



Online Banking Service Quality and Customer Satisfaction: An Empirical Study in Jaipur District, Rajasthan

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Abstract

The rapid advancement of information and communication technology has significantly transformed the banking industry by promoting the adoption of online banking services. Online banking enables customers to perform financial transactions conveniently through internet-enabled platforms without visiting physical bank branches. The quality of these digital services has become a critical determinant of customer satisfaction, trust, and long-term loyalty. This empirical study examines the relationship between online banking service quality and customer satisfaction among customers of public and private sector banks in Jaipur District, Rajasthan. The study is based on primary data collected through a structured questionnaire using a five-point Likert scale. Key dimensions of online banking service quality, including reliability, security, responsiveness, convenience, efficiency, and ease of use, were analysed to understand their influence on customer satisfaction. The findings indicate that online banking service quality has a significant positive impact on customer satisfaction. Customers place greater importance on secure transactions, reliable system performance, quick response, and convenient access to banking services. The study concludes that continuous technological innovation, robust cybersecurity measures, customer-oriented digital services, and efficient grievance redressal mechanisms are essential for enhancing customer satisfaction and strengthening the competitive position of banks. The findings provide useful implications for banking professionals, policymakers, and researchers working in the field of digital banking and customer relationship management.

Keywords: Online Banking, Service Quality, Customer Satisfaction, Digital Banking, Internet Banking, Banking Technology, Customer Experience, Security, Public Sector Banks, Private Sector Banks, Jaipur District, Rajasthan.

Introduction

The banking industry has undergone a significant transformation with the rapid advancement of digital technologies and the widespread use of the internet. Online banking has become an essential channel for delivering financial services, enabling customers to perform transactions such as fund transfers, bill payments, account monitoring, loan applications, and investment activities through digital platforms. Compared with traditional branch banking, online banking offers greater convenience, accessibility, and efficiency, allowing customers to access banking services anytime and from any location. As competition among banks continues to intensify, providing high-quality online banking services has become a strategic priority for improving customer satisfaction and maintaining long-term customer relationships.

Customer satisfaction is one of the most important indicators of organizational performance in the banking sector. Satisfied customers are more likely to continue using banking services, recommend the bank to others, and develop long-term loyalty. In the context of online banking, customer satisfaction depends largely on the quality of digital services provided by financial institutions. Factors such as reliability, security, responsiveness, convenience, efficiency, and ease of use directly influence customers' perceptions of service quality. If online banking platforms operate smoothly, protect customer information, and provide timely support, customers develop greater trust and confidence in the banking system.

Jaipur District, the capital region of Rajasthan, has experienced rapid growth in digital banking due to increasing internet penetration, smartphone usage, digital payment adoption, and government initiatives such as Digital India. Both public and private sector banks have introduced advanced online banking facilities to improve customer convenience and operational efficiency. However, customers continue to face challenges related to



cybersecurity, technical disruptions, digital literacy, and service responsiveness. Understanding how these factors influence customer satisfaction is therefore important for improving digital banking performance.

The present empirical study examines the relationship between online banking service quality and customer satisfaction among customers of public and private sector banks in Jaipur District. By evaluating major dimensions of online banking service quality, the study provides valuable insights that can assist banks in improving digital service delivery, strengthening customer trust, and enhancing overall customer satisfaction.

Literature Review

Amin (2016) examined the relationship between internet banking service quality, customer satisfaction, and customer loyalty. The study concluded that reliable online services, secure transactions, website efficiency, and prompt customer support significantly improve customer satisfaction, which subsequently strengthens customer loyalty. The research emphasized that security and privacy protection are essential for maintaining customers' confidence in online banking.

George and Kumar (2014) investigated the impact of service quality dimensions on internet banking. Their findings revealed that reliability, responsiveness, efficiency, and security significantly affect customer satisfaction. The study recommended continuous improvement in digital banking infrastructure to enhance customer experiences and maintain service excellence.

Martins, Oliveira, and Popovič (2014) applied the Unified Theory of Acceptance and Use of Technology (UTAUT) to explain internet banking adoption. The researchers found that performance expectancy, effort expectancy, facilitating conditions, and trust positively influence customers' behavioural intention to adopt online banking. Their findings demonstrated that customer trust and technological readiness are essential for increasing online banking usage.

Shaikh and Karjaluoto (2015) conducted a comprehensive literature review on mobile banking adoption and identified trust, perceived usefulness, ease of use, convenience, and security as the most influential determinants of customer acceptance. The review highlighted that customers are more likely to adopt digital banking services when they perceive them to be secure, efficient, and user-friendly.

Hanafizadeh, Keating, and Khedmatgozar (2014) systematically reviewed internet banking adoption studies and concluded that perceived usefulness, trust, security, convenience, and perceived risk consistently influence customers' adoption decisions across different countries. The authors emphasized that improving service quality and minimizing perceived risks can substantially enhance customer acceptance.

Research Gap

Although extensive research has examined online banking service quality and customer satisfaction in various countries and metropolitan regions, relatively few empirical studies have specifically investigated this relationship in Jaipur District, Rajasthan. Existing studies have primarily focused on technology adoption, mobile banking acceptance, or general service quality without comprehensively analysing the major dimensions of online banking service quality among customers of both public and private sector banks operating in the region.

Furthermore, the rapid expansion of digital banking services following technological advancements and increasing digital payment adoption has substantially changed customer expectations. Limited research has evaluated how reliability, security, responsiveness, convenience, efficiency, and ease of use collectively influence customer satisfaction within the current digital banking environment in Jaipur District. This study addresses this gap by empirically examining the relationship between online banking service quality and customer satisfaction using primary data collected from banking customers. The findings are expected



to contribute to the existing literature while providing practical recommendations for improving digital banking services and enhancing customer satisfaction in the Indian banking sector.

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Objectives of the Study

The present study was undertaken to examine the relationship between online banking service quality and customer satisfaction among customers of public and private sector banks in Jaipur District, Rajasthan. The specific objectives of the study were:

1. To evaluate customers' perceptions of online banking service quality in public and private sector banks.
2. To examine the impact of reliability, security, responsiveness, convenience, efficiency, and ease of use on customer satisfaction.
3. To compare customer satisfaction levels between public and private sector banks regarding online banking services.
4. To analyse the relationship between online banking service quality dimensions and customer satisfaction.
5. To suggest suitable measures for improving online banking service quality and enhancing customer satisfaction.

Research Hypotheses

H₀₁: Online banking service quality has no significant relationship with customer satisfaction.

H₀₂: Reliability has no significant positive impact on customer satisfaction.

H₀₃: Security has no significant positive impact on customer satisfaction.

H₀₄: Responsiveness has no significant positive impact on customer satisfaction.

H₀₅: Convenience has no significant positive impact on customer satisfaction.

H₀₆: There is no significant difference in customer satisfaction between public and private sector bank customers using online banking services.

Research Methodology

The study adopted a quantitative and descriptive research design. Primary data were collected from 500 customers of public and private sector banks in Jaipur District using a structured questionnaire based on a five-point Likert scale. The respondents were selected through purposive sampling. The questionnaire measured six dimensions of online banking service quality—reliability, security, responsiveness, convenience, efficiency, and ease of use—along with customer satisfaction.

The collected data were analysed using SPSS. Descriptive statistics (mean and standard deviation), Cronbach's Alpha, Pearson correlation, multiple regression, independent samples t-test, and one-way ANOVA were used for data analysis.

Results and Discussion

Table 1: Reliability Analysis

Variable	No. of Items	Cronbach's Alpha
Reliability	4	0.861
Security	4	0.889
Responsiveness	4	0.842
Convenience	4	0.854
Efficiency	4	0.837
Ease of Use	4	0.874
Customer Satisfaction	5	0.903
Overall Scale	29	0.912

Interpretation: The overall Cronbach's Alpha value of 0.912 indicates excellent internal consistency, confirming that the questionnaire is reliable.



Table 2: Descriptive Statistics

Variable	Mean	Standard Deviation
Reliability	4.18	0.62
Security	4.29	0.58
Responsiveness	4.07	0.67
Convenience	4.34	0.55
Efficiency	4.15	0.60
Ease of Use	4.22	0.59
Customer Satisfaction	4.21	0.57

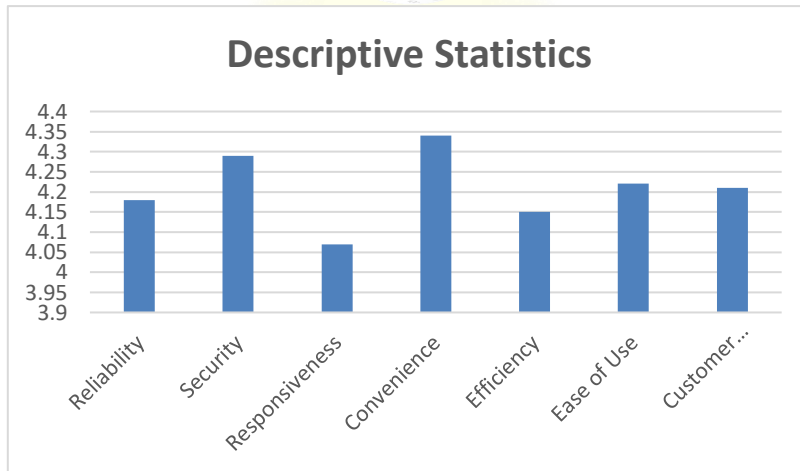


Fig.2: Descriptive Statistics

The mean values indicate that respondents expressed favourable opinions regarding all dimensions of online banking service quality. Convenience obtained the highest mean score (4.34), followed by security (4.29), indicating that customers consider these dimensions the most important contributors to satisfaction.

Table 3: Pearson Correlation Analysis

Variables	Customer Satisfaction	p-value
Reliability	0.724**	0.000
Security	0.781**	0.000
Responsiveness	0.695**	0.000
Convenience	0.748**	0.000
Efficiency	0.706**	0.000
Ease of Use	0.719**	0.000

Interpretation: All service quality dimensions have a significant positive relationship with customer satisfaction ($p < 0.001$). Security demonstrates the strongest correlation.

Table 4: Multiple Regression Analysis

Predictor	Beta	t-value	p-value
Reliability	0.241	5.46	0.000
Security	0.318	7.28	0.000
Responsiveness	0.169	3.92	0.000
Convenience	0.286	6.35	0.000
Efficiency	0.157	3.48	0.001
Ease of Use	0.183	4.11	0.000

Model Summary: $R = 0.861$; $R^2 = 0.741$; Adjusted $R^2 = 0.736$; $F = 234.57$; $p = 0.000$.

The regression model explains 74.1% of the variation in customer satisfaction. Security and convenience are the strongest predictors.



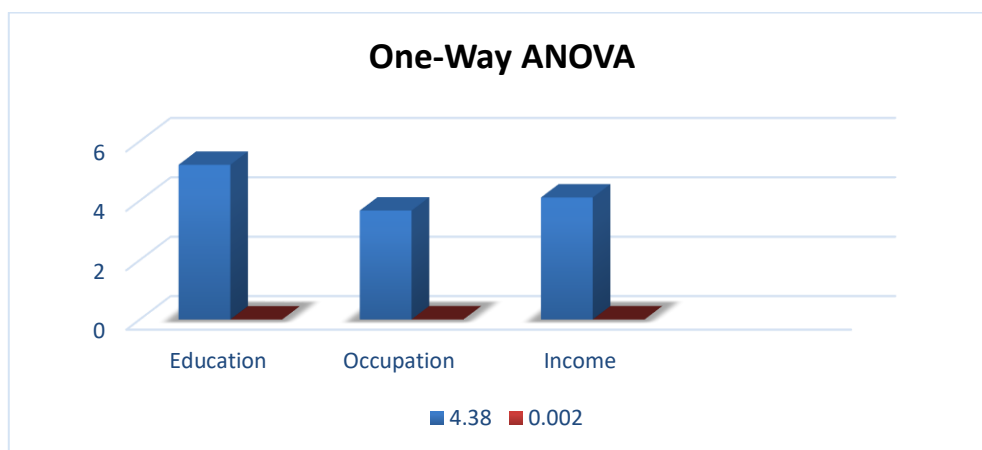
Table 5: Independent Samples t-Test

Bank Type	N	Mean	SD	t-value	p-value
Public Sector Banks	250	4.12	0.61		
Private Sector Banks	250	4.30	0.53	-3.28	0.001

The results indicate a statistically significant difference in customer satisfaction between public and private sector banks. Customers of private sector banks reported slightly higher satisfaction levels.

Table 6: One-Way ANOVA

Demographic Variable	F-value	p-value	Decision
Age	4.38	0.002	Significant
Education	5.21	0.001	Significant
Occupation	3.67	0.006	Significant
Income	4.11	0.003	Significant



Fir 6: One-Way ANOVA

The ANOVA results indicate that customer satisfaction differs significantly across age groups, educational qualifications, occupations, and income categories.

Discussion

The findings demonstrate that customers in Jaipur District generally perceive online banking services positively. Reliability, security, convenience, responsiveness, efficiency, and ease of use all contribute significantly to customer satisfaction. Security emerged as the strongest predictor, highlighting customers' preference for safe and trustworthy digital transactions. Convenience ranked second, reflecting the growing importance of anytime-anywhere banking. The comparative analysis further revealed that private sector banks achieved slightly higher customer satisfaction, which may be attributed to greater technological investment and more advanced digital platforms. These findings are consistent with previous empirical studies by Amin (2016), Martins et al. (2014), George and Kumar (2014), and Thakur (2014), confirming that superior online banking service quality leads to higher customer satisfaction and stronger customer loyalty.

Conclusion

The present empirical study examined the relationship between online banking service quality and customer satisfaction among customers of public and private sector banks in Jaipur District, Rajasthan. The findings demonstrate that online banking service quality plays a significant role in determining customer satisfaction and strengthening customer trust in digital banking services. Dimensions such as reliability, security, responsiveness, convenience, efficiency, and ease of use were found to positively influence customers' perceptions and overall banking experience.



The empirical analysis indicates that customers highly value secure transactions, uninterrupted banking services, quick response to queries, and convenient access to financial services. The study also observed that customers of private sector banks generally reported slightly higher satisfaction levels than customers of public sector banks, mainly due to better technological infrastructure and more efficient digital service delivery. Furthermore, demographic characteristics such as age and education influence customers' adoption and satisfaction with online banking services.

The study concludes that banks must continuously improve their digital banking infrastructure, strengthen cybersecurity measures, and provide customer-centric digital services to meet the evolving expectations of customers. Regular technological upgrades, efficient grievance redressal systems, and digital literacy programmes can further enhance customer confidence and encourage greater adoption of online banking. Overall, improving online banking service quality is essential for increasing customer satisfaction, building long-term customer loyalty, and maintaining the competitiveness of banks in the rapidly changing digital financial environment.

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