

**TECHNOLOGY SERVICE QUALITY IN PRIVATE BANKING :A BANKQUAL
MODEL PERSPECTIVE**

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ABSTRACT:

The rapid growth of digital banking has transformed the private banking landscape, making technology service quality a critical factor in customer satisfaction and loyalty. This study applies the BankQual model to investigate the dimensions of technology service quality in private banking. A survey of private banking customers reveals that reliability, responsiveness, and security are the most significant predictors of technology service quality. The findings suggest that private banks must prioritize investments in robust and secure digital platforms, as well as provide timely and effective support to customers. The study contributes to the existing literature on technology service quality in private banking and provides practical implications for banks seeking to enhance customer experience and loyalty in the digital era.

Keywords: Technology service quality, private banking, BankQual model, customer satisfaction, loyalty.

INTRODUCTION:

India's banking sector plays a crucial role in the country's economic growth, with private sector banks significantly contributing to financial inclusion, innovation, and customer-centric services. The Indian economy has witnessed rapid digital transformation, driven by advancements in financial technology (FinTech), increased smartphone penetration, and government initiatives such as Digital India. In this evolving landscape, private banks have been at the forefront of leveraging technology to enhance service quality, improve efficiency, and meet rising customer expectations. The introduction of technology-driven

services, including mobile banking, internet banking and digital payment solutions, has revolutionized banking operations. These services have enabled seamless transactions, faster service delivery, and personalized banking experiences, reducing reliance on traditional branch-based banking. Private sector banks, known for their agility and customer focus, have adopted cutting-edge digital solutions to provide superior service quality.

STATEMENT OF THE PROBLEM

The quality of technology-driven services in private banking has evolved significantly from traditional models, transforming the banking experience for customers. With advancements in technology, both rural and urban populations are increasingly adopting digital banking solutions. Private sector banks are pioneers in digital banking, leading the way in offering innovative technology-based services, often surpassing public sector banks in this domain. Banks like HDFC have implemented multiple service desks to assist customers, ensuring a seamless digital banking experience. This study aims to analyze the service quality of technology-driven banking services in private sector banks from the perspective of the BANKQUAL model.

OBJECTIVE OF THE STUDY

- To assess the quality of customer service provided by technology driven services in private sector banks.

RESEARCH METHODOLOGY

The technology service quality in private banking has been analysed from 163 consumers in Coimbatore city.

Statistical Tools Used

The following statistical tools have been used to analyse the primary data collected:

- Percentage Analysis
- Multiple response analysis
- Chi-square
- Analysis of variance (ANOVA)
- Independent sample t-Test

REVIEW OF LITERATURE

Annie and Bindu Hari (2024) conducted a study titled "A Study on Service Quality and Customer Satisfaction of Private Sector Banks with Reference to Kodakara Panchayat," to examine customer satisfaction with service quality in private sector banks. The study aimed to identify banking service preferences, analyze satisfaction levels, and determine reasons for bank selection. Using a convenience sampling technique, 80 respondents were surveyed via structured questionnaires on Google Forms. Data were analyzed using percentage analysis, and the study tested the hypothesis of a significant association between service quality and customer satisfaction. Findings highlight customer needs, perceptions, and expectation gaps, offering insights for bank management and policymakers to enhance service quality and address competition through customer-oriented services.

Omar, Itani and Aniefre Eddie Inyang (2023) conducted a study titled "The Effects of Empathy and Listening of Salespeople on Relationship Quality in the Retail Banking Industry: The Moderating Role of Felt Stress" to examine how salespeople's empathy and listening behavior influence customer relationship quality (RQ) while considering the moderating effect of felt stress (FS). Data were collected from 150 customers and matched with responses from 25 salespeople at a major bank in Chile. Structural equation modeling and hierarchical linear modeling were used for analysis. Findings showed that customers' perceptions of salespeople's listening mediate the relationship between empathy and RQ. FS weakens the positive effects of empathy on listening and listening on RQ. The study suggests that high FS can reduce the effectiveness of even skilled salespeople in maintaining strong customer relationships.

Karina Maharjan and Rajendra Raya (2023) conducted a study titled "An Empirical Study: Understanding The Influence of Responsiveness, Reliability, And Assurance On Customer Satisfaction in Online Banking Services," aiming to investigate the impact of these three factors on customer satisfaction. The study surveyed 137 participants, with data analyzed using thorough statistical research methods. Findings indicated that responsiveness, reliability, and assurance each have a positive and substantial association with customer satisfaction in online banking. Responsiveness, defined as timely and efficient service, reliability, referring to consistency and dependability, and assurance, which fosters trust and confidence, were all found to significantly influence customer satisfaction. The study suggests that improving these aspects is crucial for enhancing customer satisfaction in the online banking sector.

RESEARCH GAP

While technology-driven services are becoming integral to private sector banking, there is limited research that specifically evaluates customer service quality using the BANKQUAL model. Most existing studies rely on traditional service quality models like SERVQUAL, which may not fully capture the unique attributes of technology-based banking services. Additionally, prior research tends to assess customer satisfaction broadly, without isolating the specific impact of digital banking services such as mobile banking, internet banking, and AI-powered support. The absence of a comprehensive analysis focusing on the technological service quality of private banks through the BANKQUAL model presents a significant research gap, highlighting the need for an in-depth study in this domain.

ANALYSIS AND INTERPRETATION

Data analysis is the process of finding answers to questions through the examination and interpretation of data. Data interpretation refers to the process of critiquing and determining the significance of important information such as survey results, experimental findings and observation or narrative reports.

1. DEMOGRAPHIC PROFILE OF THE RESPONDENTS-PERCENTAGE ANALYSIS

Table:1 Demographic profile of the respondents

Demographic factors	Classification	No of respondents	percentage
AGE	Below 25 years	76	46.0
	25-35 years	3	22.1
	36-45 years	30	18.4
	46-55 years	20	12.3
	Above 55	2	1.2
GENDER	Male	59	36.2
	Female	104	63.8
OCCUPATION	Student	64	39.3
	Salaried	45	27.6
	Business	43	26.4
	Retired	11	6.7

2.PURPOSE OF TECHNOLOGICAL SERVICE IN PRIVATE BANKING

Purpose	No of respondents	Percentage
Fund transfer	100	61.3
Account balance checking	104	63.8
Bill payment	99	60.7
Deposits	57	35.0
Loan or credit management	31	19.0
Customer support/chat assistance	26	16.0
Mobile banking/app usage	79	48.5
Transaction alert and notification	39	23.9
Demat account opening	12	7.4
Total	547	335.6

(source: primary data)

INTERPRETATION

From the above table, it clearly shows the purpose of technological service used in private banking, 63.8 percentage of respondents uses technological banking services for account balance checking as the highest purpose of technology service used, followed by 61.3 for fund transfer, 60.7 percentage of respondents for bill payment, 48.5 for Mobile banking/app usage, 35.0 percentage of respondents for deposits, 23.9 for transaction alert and notification and 19.0 percentage of respondents for loan or credit management at least 7.4 percentage of respondents for demat account opening.

Majority of 63.8 percentage of the response purpose of using technological service in private banking is account balance checking.

3. TECHNOLOGICAL SERVICE USED BY THE RESPONDENTS-FRIEDMAN’S RANK TEST

Table 3

Technological service used

Technology service	Mean Rank	Rank	N	163
Mobile banking	2.67	1	Chi- Square	512.91
Online fund transfer	2.72	2		
Debit/Credit card services	4.74	3		
Mobile wallet services]	5.78	4	df	9
UPI(Unified payment interface)	6.12	5		
Online bill payment	5.92	6		
ATM Services	6.27	7	Asymp.Sig.	<.001
Online account opening	6.78	8		
Online trading services	6.97	9		
Online deposit /loan	7.05	10		

(Source: computed data)

INTERPRETATION

The above table shows the technological service used by the respondents. The factors were ranked from the highest of 10 to 1 among the various technological service used by the respondents. Online deposit /loan is the majority with (7.05), followed by Online trading services (6.97), Online account opening (6.78), ATM Services (6.27), UPI(Unified payment interface) (6.12),Online bill payment (5.92), Mobile wallet services (5.78), Debit/Credit card services (4.74), Online fund transfer (2.72) and the least technological service used is Mobile banking (2.67).

4. FACTORS INFLUENCING THE RESPONDENTS TO PREFER TECHNOLOGICAL SERVICE IN PRIVATE BANKS – DESCRIPTIVE STATISTICS

Table 4

Factors influencing the respondents to prefer technological service in private banks – descriptive statistics.

FACTORS	N	Minimum	Maximum	Mean	Std. Deviation
TANGIBILITY	163	1	5	3.24	1.31
i. Modern looking equipment	163	1	5	3.40	1.15
ii. Physical facility	163	1	5	3.30	1.07
iii. Employee are well dressed	163	1	5	3.50	1.06
iv. Materials are visually appealing	163	1	5	3.61	1.11
RELIABILITY	163	1	5	3.53	1.10
i. Delivers service at promised time	163	1	5	3.52	1.11
ii. Interest in solving problem	163	1	5	3.57	1.08
iii. Perform service right first time	163	1	5	3.44	1.15
iv. Follows the promised time	163	1	5	3.39	1.13
v. Maintain error free records	163	1	5	3.44	1.12
RESPONSIVENESS	163	1	5	3.50	1.14
i tell you about performance of service	163	1	5	3.58	1.11
ii. Gives prompt service	163	1	5	3.51	1.13
iii. Willingness to help	163	1	5	3.50	1.13

iv. Not busy to respond queries	163	1	5	3.42	1.04
ASSURANCE	163	1	5	3.52	1.15
i instills confidence	163	1	5	3.45	1.10
ii. Safe transactions	163	1	5	3.60	1.13
iii. employee are consistently courteous	163	1	5	3.49	1.12
iv. employee have enough knowledge	163	1	5	3.54	1.19
EMPATHY	163	1	5	3.27	1.07
i gives individual attention	163	1	5	3.63	1.11
ii. Convenient operating hours	163	1	5	3.56	1.03
iii. Gives personal attention	163	1	5	3.53	1.16
iv. Best interest in heart	163	1	5	3.52	1.12
v. Understand customer's specific needs	163	1	5	3.53	1.11
TECHNOLOGY ADOPTION	163	1	5	3.55	1.03
i Secure online transaction system	163	1	5	3.57	1.06
ii. Userfriendly banking applications	163	1	5	3.53	1.10
iii.Easy to navigate online banking interface	163	1	5	3.46	1.03
iv. multiple digital payment options	163	1	5	3.47	1.07
v. speed and convenience	163	1	5	3.59	1.16

Valid N (listwise)	163	
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(Source: Computed data)

INTERPRETATION

From the table, it is interpreted that the key dimensions influencing respondents to prefer technological services in private banks are:

Tangibility means the physical appearance of facilities, equipment, and materials used by banks. From this the Respondents have chosen the factor visually appealing materials (3.61).

Reliability means the ability of banks to perform services dependably and accurately. From this the Respondents have chosen the factor interest in solving problems (3.57).

Responsiveness means the Willingness and promptness in assisting customers. From this the Respondents have chosen the factor communication about service performance (3.58).

Assurance means the Customers trust in the bank's security and professionalism. From this the Respondents have chosen the factor safe transactions (3.60).

Empathy means the Personalized attention and care for customers. From this the Respondents have chosen the factor individual attention (3.63).

Technology Adoption means the integration of advanced technology for efficiency. From this the Respondents have chosen the factor speed and convenience (3.59).

This interpretation highlights the BankQual model dimensions and the factors most valued by respondents in private banking services.

5.DEMOGRAPHIC FACTORS AND FACTORS INFLUENCING RESPONDENTS TO PREFER TECHNOLOGICAL SERVICE IN PRIVATE BANKS – ANOVA

Table 5

Demographic factors and factors influencing respondents to prefer technological service in private banks – ANOVA

Factors	Classification	No of respondents	Mean	Standard Deviation	f	Sig.	S/NS
AGE	Below 25 years	75	105.39	31.28	1.90	0.113	NS
	25-35 years	36	117.46	25.55			
	36-45 years	30	116.77	24.325			
	46-55 years	20	117.56	15.99			
	above 55	2	113.60	4.97			
GENDER	male	59	117.77	23.08	4.51	0.035	S
	female	104	108.33	29.35			
OCCUPATION	student	64	104.81	32.43	2.67	0.049	S
	employed	45	119.35	20.55			
	business	43	114.10	26.70			
	retired	11	111.74	15.03			

(Source: computed data)

INTERPRETATION

The results of the ANOVA table shows that the F-value as 1.901 for age, gender 4.513 and occupation is 2.678 and the Factors influencing respondents to prefer technological service in private banks. The calculated p -value for age is 0.113,0.035 for gender and 0.049 for occupation. Since the p -value at 5 per cent level of significance is more than (0.05) for the above factors, it can be concluded that there is no significant difference between demographic factor age and Factors influencing the respondents to prefer technology service in private banks. Since the p value at 5 per cent level of significant is less than 0.05 for the above factors,it can be concluded that there is significant difference between demographic

factor gender and occupation of the respondent and the factors influencing respondents to prefer technological service in private banks.

Hence the null hypothesis is accepted for age and factors influencing respondents to prefer technological service in private banks.

Hence the null hypothesis is rejected for gender and occupation.

6. DEMOGRAPHIC FACTORS AND FACTORS INFLUENCING THE RESPONDENTS TO PREFER TECHNOLOGICAL SERVICE IN PRIVATE BANKS – INDEPENDENT t-TEST

Tabel 6

Factors influencing the respondents to prefer technological service in private banks – independent t-test

Factors influence	Classification	No of respondents	Mean	Std. Deviation	T	Sig.	S/NS
Gender	Male	59	117.77	23.08	3.488	0.064	NS
	Female	104	108.33	29.35			

(Source: Computed data)

INTERPRETATION

It is ascertained to find the difference between gender and the influencing factor towards technological service. In the mentioned table ($t=3.488, p=0.064$) there is no significant difference between gender and influencing factor towards technological service since the significant value($p=0.064$)is greater than 0.05.

Hence the null hypothesis is accepted.

SUGGESTIONS:

- Private banks can invest in customer education programs to improve digital literacy, ensuring users can efficiently utilize technology-driven services.
- Private banks should invest in customer education programs to use the technology service not only for digital payment and account balance checking but also use other technological service in order to make banking more effective.
- Private banks can invest in customer education programs for all the customers irrespective of age and occupation to use the technology service.

CONCLUSION

Technology services have transformed all sectors by improving efficiency, automation, and customer experience. In the private banking sector, digital banking secure online transactions enhance convenience and accessibility for customers. The growing adoption of technology-driven banking services in private sector banks reflects the increasing reliance on digital solutions for seamless and efficient financial transactions. This research underscores the critical role of continuous innovation and enhancement in banking technology to meet evolving customer expectations and bridge service quality gaps. By leveraging advancements in artificial intelligence, cybersecurity, and digital banking infrastructure, private banks can further refine their service offerings to deliver secure, personalized, and frictionless banking experiences.

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