satisfaction is a key determinant of success in the banking sector, as it directly influences customer retention, loyalty, and trust. In this context, understanding the effectiveness of technology-based services becomes crucial for Small Finance Banks to identify customer needs and improve service quality. However, challenges such as cybersecurity risks, technical glitches, and lack of digital literacy among some users still affect the overall experience of customers. Therefore, this study focuses on analysing the effectiveness of technology-based services and their impact on customer satisfaction in Small Finance Banks. It highlights the importance of digital banking in enhancing service quality while also identifying areas that require improvement to ensure better customer experience and sustainable growth in the banking sector.

**REVIEW OF LITERATURE**

**Okoye, L. U., Omankhanlen, A. E., Okoh, J. I., & Isibor, A. A. (2018)** identified the extent to which technology has impacted customer satisfaction in the Nigerian banking sector. Data analysis was based on responses obtained from 120 customers of three Deposit Money Banks within Ogun and Lagos States of Nigeria. The responses were collated, coded and analysed using the statistical package for social science (SPSS) while model estimation was based on the method of analysis of variance (ANOVA). Features of bank service evaluated in the study are time saving, convenience, crime reduction, reliability, risk reduction, and ease of use. The result showed significant positive impact of all the above service features on customer satisfaction, an indication that electronic-based banking has enhanced customer satisfaction in Nigeria.

**Alkibsi, S. M. (2010)** examined the Technology-based banking services (TBBS) are quickly expanding and provide cost reductions per transaction, given increasing labor costs. TBBS can be very costly if not introduced correctly. It is critical to have a clear understanding regarding how to best implement, manage, and promote TBBS for success. The purpose of this quantitative correlational descriptive research study was to determine if a set of technology-based banking service quality dimensions had an association with customer satisfaction and behavioral intentions toward TBBS in Yemen. The findings contained descriptive and inferential statistical analysis to describe service quality dimensions and customer perceptions of TBBS. The study includes a recommendation that bank leaders focus on service enjoyment and customization to enhance customers' experience using TBBS.

**Rao, Y. V., & Budde, S. R. (2015)** investigated the development of information and technology-enabled banking services and their role in providing value-added services to satisfy customer needs through innovative banking solutions. It examined the perceptions of both bank customers and employees regarding the use and acceptability of various e-banking products and service delivery channels in Andhra Pradesh. A sample of 200 respondents was interviewed to assess the extent of customers availing e-banking services. Correlation analysis was applied to examine the relationship between service usage and customer perceptions. The findings highlighted that modern banking increasingly requires timely, efficient, and cost-effective service delivery to meet customer expectations. It was observed that customers now expect personalized pricing and customized product offerings based on their needs. The study concluded that digital banking enables customization through data and analytics, allowing banks to improve customer satisfaction and profitability through targeted and segmented service delivery.

**Shodiya, O. A., Akintaro, A., & Olopade, J. (2024)** examined the effect of service innovation which consist of New Service Concept, New Service Process, and New Technology on customer satisfaction of selected micro finance banks in Ogun state Nigeria. The study adopted a cross-sectional survey research design with the aid of structured questionnaire which enabled the researcher to obtain firsthand information from the respondents. The data collected was analysed using partial least square structural equation modeling (PLSSEM 4.0). The study concluded that the three dimensions of service innovation, namely New Service Concept, New Service Process, and New Technology, had a positive and substantial influence on customer satisfaction among the selected micro finance banks in Nigeria.

**Nguyen, H. M., Ho, T. K. T., & Ngo, T. T. (2024)** examined the effect of service innovation on customer satisfaction and loyalty in the Vietnamese banking sector. The research investigates banking service innovation from three angles: novel service concept, novel service procedure, and novel technological distribution system. To confirm the relationship between concepts and complete the survey questionnaire, qualitative research techniques are employed. Simultaneously, a quantitative research technique (structural equation modeling—SEM) is used to assess the relationship between concepts. The study surveyed 398 clients of Vietnamese retail banks. Finally, it then draws some conclusions and makes some recommendations to retail banks to improve both customer satisfaction and customer loyalty via enhancing service innovation.

**Ajagbe, A. M., Ismail, K., Aslan, A. S., & Choi, S. L. (2012)** examined to understand the fundamental role of banks in Malaysia in bridging the startups financing gap, thereby, helping to grow technology based small and medium sized enterprises in the country. A qualitative research approach which aims first to identify all the commercial and investment banks in the country, then with a select sample size of ten biggest banks shall administer a semi-structured/open ended questionnaire. This methodology will allow respondents to open up on critical issues to be discussed and not limiting them to certain choices as in the case with a structured form of interview. Banks in Malaysia are not willing to finance high technology small and medium enterprises since it is a high-risk industry. The findings are compared to what is obtainable in other countries and Europe and America.

**Almansour, B., & Elkrggli, S. (2023)** investigated the factors influencing customer satisfaction with ebanking services in Libyan banks, with a focus on perceived usefulness, perceived ease of use, perceived credibility, and customer attitude. A descriptive research design with a quantitative research approach was used, and data was collected through a questionnaire distributed online to 215 e-banking users. The findings revealed that perceived usefulness, perceived ease of use, perceived credibility, and customer attitude have a significant positive impact on customers' satisfaction with e-banking services.

**Nguli, R. K. (2016)** aimed to establish the internal factors affecting customer satisfaction in commercial banks in Kitui Town, focusing on product innovation, relationship management, customer feedback, turnaround time, and queuing management systems. A descriptive survey design was adopted, with a target population of 3,230 active customers from eight commercial banks, and stratified random sampling was used to select respondents. Data were collected using

structured questionnaires for customers and interview schedules for branch managers. Quantitative data were analyzed using SPSS Version 21, while qualitative data were examined thematically, and triangulation was applied to ensure consistency. The results revealed that all independent variables positively influenced customer satisfaction. The study concluded that these factors significantly explained variations in customer satisfaction and recommended improving service speed, reducing waiting time, and enhancing customer feedback mechanisms.

**Kuriakose, M., & Johnson, J. (2026)** examined service adoption and usage patterns of customers in Small Finance Banks (SFBs) in Kerala, with a focus on service quality, customer satisfaction, and sustained patronage. A quantitative research approach with a descriptive design was adopted, and 450 responses were collected using purposive sampling from three regions of Kerala: North (Kozhikode), Central (Ernakulam), and South (Thiruvananthapuram). The service quality of SFBs was measured using the SERVPERF model. Findings revealed that the overall service quality of SFBs was excellent with a mean score of 82.96%. Customer adoption of deposit services was high, while loan usage was moderate and investment and insurance services were low. Regression analysis showed that service quality significantly influenced customer satisfaction, and satisfaction strongly affected customers' intention to continue patronizing SFBs.

**Bindu, R., & Vimala, V. (2024)** The study examined the relationship between clients' perceptions of service quality and the performance of microfinance-based programs in ESAF Small Finance Bank, Kerala. It focused on customers' attitudes toward various aspects of service strategy and their effects on socio-economic and social performance outcomes. A descriptive and analytical research design was adopted using both primary and secondary data sources. Data were collected from 200 clients and analyzed by developing latent constructs based on service quality indicators. Statistical tools such as the Friedman test, ANOVA, and t-test were used to evaluate the responses. The findings revealed that different service quality strategies had varying levels of impact on socio-economic outcomes, with some showing stronger influence than others. The study concluded that maintaining high service quality and improving customer-oriented service strategies significantly enhance performance and customer responsiveness in ESAF Small Finance Bank.

#### STATEMENT OF THE PROBLEM

The rapid growth of digital technology has transformed the banking industry, with Small Finance Banks (SFBs) increasingly adopting technology-based services such as mobile banking, internet banking, ATMs, and digital payment systems to improve accessibility and efficiency. These banks play a crucial role in promoting financial inclusion, particularly among underserved and rural populations. However, the effectiveness of these technology-enabled services in meeting customer expectations remains uncertain. Variations in digital literacy, limited infrastructure, and concerns related to security and usability may influence how customers perceive and utilize these services, ultimately affecting their level of satisfaction.

Despite the expansion of digital banking services, Small Finance Banks often face challenges in delivering consistent and high-quality technological solutions due to resource constraints and operational limitations. Issues such as system reliability, service responsiveness, and customer support can create gaps between customer expectations and actual service experiences. Moreover, there is a lack of focused research examining how these factors specifically impact customer satisfaction in the context of Small Finance Banks. Therefore, this study aims to evaluate the effectiveness of technology-based services and identify the key factors influencing customer satisfaction, thereby addressing existing gaps and improving service delivery.

#### OBJECTIVES OF THE STUDY

- ✦ To analyse the influence of demographic variables (age, education, income, and occupation) on customer satisfaction towards technology-based banking services.
- ✦ To examine the various technology-based services (such as mobile banking, internet banking, ATMs, and digital payment systems) offered by small finance banks.
- ✦ To evaluate customer usage patterns of technology-based services provided by small finance banks.
- ✦ To identify the key factors influencing customer satisfaction in technology-enabled bank services in small finance banks.
- ✦ To provide suggestions for improving the effectiveness of technology-based services to enhance customer satisfaction in small finance banks.

#### SCOPE OF THE STUDY

This study focuses on examining the effectiveness of technology-based services in enhancing customer satisfaction in Small Finance Banks (SFBs). It encompasses various digital banking services, including mobile banking, internet banking, Automated Teller Machines (ATMs), and digital payment systems. The study aims to evaluate customer usage patterns, level of awareness, and overall satisfaction with these services. Key dimensions such as ease of use, accessibility, reliability, security, and responsiveness are considered to assess their influence on customer satisfaction. Additionally, the study explores the extent to which customers adopt and utilize these services in their day-to-day banking activities.

The scope of the study is confined to selected Small Finance Banks within a specific geographical area, thereby limiting the generalizability of the findings. It primarily relies on primary data collected from customers belonging to diverse socio-economic backgrounds, with particular emphasis on rural and semi-urban segments. The study also identifies the challenges faced by customers in using technology-enabled banking services and examines the gap between customer expectations and actual service delivery. While the research provides valuable insights for improving service quality and customer satisfaction, it does not cover the technical or financial performance of banks and is subject to limitations related to time, sample size, and regional coverage.

#### RESEARCH METHODOLOGY

**Research Type:** Descriptive

##### Data Collection:

**Primary Data:** Primary data was collected through a structured questionnaire designed to measure customer satisfaction, usage patterns, and perceptions regarding technology-based banking services.

**Secondary Data:** Secondary data was gathered from academic journals, books, research articles, RBI reports, banking publications, and relevant online sources related to digital banking, customer satisfaction, and Small Finance Banks.

**Sampling Type:** Simple Random Sampling

**Sampling Universe:** The study focused on customers of Small Finance Banks who actively use technology-based banking services across urban, semi-urban, and rural areas.

**Sample Size:** 150 Customers

**Statistical Tools Used:** Percentage Analysis, Descriptive Statistics, and One-Way ANOVA.

#### LIMITATIONS OF THE STUDY

- ✦ The sample size is limited.
- ✦ Focus limited to selected Small Finance Banks, excluding other banking institutions.
- ✦ External factors such as network issues may influence customer satisfaction levels.
- ✦ Technological disruptions and system failures are not deeply investigated.
- ✦ The impact of training and awareness programs is not extensively analysed.

#### DATA ANALYSIS AND INTERPRETATION

**Demographic Variables of the customers**

Demographic Variables	Particulars	Frequency	Percent
Age	Below 20 years	17	11.3
	21-30 years	35	23.3
	31-40 years	30	20.0
	41-50 years	29	19.3
	Above 50 years	39	26.0
Gender	Male	69	46.0
	Female	81	54.0
Educational Qualification	School Level	21	14.0
	Diploma	30	20.0
	UG	31	20.7
	PG	36	24.0
	Professional Qualification	32	21.3

Occupation	Student	15	10.0
	Government Employee	18	12.0
	Private Employee	31	20.7
	Self-Employed	24	16.0
	Business	20	13.3
	Retired	25	16.7
	Others	17	11.3
Monthly Income	Below Rs.10,000	28	18.7
	Rs.10,001 – Rs.25,000	32	21.3
	Rs.25,001 – Rs.50,000	40	26.7
	Rs.50,001 – Rs.1,00,000	30	20.0
	Above Rs.1,00,000	20	13.3
Area of Residence	Urban	51	34.0
	Semi-Urban	57	38.0
	Rural	42	28.0
	Total	150	100.0

Among the 150 respondents, 11.3% were below 20 years, 23.3% in the 21–30 years, 20% in the 31–40 years, 19.3% in the 41–50 years, and 26% were above 50 years. Regarding gender, 46% were male, and 54% were female. 14% of the customers completed school-level education, 20% completed a diploma, 20.7% completed UG, 24% completed PG, and 21.3% completed professional qualifications. In terms of occupation, 10% were students, 12% were government employees, 20.7% were private employees, 16% were self-employed, 13.3% were engaged in business, 16.7% were retired, and 11.3% working as other occupations. 18.7% earn below Rs.10,000, 21.3% earned between Rs.10,001–Rs.25,000, 26.7% earned between Rs.25,001–Rs.50,000, 20% earn between Rs.50,001–Rs.1,00,000, and 13.3% earn above Rs.1,00,000. 34% were from urban areas, 38% were from semi-urban areas, and 28% were from rural areas.

**Sociographic Variables of the customers**

Sociographic Variables	Particulars	Frequency	Percent
Type of Account	Savings Account	60	40.0
	Current Account	42	28.0
	Fixed Deposit Account	23	15.3
	Loan Account	25	16.7
Duration of Banking Relationship	Less than 1 year	42	28.0
	1–3 years	38	25.3
	3–5 years	33	22.0
	Above 5 years	37	24.7
Frequency of using Digital banking services	Daily	28	18.7
	Weekly	47	31.3
	Monthly	37	24.7
	Occasionally / Rarely	38	25.3
Preferred Mode of Banking Transactions	Fully Digital Channels	51	34.0
	ATM-Based Transactions	27	18.0
	Branch Visits	30	20.0
	Combination of Digital and Branch Services	42	28.0
Primary Purpose of Using Digital Banking Services	Fully Digital Channels	51	34.0
	Fund Transfers	44	29.3
	Bill Payments	29	19.3
	Balance Enquiry and Account Information	16	10.7
	Loan and Credit-Related Services	31	20.7
	Other Banking Transactions	30	20.0
	Total	150	100.0

Among the 150 respondents, 40% of the customers having savings accounts, 28% having current accounts, 15.3% having fixed deposit accounts, and 16.7% having loan accounts. Regarding the duration of banking relationship, 28% of the customers with less than 1 year, 25.3% with 1–3 years, 22% with 3–5 years, and 24.7% above 5 years relationship with banking. 18.7% of the customers daily using digital banking services, 31.3% using weekly, 24.7% using monthly, and 25.3% using occasionally or rarely. With respect to the preferred mode of banking transactions, 34% preferred fully digital channels, 18% preferred ATM-based transactions, 20% preferred branch visits, and 28% preferred a combination of digital and branch services. Regarding the primary purpose of using digital banking services, 29.3% using digital banking services for fund transfers, 19.3% for bill payments, 10.7% for balance enquiry and account information, 20.7% for loan and credit-related services, and 20% for other banking transactions.

**Descriptive Statistics for the Technology-Based Services offered by Small Finance Banks**

Statements	N	Mean	SD
Mobile banking services of Small Finance Banks are easy to use and support convenient financial transactions.	150	3.05	1.421
Internet banking enables secure account access without visiting the branch.	150	3.03	1.433
ATM services are easily accessible and support quick cash withdrawals and basic banking needs.	150	2.83	1.403
UPI and digital payments enable fast and seamless fund transfers.	150	3.07	1.329
SMS alerts provide timely and accurate updates on account transactions.	150	3.08	1.349
Technology-based banking ensures security and privacy of customer financial data.	150	2.87	1.322
Customer support for digital banking is responsive and resolves issues quickly.	150	3.11	1.445
Valid N (listwise)	150		

The above table indicates that the customers agree with the mobile banking services of small finance banks support convenient transactions (3.05), internet banking enables secure account access without visiting the branch (3.03), UPI and digital payments enable fast fund transfers (3.07), and SMS alerts providing timely account transaction updates (3.08). The customers disagree with the ATM services are easily accessible and support quick withdrawals (2.83), and technology-based banking ensures the security of customer financial data (2.87).

**Descriptive Statistics for the Customer Usage Patterns of Technology-Based Services Provided by Small Finance Banks**

Statements	N	Mean	SD
I frequently use mobile banking applications for performing day-to-day financial transactions.	150	2.97	1.423

Mobile banking applications are relied upon for checking account balance and transaction history.	150	2.89	1.475
Utility bill payments are carried out through digital banking channels.	150	3.05	1.478
QR code-based payments are used in daily purchase transactions.	150	3.16	1.366
Digital banking services are used for accessing loan repayment and EMI services.	150	3.05	1.465
Internet banking services are used for managing multiple bank accounts when applicable.	150	2.85	1.450
Valid N (listwise)	150		

The above table indicates that the customers disagree with the frequently using mobile banking applications for day-to-day financial transactions (2.97), using applications to check account balance and history (2.89), and internet banking services for managing multiple accounts (2.85). The customers agree with the utility bill payments are carried out through digital banking (3.05), QR code-based payments are used in daily purchase transactions (3.16), and digital banking services accessed for loan repayment and EMI services (3.05).

**Descriptive Statistics for the Factors Influencing Customer Satisfaction in Technology-Enabled Bank Services in Small Finance Banks**

Statements	N	Mean	SD
Security of transactions significantly influences satisfaction in digital banking.	150	2.97	1.409
Confidence in online transactions contributes to higher customer satisfaction.	150	2.93	1.466
Simplicity of interface design positively influences customer satisfaction with banking applications.	150	3.13	1.398
Speed of transaction processing significantly enhances customer satisfaction.	150	2.97	1.390
The technology-enabled banking services improve my overall banking experience.	150	3.13	1.382
Time convenience significantly improves customer satisfaction in digital banking usage.	150	3.11	1.386
Valid N (listwise)	150		

The above table indicates that the customers dissatisfied with the security of transactions influencing satisfaction in digital banking (2.97), confidence in online transactions contributing to satisfaction (2.93), speed of transaction processing enhancing customer satisfaction (2.97). The customers satisfied with the simplicity of interface design influences customer satisfaction (3.13), technology-enabled banking services improving the overall banking experience (3.13), and time convenience improving satisfaction in digital banking (3.11).

**Comparison between the Demographic Variables (Monthly Income) of the customers and Various Dimensions**

Ho1: There is a substantial link between the demographic variables (monthly income) of the customers and various dimensions.

Dimensions	Monthly Income	N	Mean	SD	F	Sig.
Technology-Based Services offered by Small Finance Banks	Below Rs.10,000	28	3.17	0.531	1.074	0.371
	Rs.10,001 – Rs.25,000	32	3.00	0.515		
	Rs.25,001 – Rs.50,000	40	2.94	0.502		
	Rs.50,001 – Rs.1,00,000	30	2.99	0.511		
	Above Rs.1,00,000	20	2.93	0.443		
	Total	150	3.00	0.505		
Customer Usage Patterns of Technology-Based Services Provided by Small Finance Banks	Below Rs.10,000	28	3.01	0.339	0.458	0.766
	Rs.10,001 – Rs.25,000	32	2.94	0.727		
	Rs.25,001 – Rs.50,000	40	2.93	0.587		
	Rs.50,001 – Rs.1,00,000	30	3.09	0.626		
	Above Rs.1,00,000	20	3.05	0.510		
	Total	150	3.00	0.578		
Key Factors Influencing Customer Satisfaction in Technology-Enabled Bank Services in Small Finance Banks	Below Rs.10,000	28	3.02	0.528	0.875	0.481
	Rs.10,001 – Rs.25,000	32	3.19	0.746		
	Rs.25,001 – Rs.50,000	40	3.02	0.540		
	Rs.50,001 – Rs.1,00,000	30	2.89	0.709		
	Above Rs.1,00,000	20	3.10	0.750		
	Total	150	3.04	0.650		

There is a substantial link between the technology-based services offered by small finance banks (0.371), customer usage patterns of technology-based services provided by small finance banks (0.766), key factors influencing customer satisfaction in technology-enabled bank services in small finance banks (0.481) and the monthly income of the customers.

**Comparison between the Sociographic Variables (Primary Purpose of Using Digital Banking Services) of the customers and Various Dimensions**

Ho2: There is a substantial link between sociographic variables (primary purpose of using digital banking services) of the customers and various dimensions.

Dimensions	Primary Purpose of Using Digital Banking Services	N	Mean	SD	F	Sig.
Technology-Based Services offered by Small Finance Banks	Fund Transfers	44	3.03	0.516	0.587	0.673
	Bill Payments	29	2.90	0.547		
	Balance Enquiry and Account Information	16	2.95	0.581		
	Loan and Credit-Related Services	31	3.08	0.410		
	Other Banking Transactions	30	3.03	0.510		
	Total	150	3.00	0.505		
Customer Usage Patterns of Technology-Based Services Provided by Small Finance Banks	Fund Transfers	44	3.14	0.545	1.099	0.360
	Bill Payments	29	2.93	0.475		
	Balance Enquiry and Account Information	16	3.01	0.622		
	Loan and Credit-Related Services	31	2.89	0.540		
	Other Banking Transactions	30	2.96	0.713		
	Total	150	3.00	0.578		
Key Factors Influencing Customer Satisfaction in Technology-Enabled Bank Services in Small Finance Banks	Fund Transfers	44	3.10	0.607	2.498	0.045
	Bill Payments	29	2.74	0.689		
	Balance Enquiry and Account Information	16	3.07	0.702		
	Loan and Credit-Related Services	31	3.24	0.572		
	Other Banking Transactions	30	3.03	0.657		
	Total	150	3.04	0.650		

There is a substantial link between the technology-based services offered by small finance banks (0.673), customer usage patterns of technology-based services provided by small finance banks (0.360) and the primary purpose of using digital banking services of the customers. There is no substantial link between the key

factors influencing customer satisfaction in technology-enabled bank services in small finance banks (0.045) and the primary purpose of using digital banking services of the customers.

#### **Key Factors Influencing Customer Satisfaction in Technology-Enabled Bank Services in Small Finance Banks**

Customers who are using fund transfer services (3.10), balance enquiry and account information (3.07), loan and credit-related services (3.24), and other banking transactions (3.03) agree with the primary purpose of using digital banking services. Customers who are using bill payment services (2.74) disagree with the primary purpose of using digital banking services.

#### **FINDINGS**

##### **Demographic Variables**

Most of the respondents belong to the age group of above 50 years. Most of the respondents are female. Most of the respondents have completed postgraduate education. Most of the respondents are private employees. Most of the respondents earned between Rs.25,001 – Rs.50,000. Most of the respondents belong to semi-urban areas.

##### **Sociographic Variables**

Most of the respondents having a savings account. Most of the respondents with less than 1 year. Most of the respondents use digital banking services weekly. Most of the respondents preferred fully digital channels for banking transactions. Most of the respondents using digital banking services primarily for fund transfers.

##### **Technology-Based Services offered by Small Finance Banks**

The findings revealed that respondents have a positive perception of customer support, SMS alerts, and UPI/digital payment services in technology-based banking. They also indicated a moderate level of satisfaction with mobile banking and internet banking services in terms of usability and convenience. However, the findings further suggested comparatively lower satisfaction with ATM accessibility and concerns regarding the security and privacy of technology-based banking services.

##### **Customer Usage Patterns of Technology-Based Services Provided by Small Finance Banks**

The findings indicated that respondents show higher usage of QR code-based payments and digital channels for bill payments and loan-related services. They also indicated a moderate level of usage of mobile banking applications for day-to-day transactions. However, the findings revealed comparatively lower usage of mobile banking for account information and internet banking for managing multiple accounts.

##### **Key Factors Influencing Customer Satisfaction in Technology-Enabled Bank Services in Small Finance Banks**

The findings suggested that respondents have a higher level of agreement that simplicity of interface design, overall banking experience, and time convenience positively influence customer satisfaction. They also indicated a moderate level of agreement regarding the impact of transaction speed and security on satisfaction. However, the findings revealed comparatively lower agreement on confidence in online transactions as a factor influencing customer satisfaction.

#### **SUGGESTIONS**

- ✦ Small finance banks may enhance customer satisfaction by improving the security features of digital banking platforms.
- ✦ Banks might focus on simplifying user interfaces to make technology-based services more accessible to all customer groups.
- ✦ Continuous technological upgrades may help in increasing the speed and reliability of digital transactions.
- ✦ Customer awareness programs might improve the adoption and effective use of technology-based banking services.
- ✦ Banks may strengthen customer trust by ensuring data privacy and transparent digital processes.
- ✦ Training initiatives for customers might reduce difficulties faced while using mobile and internet banking services.
- ✦ Personalized digital services may increase customer engagement and overall satisfaction.
- ✦ Efficient grievance redressal systems might enhance customer confidence in technology-enabled banking services.
- ✦ Integration of advanced technologies such as AI-based support may improve service quality and responsiveness.
- ✦ Regular feedback mechanisms might help banks identify gaps and improve their digital service delivery.
- ✦ Expanding digital infrastructure in rural areas may promote wider usage of technology-based banking services.
- ✦ Regular updates of banking applications may ensure better functionality and performance.
- ✦ The adoption of digital banking might reduce waiting time and make financial transactions more efficient.
- ✦ Customers may experience greater flexibility in managing their accounts and performing day-to-day banking operations.
- ✦ Feedback mechanisms might help banks identify gaps in service quality and improve performance.
- ✦ Personalization of services based on customer needs may enhance engagement and satisfaction.

#### **CONCLUSION**

The study will examine the effectiveness of technology-based services on customer satisfaction in small finance banks. It will focus on digital banking facilities such as mobile banking, internet banking, ATMs, and digital payment systems. These services will enhance customer convenience and improve accessibility to banking operations. They will also reduce transaction time and increase service efficiency. Customers will benefit from faster and more flexible banking experiences. The adoption of technology will improve the overall quality of banking services. Security of transactions will play a key role in influencing customer trust and satisfaction. Ease of use of digital platforms will further encourage customer adoption. Reliability of banking applications will also affect user satisfaction levels. Small finance banks will be expected to strengthen their digital infrastructure. Continuous improvements in technology will support better service delivery. Customer awareness of digital services will increase usage patterns. Banks will provide support systems to assist customers in using technology-based services. Digital literacy programs will help in improving customer engagement. The effectiveness of services will depend on smooth and uninterrupted functioning. Customer feedback will guide improvements in banking applications. Technological advancements will enhance competitiveness among banks. Overall service quality will improve through innovation. The study will show that customer satisfaction will be positively influenced by technology-based banking services. Small finance banks will benefit from increased trust and long-term customer relationships.

#### **REFERENCES**

- 1) Okoye, L. U., Omankhanlen, A. E., Okoh, J. I., & Isibor, A. A. (2018). Technology-based financial services delivery and customer satisfaction: A study of the Nigerian banking sector. *International Journal of Civil Engineering and Technology*, 9(13), 214-223.
- 2) Alkibsi, S. M. (2010). *Customer perceptions of technology-based banking service quality provided by banks operating in Yemen*. University of Phoenix.
- 3) Rao, Y. V., & Budde, S. R. (2015). Banking technology innovations in India: Enhancing customer value and satisfaction. *Indian Journal of Science and Technology*, 8(33), 1-10.
- 4) Shodiya, O. A., Akintaro, A., & Olopade, J. (2024). Service innovation and customers' satisfaction of selected micro finance banks in Ogun State, Nigeria. *Journal of International Business, Economics and Entrepreneurship (JIBE)*, 9(1), 38-51.
- 5) Nguyen, H. M., Ho, T. K. T., & Ngo, T. T. (2024). The impact of service innovation on customer satisfaction and customer loyalty: a case in Vietnamese retail banks. *Future Business Journal*, 10(1), 61.
- 6) Ajagbe, A. M., Ismail, K., Aslan, A. S., & Choi, S. L. (2012). Investment in technology based small and medium sized firms in Malaysia: Roles for commercial banks. *International Journal of Research in Management and Technology*, 2(2), 147-153.
- 7) Almansour, B., & Elkrgli, S. (2023). Factors influencing customer satisfaction on e-banking services: a study of Libyan banks. *International Journal of Technology Innovation and Management (IJTIM)*, 3(1), 34-42.
- 8) Nguli, R. K. (2016). *Internal factors affecting customer satisfaction of commercial banks in Kitui town* (Doctoral dissertation).
- 9) Kuriakose, M., & Johnson, J. (2026). Service Quality and Customer Satisfaction in Kerala's Small Finance Banks: A Study on Adoption and Patronage Intentions. *Vision*, 09722629261435326.
- 10) Bindu, R., & Vimala, V. (2024). Clients' perceptions towards Service quality of New Regime Bank in India-ESAF Small Finance Bank. *Business Studies*, 45(1), 198-214.