



IMPACT OF DIGITAL BANKING SERVICES ON CUSTOMER SATISFACTION: AN EMPIRICAL STUDY OF SBI CUSTOMERS IN KARIMNAGAR DISTRICT

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Abstract

The rapid advancement of digital technology has significantly transformed the Indian banking sector. Digital banking services such as internet banking, mobile banking, UPI transactions, ATM services, and mobile applications have enhanced convenience and efficiency in financial transactions. The present study examines the impact of digital banking services on customer satisfaction among State Bank of India (SBI) customers in Karimnagar District. The study is based on primary data collected from 120 respondents using a structured questionnaire. Statistical tools such as percentage analysis, mean score, ranking method, Pearson correlation, and Cronbach's Alpha reliability test were applied for data analysis. The findings reveal a high level of customer satisfaction (overall mean = 3.90) and indicate that digital banking significantly reduces branch visits and enhances convenience. The Pearson correlation coefficient ($r = 0.68$, $p < 0.05$) confirms a strong positive relationship between digital banking services and customer satisfaction. The study concludes that continuous improvement in technical efficiency and customer support will further strengthen digital banking adoption and customer satisfaction.

Keywords: Digital Banking, Customer Satisfaction, SBI, UPI, Mobile Banking, Correlation Analysis.

I. Introduction

The banking sector in India has undergone a remarkable transformation with the rapid advancement of digital technology. Digital banking services such as internet banking, mobile banking, UPI transactions, ATM services, and mobile applications have significantly changed the way customers interact with banks. In recent years, digitalization has enhanced speed, convenience, accessibility, and efficiency in banking operations.

State Bank of India, being the largest public sector bank in India, has introduced various digital platforms including internet banking, mobile banking, and the YONO app to provide seamless banking experiences to its customers. These services aim to reduce physical branch visits and improve customer convenience.

Customer satisfaction plays a crucial role in determining the success and sustainability of digital banking services. The quality, security, reliability, and user-friendliness of digital platforms directly influence customer perception and loyalty. Although digital banking offers numerous benefits, customers may also face challenges such as technical issues, transaction failures, and security concerns. In this context, the present study attempts to examine the impact of digital banking services on customer satisfaction among SBI customers in Karimnagar District. The study also identifies usage patterns and problems faced by customers while using digital banking services.

Review of Literature

Safeena, Abdullah and Date (2014) aimed to identify factors influencing the adoption of internet banking among customers. The study revealed that perceived usefulness, ease of use, and trust are the



major determinants of customer acceptance of digital banking services. Security concerns were identified as a key barrier to adoption.

Kumar and Ravi (2016) examined customer satisfaction towards mobile banking services in public sector banks. The objective was to evaluate the relationship between service quality and customer loyalty. The findings indicated that responsiveness, speed of transaction, and user-friendly applications positively influence customer satisfaction levels.

Singh (2017) focused on customer perception towards digital payment systems in India. The study aimed to assess customer awareness and usage patterns of digital services. The findings revealed that younger customers show higher digital adoption, while older customers face challenges due to limited digital literacy.

George and Kumar (2019) investigated the impact of digital banking services on customer satisfaction in selected Indian banks. The objective was to measure the relationship between digital service quality and satisfaction. The study concluded that there is a strong positive relationship between digital service efficiency and overall customer satisfaction.

Kaur and Kiran (2020) analyzed customer satisfaction towards internet banking in public sector banks. The objective was to evaluate service quality factors affecting customer trust. The study found that system security, reliability, and quick grievance redressal mechanisms are critical for enhancing customer confidence.

Reddy (2021) examined digital banking adoption in semi-urban areas of Telangana. The objective was to understand customer challenges and satisfaction levels. The study revealed that while digital usage is increasing, technical glitches and server downtime remain significant issues affecting customer experience.

Research Gap

Although several studies have examined digital banking services and customer satisfaction in India, most of them focus on metropolitan and urban areas. Limited research has been conducted at the district level, particularly in semi-urban regions like Karimnagar. Moreover, previous studies often analyze digital banking adoption in general without specifically examining its impact on customer satisfaction in public sector banks. There is a lack of empirical research based on primary data addressing customer usage patterns and challenges in such regions. Hence, this study attempts to fill this gap by focusing on SBI customers in Karimnagar District.

Scope of the Study

The present study focuses on examining the impact of digital banking services on customer satisfaction among SBI customers in Karimnagar District. The study covers various digital services such as internet banking, mobile banking, YONO app, ATM services, UPI transactions, and debit/credit card services.

The research is limited to 120 respondents selected from SBI customers within Karimnagar District. It analyzes customer usage patterns, satisfaction levels, and problems encountered while using digital banking services. The study is confined to primary data collected through a structured questionnaire and does not include customers of other banks. The findings are applicable mainly to SBI customers in the selected geographical area.



Objectives of the Study

1. To examine the usage level of digital banking services among SBI customers.
2. To analyze the impact of digital banking services on customer satisfaction.
3. To identify the problems faced by customers while using digital banking services.

Hypotheses of the Study

H₀ (Null Hypothesis): There is no significant relationship between digital banking services and customer satisfaction.

H₁ (Alternative Hypothesis): There is a significant relationship between digital banking services and customer satisfaction.

Research Methodology

The present study is empirical in nature and is based on both primary and secondary data. Primary data were collected from 120 customers of State Bank of India in Karimnagar District using a structured questionnaire. The questionnaire consisted of four sections covering personal profile, usage of digital banking services, customer satisfaction (Likert scale), and problems faced by customers.

A convenience sampling method was adopted for selecting respondents due to accessibility and time constraints. The study employed descriptive and analytical research design to examine the relationship between digital banking services and customer satisfaction.

Secondary data were collected from books, journals, research articles, RBI reports, and official publications related to digital banking.

For data analysis, statistical tools such as percentage analysis, mean score analysis, ranking method, and Pearson correlation were used. The hypothesis was tested at a 5% level of significance to determine the relationship between digital banking services and customer satisfaction.

Data Analysis and Interpretation

Reliability Test (Cronbach’s Alpha)

To measure the internal consistency of the Likert scale items used in the questionnaire, Cronbach’s Alpha reliability test was applied.

Table-1: Reliability Test Results

S.No.	Scale / Section	Number of Items	Cronbach’s Alpha ()	Reliability Level
1	Section C – Customer Satisfaction	8	0.87	Good Reliability
2	Section D – Problems & Suggestions	6	0.81	Good Reliability
3	Overall Scale (Section C & D Combined)	14	0.89	Excellent Reliability

Source: SPSS Output

The above table shows that the Cronbach’s Alpha values for both sections are above 0.80, indicating good internal consistency among the Likert scale items. The overall reliability coefficient (0.89) demonstrates excellent reliability of the questionnaire. Therefore, the instrument used for measuring customer satisfaction and problems related to digital banking services is statistically reliable and suitable for further analysis.



Section A: Personal Profile of Respondents

This section presents the demographic profile of the respondents selected for the study. It includes variables such as gender, age, educational qualification, occupation, and monthly income. The analysis of these factors helps in understanding the background characteristics of SBI customers using digital banking services in Karimnagar District.

Table-2: Personal Profile of Respondents

Variable	Category	No. of Respondents	Percentage (%)
Gender	Male	72	60%
	Female	44	37%
	Others	4	3%
Age Group	Below 25	28	23%
	25–35	40	33%
	36–45	26	22%
	46–55	16	13%
	Above 55	10	9%
Educational Qualification	SSC	14	12%
	Intermediate	22	18%
	Graduate	46	38%
	Postgraduate	30	25%
	Others	8	7%
Occupation	Student	24	20%
	Employee	48	40%
	Business	22	18%
	Professional	16	13%
	Others	10	9%
Monthly Income	Below 20,000	30	25%
	20,000– 40,000	38	32%
	40,001– 60,000	28	23%
	Above 60,000	24	20%

Source: Primary Data

The personal profile of respondents indicates that a majority (60%) are male, while 37% are female. Most respondents (33%) belong to the 25–35 age group, followed by 23% below 25 years, showing higher digital adoption among younger customers. Significant proportions (38%) are graduates and 25% postgraduates, reflecting good educational background. Employees constitute 40% of respondents. Regarding income, 32% earn between 20,000– 40,000, indicating moderate income levels among SBI digital banking users.

Section B: Usage of Digital Banking

This section analyzes the usage pattern of digital banking services among SBI customers in Karimnagar District. It examines the duration of usage, types of digital services utilized, frequency of transactions, and primary purposes for using digital banking. The analysis helps in understanding the level of digital adoption and customer engagement with various digital platforms offered by SBI.



Table-3: Years of Usage of Digital Banking Services of SBI

Duration	No.	%
< 1 Year	18	15%
1–3 Years	42	35%
3–5 Years	34	28%
> 5 Years	26	22%
Total	120	100%

Source: Primary Data

The above table shows that a majority of respondents (35%) have been using SBI digital banking services for 1–3 years, followed by 28% who have used them for 3–5 years. About 22% of customers have more than five years of experience, indicating sustained usage. Only 15% are recent users with less than one year of experience. This suggests that most customers are moderately experienced users of digital banking services.

Table-4: Digital Services of SBI used by Customers

Digital Service	No. of Respondents	Percentage (%)
Internet Banking	68	57%
Mobile Banking	82	68%
YONO SBI App	76	63%
ATM Services	104	87%
UPI Services	90	75%
Debit/Credit Card	98	82%

Source: Primary Data (Percentage calculated out of 120 respondents; total may exceed 100% due to multiple responses.)

The above table indicates that ATM services (87%) are the most widely used digital service among SBI customers, followed by debit/credit cards (82%) and UPI services (75%). Mobile banking (68%) and YONO SBI app (63%) are also widely adopted. Internet banking (57%) shows comparatively lower usage. Since this is a multiple response question, the total percentage exceeds 100%. The findings suggest that customers prefer convenient and transaction-based digital services for their routine banking activities.

Table-5: Frequency of Using Digital Banking Services

Frequency	No. of Respondents	Percentage (%)
Daily	52	43%
Weekly	38	32%
Monthly	20	17%
Rarely	10	8%
Total	120	100%

Source: Primary Data



The table shows that 43% of respondents use digital banking services on a daily basis, indicating high engagement with SBI’s digital platforms. About 32% use these services weekly, while 17% access them monthly. Only 8% use digital banking rarely. This suggests that a majority of customers frequently rely on digital banking services for their financial transactions and routine banking needs.

Table-6: Primary Purpose of Using Digital Banking Services

Purpose	No. of Respondents	Percentage (%)*
Fund Transfer	78	65%
Bill Payments	64	53%
Online Shopping	52	43%
Balance Enquiry	70	58%
Others	18	15%

Source: Primary Data (Percentage calculated based on 120 respondents. Total percentage exceeds 100% due to multiple responses.)

The above table reveals that fund transfer (65%) is the primary purpose for using digital banking services among SBI customers, followed by balance enquiry (58%) and bill payments (53%). A considerable number of respondents (43%) use digital banking for online shopping. Only 15% indicated other purposes. This indicates that customers mainly rely on digital banking for routine financial transactions and quick account-related services.

Section C: Customer Satisfaction (Likert Scale Data)

This section analyzes the level of customer satisfaction towards digital banking services offered by SBI. The satisfaction level is measured using a five-point Likert scale ranging from Strongly Agree to Strongly Disagree. Mean scores and ranking methods are applied to evaluate customer perception regarding convenience, security, service quality, and overall satisfaction with digital banking services.

Table-7: Customer Satisfaction Towards Digital Banking Services

S.No.	Statement	SA	A	N	D	SD	Total	Mean	Rank
01	Digital banking services are convenient	48	42	16	8	6	120	3.98	4
02	Transactions are processed quickly	44	46	14	10	6	120	3.93	6
03	The system is secure and safe	40	50	18	8	4	120	3.95	5
04	The mobile banking/YONO app is user-friendly	52	40	14	8	6	120	4.03	3
05	Customer support is satisfactory	30	44	22	16	8	120	3.60	8
06	Charges for digital services are reasonable	28	38	26	18	10	120	3.47	9
07	Digital banking reduces my visits to the branch	60	38	12	6	4	120	4.20	1
08	Overall, I am satisfied with SBI digital banking services	50	42	16	8	4	120	4.05	2
Overall Mean								3.9	

Source:Primary Data



The above table indicates that customers are generally satisfied with SBI’s digital banking services, as most mean scores are above 3.5, reflecting a high level of satisfaction. The statement “Digital banking reduces my visits to the branch” secured the highest mean score (4.20) and ranked first, highlighting that customers strongly value the convenience and time-saving benefits of digital services. “Overall satisfaction” (4.05) and “User-friendliness of the mobile banking/YONO app” (4.03) obtained second and third ranks respectively, showing a strong positive perception toward SBI’s digital platforms. Statements related to convenience, security, and quick transactions occupied middle ranks, indicating consistent but slightly lower satisfaction levels. However, “Customer support” (3.60) and “Reasonable charges” (3.47) received the lowest ranks, suggesting that customers expect improvements in service support and pricing aspects. Overall, the ranking and mean analysis confirm a positive customer perception of digital banking services among SBI customers in Karimnagar District.

Since overall weighted Mean is 3.90 falls between 3.1–4.0, it indicates High Level of Customer Satisfaction.

Section D: Problems & Suggestions (Likert Scale Data)

This section examines the problems faced by customers while using SBI digital banking services and identifies areas requiring improvement. The responses are measured using a five-point Likert scale. Mean score and ranking methods are applied to determine the major issues affecting customer experience and to suggest necessary improvements in digital banking services.

Table-8: Problems Faced By Customers While Using SBI Digital Banking Services

S.No.	Statement	SA	A	N	D	SD	Total	Weighted Mean	Rank
01	Face Technical Issues	36	40	18	16	10	120	3.63	4
02	Server/Transaction Failure	34	42	20	16	8	120	3.65	3
03	OTP/Login Issues	38	36	22	14	10	120	3.65	3
04	Security Needs Improvement	30	44	24	14	8	120	3.62	5
05	Improve Customer Support	42	38	18	14	8	120	3.77	2
06	Overall Improvement Needed	40	44	16	12	8	120	3.80	1

Source: Primary Data

The above table highlights the major problems and improvement areas in SBI’s digital banking services. The statement “Overall Improvement Needed” secured the highest mean score (3.80) and ranked first, indicating that customers believe further enhancement of digital services is necessary. “Improve Customer Support” (3.77) ranked second, suggesting that customers expect better assistance and grievance redressal mechanisms.

Issues such as server/transaction failure and OTP/login problems share the next ranks, reflecting moderate operational challenges faced by users. “Face Technical Issues” and “Security Needs Improvement” obtained slightly lower ranks but still indicate noticeable concerns. Overall, the results show that while satisfaction levels are high, customers expect improvements in technical efficiency and support services to enhance their digital banking experience.

Since weighted Mean 3.69 is above 3.5, it indicates that customers moderately agree that improvements are required in digital banking services.



Hypothesis Testing

To examine the relationship between digital banking services and customer satisfaction, Pearson’s Correlation analysis was applied. The hypothesis was tested at a 5% level of significance.

Hypotheses

H₀ (Null Hypothesis)

There is no significant relationship between digital banking services and customer satisfaction.

H₁ (Alternative Hypothesis)

There is a significant relationship between digital banking services and customer satisfaction.

Correlation Analysis Result

Variables	Pearson Correlation (r)	Significance Level	Result
Digital Banking Services & Customer Satisfaction	0.68	0.000 (<0.05)	Significant

Interpretation

The Pearson correlation coefficient ($r = 0.68$) indicates a strong positive relationship between digital banking services and customer satisfaction. Since the significance value ($p < 0.05$) is less than the 5% level of significance, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted.

This result confirms that improvements in digital banking services significantly enhance customer satisfaction among SBI customers in Karimnagar District. The findings clearly support the title of the study, demonstrating that digital banking services have a positive and meaningful impact on customer satisfaction.

Findings and Conclusion of the Study

Based On The Analysis of Primary Data Collected From 120 SBI Customers In Karimnagar District, The Following Major Findings Were Observed:

1. The majority of respondents (60%) are male and 33% belong to the 25–35 age group, indicating higher digital adoption among young customers.
2. Most respondents (38%) are graduates and 40% are employees, showing that educated and salaried individuals actively use digital banking services.
3. A significant proportion (35%) have been using digital banking services for 1–3 years, reflecting moderate experience in digital transactions.
4. ATM services (87%), debit/credit cards (82%), and UPI services (75%) are the most widely used digital banking services.
5. Nearly 43% of respondents use digital banking services daily, indicating high engagement with SBI’s digital platforms.
6. Fund transfer (65%) is the primary purpose for using digital banking services, followed by balance enquiry (58%) and bill payments (53%).
7. The overall mean score of customer satisfaction is 3.90, indicating a high level of satisfaction.
8. “Digital banking reduces branch visits” ranked first (Mean = 4.20), highlighting convenience as the major strength.



9. “Customer support” and “Reasonable charges” received comparatively lower ranks, suggesting areas for improvement.
10. The overall mean score for problems and suggestions is 3.69, indicating moderate agreement that improvements are required.
11. Pearson’s correlation coefficient ($r = 0.68$) shows a strong positive relationship between digital banking services and customer satisfaction.
12. The null hypothesis was rejected, confirming that digital banking services significantly impact customer satisfaction.

Conclusion

The study concludes that digital banking services have a significant and positive impact on customer satisfaction among SBI customers in Karimnagar District. The findings reveal that customers widely use digital services such as ATM, UPI, mobile banking, and debit/credit cards for routine financial transactions. The overall satisfaction level is high, particularly regarding convenience, user-friendliness, and reduction in branch visits.

However, certain issues such as customer support, service charges, and technical glitches require attention. The correlation analysis confirms a strong positive relationship between digital banking services and customer satisfaction, thereby supporting the research hypothesis.

Overall, the study highlights that continuous improvement in digital service quality, technical efficiency, and customer support will further enhance customer satisfaction and strengthen SBI’s digital banking ecosystem.

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