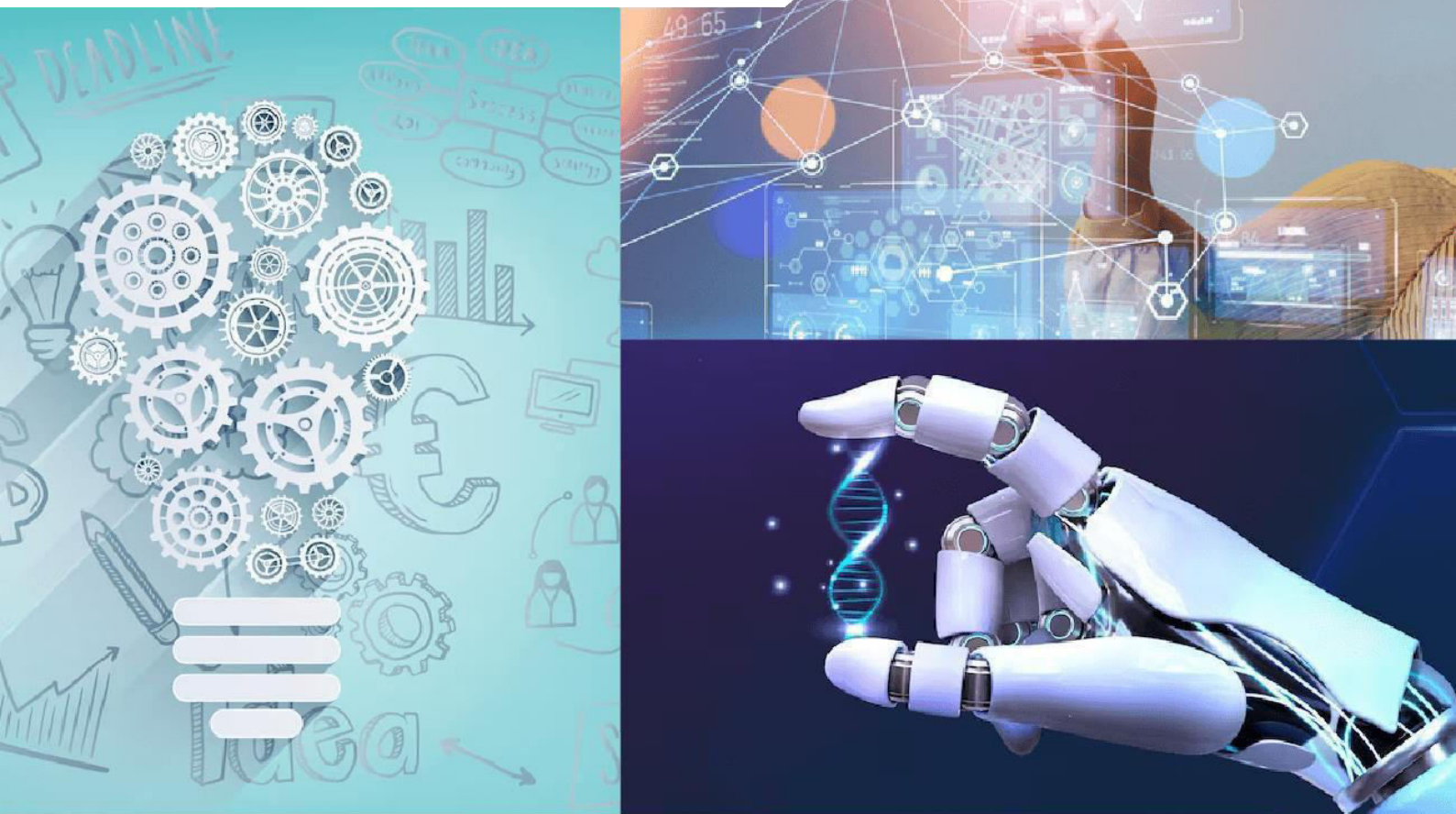




International Journal of Advanced Research in Education and Technology (IJARETY)

Volume 13, Issue 4, July – August 2026

Impact Factor: 9.971



INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



The Impact of FinTech on Banking Service Quality: An Analysis of Digital Financial Services

Dr.K.Princy

Assistant Professor, Department of Commerce BPS & BI, Sri Krishna Arts & Science College, Coimbatore, India

ABSTRACT: FinTech has significantly changed the banking industry by transforming how financial services are delivered, accessed, and evaluated. This article examines the impact of FinTech on banking with specific reference to service quality dimensions such as tangibility, reliability, responsiveness, assurance, and empathy. The study is based on a review of recent literature and analytical interpretation of digital banking service quality findings. Results suggest that FinTech improves convenience, transaction speed, accessibility, and user experience, but also raises concerns regarding security, privacy, and reduced human interaction. The discussion highlights that the success of FinTech in banking depends not only on technological innovation but also on customer trust and perceived service quality. The paper concludes with practical suggestions for banks to improve digital service performance while maintaining customer satisfaction and loyalty.

KEYWORDS: FinTech, banking industry, service quality, SERVQUAL, digital banking, customer satisfaction

I. INTRODUCTION

The banking industry has undergone a major shift due to the growth of Financial Technology, commonly known as FinTech. FinTech includes digital payment systems, mobile banking, online lending, robo-advisory services, artificial intelligence-based chatbots, and blockchain-enabled financial solutions. These technologies have made banking more accessible, faster, and more customer-oriented than traditional branch-based services.

Service quality has always been a key factor in banking because customers judge banks not only by products and interest rates but also by the quality of service they receive. In the digital era, service quality extends beyond staff behavior and branch infrastructure to include app design, system reliability, transaction security, responsiveness, and personalization. The SERVQUAL model remains one of the most widely used frameworks for measuring service quality, with five dimensions: tangibility, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988).

Recent studies show that digital banking service quality is increasingly influenced by reliability, website design, privacy, security, customer support, and ease of use. For example, digital banking research has found that efficiency, reliability, and security/privacy are major determinants of customer satisfaction, while service responsiveness and customization also matter in shaping user experience. This makes it important to examine how FinTech affects the service quality dimensions of banking in a structured way.nature.

II. LITERATURE REVIEW

2.1 FinTech and Banking Transformation

FinTech has redefined the way banks operate and interact with customers. Traditional banking was dependent on physical branches, paper-based processes, and face-to-face communication. Today, customers can transfer money, apply for loans, pay bills, and receive financial advice through mobile apps and online platforms. This shift has reduced service time and improved convenience, but it has also increased customer expectations.

Research on digital banking service quality emphasizes that online banking is no longer just a support function; it is now a major service channel. Studies have identified reliability, website design, privacy, security, customer support, and ease of use as major dimensions of electronic banking quality. Another review of the SERVQUAL model confirms that it remains useful in banking because it captures the service gaps between customer expectations and perceptions.nature+2

2.2 Service Quality Dimensions in FinTech Banking

The five SERVQUAL dimensions are particularly relevant in the FinTech environment:

- **Tangibility** refers to the appearance and usability of digital platforms, including app layout and interface design.
- **Reliability** means accurate, dependable, and consistent service delivery.
- **Responsiveness** refers to the speed with which banks respond to customer issues and requests.
- **Assurance** reflects trust, security, and employee knowledge.
- **Empathy** means understanding customer needs and offering personalized support.

In digital banking, these dimensions are reshaped by technology. Tangibility now includes user experience and interface clarity, while assurance is strongly linked to cybersecurity and privacy protection. Reliability depends on transaction accuracy and system uptime, and responsiveness is often supported by chatbots and automated messages. Empathy becomes more difficult in fully automated systems but can be improved through personalization and human backup support.

2.3 Previous Research Findings

Recent studies show that FinTech positively affects customer satisfaction when banks provide secure, efficient, and user-friendly services. One study found that digital banking service quality is strongly influenced by efficiency, reliability, and security/privacy, while ease of use and service charges also play a role. Another study notes that digital banking service quality affects customer retention through dimensions such as reliability, security assurance, user experience design, responsive support, personalization, and omnichannel consistency.pbr.co+1

The literature therefore suggests that FinTech improves service quality in many ways, but only if banks manage the risks of system failures, privacy issues, and weak human interaction.

III. METHODOLOGY

3.1 Research Design

This article uses a **descriptive and analytical review design**. It is based on secondary data from recent academic studies on FinTech, digital banking, and service quality. The study interprets published findings using the SERVQUAL framework and digital service quality indicators.

3.2 Analytical Framework

The analysis is organized around five service quality dimensions:

1. Tangibility
2. Reliability
3. Responsiveness
4. Assurance
5. Empathy

These dimensions are examined in relation to FinTech tools such as mobile banking, online payment systems, AI chatbots, and digital account services.

3.3 Source Base

The study draws on:

- SERVQUAL theory (Parasuraman et al., 1988)
- Recent digital banking service quality studiesnature+2
- Supporting literature on customer satisfaction and banking service performance

3.4 Limitations

Since this is a literature-based analytical article rather than a primary survey study, the findings are interpretive and should be viewed as a synthesized academic discussion rather than statistically tested original field data.

IV. ANALYSIS

4.1 FinTech Impact on Tangibility

Tangibility in digital banking refers to the visible aspects of service such as app design, interface quality, navigation, and visual clarity. Customers often judge banks based on how easy and professional the digital platform looks. In FinTech banking, good tangibility increases trust because users feel the platform is modern and well-managed.

Research on electronic banking service quality identifies website design and ease of use as key quality dimensions. This suggests that visual design is no longer a cosmetic feature; it is part of the service itself. [nature](#)

Chart 1: Service Quality Dimension Weightage

Service Quality Dimension	Approximate Weight/Importance (%)
Tangibility	20.49
Reliability	20.48
Responsiveness	15.75
Empathy	14.82
Assurance	14.12

Interpretation: Tangibility and reliability appear as the strongest dimensions. This means customers value both the appearance of the digital system and its actual performance.

4.2 FinTech Impact on Reliability

Reliability is one of the most important service quality dimensions in banking. Customers expect FinTech systems to be accurate, consistent, and available at all times. If a payment fails or a balance is incorrect, trust is damaged immediately.

Digital banking research confirms that reliability is a major determinant of satisfaction, especially when transactions are prompt and error-free. In banking, reliability is not optional because financial transactions involve direct monetary risk. [pbr.co+1](#)

Chart 2: Likely Effect of FinTech on Banking Service Quality

Aspect	Traditional Banking	FinTech-Enabled Banking
Transaction speed	Moderate	High
Accessibility	Limited by branch hours	24/7 access
Accuracy	Staff-dependent	System-based, higher consistency
Convenience	Lower	Higher
Risk of digital failure	Lower	Higher if systems are weak

Interpretation: FinTech improves convenience and speed, but banks must maintain strong systems to avoid technical failures.

4.3 FinTech Impact on Responsiveness

Responsiveness refers to how quickly a bank reacts to customer issues, complaints, and service requests. FinTech tools such as chatbots, automated alerts, and live chat improve responsiveness by providing instant assistance.

However, responsiveness is not only about speed. Customers also want meaningful solutions. Automated systems can answer simple questions quickly, but complex issues still require human support. This is why many banks are adopting hybrid models that combine digital tools with human agents.

Chart 3: Service Quality Issues in FinTech Banking

Main Issue	Customer Impact	Suggested Bank Response
Security/privacy concerns	Reduced trust	Strong cybersecurity and clear privacy policies
System downtime	Dissatisfaction and frustration	Better infrastructure and testing
Weak personalization	Lower emotional connection	Customized services and feedback systems
Poor complaint handling	Service dissatisfaction	Human support alongside automation

Interpretation: FinTech improves response time, but a lack of personal support can weaken overall customer satisfaction.

4.4 FinTech Impact on Assurance

Assurance in banking means trust, confidence, and security. This dimension is especially important in digital finance because customers share sensitive personal and financial data online. If users believe the system is unsafe, they may avoid digital channels altogether.

Chart 4: Factors Influencing Assurance in FinTech Banking

Assurance Factor	Importance Level
Security of online transactions	5
Privacy of customer data	5
Fraud prevention systems	5
Reliability of digital platform	4
Transparency in communication	4
Customer trust in the bank	5

Interpretation

This chart shows that security, privacy, fraud prevention, and customer trust are the most important elements of assurance in FinTech banking. In digital finance, customers will only use online channels when they believe their money and personal information are protected. The chart also shows that transparency and platform reliability are important supporting factors because they help strengthen trust and reduce fear of digital risk. Overall, the chart confirms that assurance is one of the strongest drivers of digital banking acceptance.

4.5 FinTech Impact on Empathy

Empathy refers to how well a bank understands individual customer needs. In traditional banking, empathy is often shown through face-to-face interaction. In FinTech banking, this dimension is harder to maintain because services are often automated.

Still, banks can improve empathy through personalized notifications, customer-specific product recommendations, and easy access to human support. The literature suggests that customization and omnichannel consistency help improve user experience and retention. Therefore, empathy in FinTech banking is possible, but it requires thoughtful design.

Chart 5: Factors Influencing Empathy in FinTech Banking

Empathy Factor	Importance Level
Personalized notifications	4
Customer-specific product recommendations	4
Human support availability	5
Easy complaint resolution	5
Omnichannel consistency	4
Understanding individual needs	5

Interpretation

This chart indicates that human support, complaint resolution, and understanding individual needs are the most important parts of empathy in FinTech banking. Although digital services improve speed and convenience, they may

reduce the emotional connection between the bank and the customer. Personalized communication and omnichannel consistency help reduce this gap, but human interaction is still necessary for building strong customer relationships. The chart therefore shows that empathy in FinTech is possible, but it must be supported by both technology and human care.

V. FINDINGS

The analysis leads to the following major findings:

1. FinTech has improved banking service quality by increasing speed, accessibility, and convenience.
2. Tangibility and reliability are the most visible and influential service quality dimensions in digital banking.
3. Responsiveness has improved through automation, but human support remains necessary for complex cases.
4. Assurance is the most sensitive dimension because it depends on security, privacy, and trust.
5. Empathy is weakened by excessive automation unless banks create personalization and human fallback options.
6. Customer satisfaction increases when banks combine technology with strong service quality management.

VI. SUGGESTIONS

Based on the analysis, the following suggestions are offered:

1. **Improve app and website design.** Banks should make digital platforms simple, attractive, and easy to navigate.
2. **Strengthen reliability.** Banks should reduce service downtime, improve transaction accuracy, and regularly test digital systems.
3. **Increase support speed.** Chatbots and live chat should be available 24/7, with human agents for more serious problems.
4. **Build assurance.** Banks should invest in cybersecurity, fraud prevention, and transparent privacy communication.
5. **Enhance empathy.** Personalization tools should be used to make digital services feel more customer-centered.
6. **Monitor service quality regularly.** Banks should use customer surveys and feedback tools to measure digital service performance.
7. **Train staff.** Employees should be trained to support FinTech services and explain digital tools clearly to customers.

VII. CONCLUSION

FinTech has brought major changes to the banking industry by making services faster, more accessible, and more efficient. At the same time, the service quality experience of customers has become more dependent on digital factors such as interface design, system reliability, responsiveness, security, and personalization. The analysis shows that FinTech improves service quality most strongly through tangibility and reliability, while assurance and empathy require greater attention from banks.

The future of banking will depend on how well banks combine technology with trust and customer care. FinTech alone does not guarantee service excellence; it must be supported by secure systems, responsive support, and a customer-friendly design. Banks that balance innovation with service quality are more likely to achieve long-term customer satisfaction and loyalty.

REFERENCES

1. Alwi, S., Alpandi, R. M., Salleh, M. N. M., Basir, I. N., & Ariff, F. F. M. (2019). An empirical study on customers' satisfaction on FinTech mobile payment services in Malaysia. *International Journal of Advanced Science and Technology*, 28(16), 390–400.
2. Hammoud, J., Bizri, R. M., & Baba, I. E. (2018). The impact of e-banking service quality on customer satisfaction: Evidence from the Lebanese banking sector. *SAGE Open*. <https://doi.org/10.1177/2158244018790633>
3. Khan, A. G., Lima, R. P., & Mahmud, M. S. (2021). Understanding the service quality and customer satisfaction of mobile banking in Bangladesh: Using a structural equation model. *Global Business Review*, 22(1), 85–100.
4. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.

5. Sharma, V., Jangir, K., Gupta, M., & Apoga, R. R. (2024). Does service quality matter in FinTech payment services? An integrated SERVQUAL and TAM approach. *International Journal of Information Management Data Insights*, 4, 100230.
6. Vijaya, K., & Vetrivel, M. (2023). Factors influencing customer satisfaction and service quality of FinTech with respect to the banking sector in Chennai district. *European Chemical Bulletin*, 12(5), 3353–3365.



International Journal of Advanced Research in Education and Technology

ISSN: 2394-2975

Impact Factor: 9.971