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Digital Banking Services and Customer Satisfaction: A Literature Review on Innovation and Service Quality in the Banking Industry

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ABSTRACT
The banking industry has experienced significant transformation due to digitalization, financial technology, mobile banking, artificial intelligence, and digital financial platforms. This literature review examines how digital banking services relate to customer satisfaction by synthesizing 15 articles published or accepted between 2024 and 2025. Using thematic analysis, the selected articles were reviewed by identifying repeated concepts related to service quality, trust, privacy, fintech adoption, financial inclusion, sustainability, digital innovation, and bank performance. The results show seven main themes: digital service quality, trust and security, fintech adoption, financial inclusion, banking innovation, sustainability-oriented banking, and bank performance. The findings indicate that customer satisfaction in digital banking depends on convenience, reliability, ease of use, security, privacy, and trust. Digital banking and fintech can also support financial inclusion by expanding access for rural users, SMEs, senior customers, and underserved groups. However, cybersecurity risks, digital literacy, infrastructure gaps, and access inequality remain important challenges. Overall, digital banking should be understood as a customer-oriented service transformation rather than merely a technological upgrade.

Keywords: *digital banking, customer satisfaction, fintech, service quality, financial inclusion, thematic analysis.*

1. INTRODUCTION

The banking industry has experienced significant transformation as digital technologies reshape how financial services are delivered and consumed. Digital transformation changes organizational value creation by requiring firms to respond strategically to technology-driven disruption (Vial, 2019). In financial services, fintech has accelerated this transformation by introducing new business models, applications, processes, and products that reshape competition and customer interaction in the banking sector (Financial Stability Board, 2017; Gomber et al., 2018). As a result, banking services are increasingly delivered through mobile banking, internet banking, fintech platforms, digital payments, and AI-supported financial services.

Customer satisfaction remains an important issue in digital banking because the availability of technology does not automatically guarantee a positive customer experience. In digital services, customers evaluate quality through dimensions such as efficiency, reliability, system availability, fulfillment, privacy, and responsiveness (Parasuraman et al., 2005). In mobile banking, adoption is also shaped by customers' perceptions of usefulness, ease of use, risk, trust, cost, and compatibility with their banking needs (Shaikh & Karjaluoto, 2015). Therefore, digital banking satisfaction depends not only on access to digital channels, but also on whether the service is convenient, secure, reliable, and easy to use.

Digital banking and fintech also have broader implications for financial inclusion and banking competitiveness. Digital finance can expand access to financial services by reducing distance and transaction barriers, but it can also create new risks related to unequal access, digital literacy, privacy, and financial stability (Ozili, 2018). Similarly, digital financial inclusion can support sustainable development, but persistent divides remain between different income groups, genders, and urban-rural populations (Tay et al., 2022). These issues show that digital banking should be understood as both a service innovation and an inclusion challenge.

Although digital banking, service quality, and customer satisfaction have been widely discussed, recent studies remain spread across different research contexts and themes. Therefore, this study reviews selected articles published or accepted between 2024 and 2025 using a thematic literature review approach. The review aims to identify the main themes in recent digital banking literature and explain how innovation and service quality in the banking industry relate to customer satisfaction, trust, privacy, financial inclusion, sustainability, and bank performance.

2. RESEARCH METHODOLOGY AND DESCRIPTIVE DATA ANALYSIS

This study used a literature review approach with thematic analysis to examine previous studies on digital banking services and customer satisfaction. A literature review approach was used because the study aims to synthesize findings from recent articles rather than collect primary data. Thematic analysis was applied to identify repeated concepts across the selected articles, such as service quality, trust, privacy, fintech adoption, financial inclusion, sustainability, digital innovation, and bank performance, and group them into broader themes related to the research focus (Braun & Clarke, 2006; Guest et al., 2012).

The selected articles were analyzed based on author, publication year, research focus, method, findings, and relevance to the topic. The articles were selected using four criteria: they had to be related to digital banking, fintech, mobile banking, digital finance, or banking innovation; discuss at least one issue related to customer satisfaction, service quality, trust, privacy, financial inclusion, sustainability, or bank performance; be published or accepted for publication between 2024 and 2025; and be relevant to innovation and service quality in the banking industry. Based on these criteria, 15 articles were included in this review.

Table 1. Reviewed Papers

No.	Author(s)	Year	Short Title	Main Focus
1	Al-Habashneh et al.	2025	Smartphone Banking Application Quality	App quality and satisfaction
2	Mir et al.	2025	Green Banking and Customer Satisfaction	Green banking and satisfaction
3	Hurani and Abdel-Haq	2025	FinTech Adoption in Palestine	Fintech adoption and trust
4	Martínez de Ibarreta et al.	2025	Banking Digitalization in Spain	E-banking and inclusion
5	Del Sarto et al.	2025	Social Media and Digital Banking	Social media transformation
6	Moharrak and Mogaji	2024	Generative AI in Banking	AI, privacy, and regulation
7	Qatawneh and Makhlouf	2025	Smart Mobile Banking for Senior Clients	Mobile banking and senior users
8	Shaikh and Amin	2025	Digital Banking Adoption in Banking 4.0	Innovation diffusion
9	Koziel and Shen	2025	Mobile Fintech Customer Profiling	Customer segmentation
10	Aracil et al.	2025	Mobile Money and Bank Services	Mobile money and inclusion
11	Warokka et al.	2025	Fintech Development in ASEAN-4	Fintech ecosystem
12	Umar et al.	2025	Digital Finance and SME Inclusion	SME financial inclusion
13	Jena	2025	FinTech Adoption in Rural India	Rural financial inclusion
14	Ulrich-Diener et al.	2025	Barriers to Bank Digitalization	Digitalization barriers
15	Ky et al.	2025	Mobile Money and Bank Performance	Fintech and performance

Based on Table 1, the reviewed articles consist of 15 studies published or accepted between 2024 and 2025. Most of the selected articles were published in 2025, while one article was accepted in 2024 because of its strong relevance to generative AI in banking (Moharrak & Mogaji, 2024). The selected studies cover several research contexts, including Jordan, Palestine, India, Spain, Africa, ASEAN countries, Italy, Germany, and the East African Community. This shows that digital banking services and customer satisfaction have been discussed across different banking environments.

The reviewed articles also use different research methods. Several studies use survey-based quantitative methods to examine customer satisfaction, intention to use, fintech adoption, and digital banking service quality (Al-Habashneh et al., 2025; Hurani & Abdel-Haq, 2025; Qatawneh & Makhlouf, 2025). Other studies use secondary data to analyze financial inclusion, fintech development, and bank performance (Ky et al., 2025; Umar et al., 2025; Warokka et al., 2025). A smaller number of studies use qualitative methods to explore social media use, bank digitalization, and generative AI implementation (Del Sarto et al., 2025; Moharrak & Mogaji, 2024). This methodological variety indicates that recent digital banking research can be understood from both customer-level and institutional-level perspectives. In terms of research focus, the selected articles show that digital banking is discussed through several related issues. Some articles focus directly on customer satisfaction and digital service quality (Al-Habashneh et al., 2025; Mir et al., 2025), while others examine fintech adoption, financial inclusion, digital transformation, sustainability, and bank performance (Aracil et al., 2025; Jena, 2025; Martínez de Ibarreta et al., 2025; Ulrich-Diener et al., 2025). Therefore, the reviewed literature provides a broad basis for understanding how innovation and service quality shape customer satisfaction in the banking industry. The descriptive data analysis in this section provides the basis for the next stage of discussion. After the articles were identified and described, the findings were grouped into broader themes. These themes are discussed in the next section to explain the main patterns found in recent literature on digital banking services and customer satisfaction.

3. RESULTS

The thematic analysis shows that the reviewed articles can be grouped into several main themes. These themes include digital service quality and customer satisfaction, trust and security, fintech adoption and customer readiness, financial inclusion and digital access, banking innovation, sustainability-oriented banking, and bank performance. These themes show that digital banking services are not only related to the use of technology, but also to customer experience, trust, inclusion, and institutional readiness.

Table 2. Main Topic Classification from Reviewed Articles

Main Topic	Related Articles	General Finding
Digital service quality and customer satisfaction	Al-Habashneh et al. (2025), Mir et al. (2025), Qatawneh and Makhlouf (2025)	Digital banking satisfaction is influenced by application quality, convenience, trust, privacy, and security.
Trust, security, and privacy	Hurani and Abdel-Haq (2025), Jena (2025), Moharrak and Mogaji (2024), Al-Habashneh et al. (2025)	Trust and perceived security are important conditions for digital banking adoption and satisfaction.
Fintech adoption and customer readiness	Hurani and Abdel-Haq (2025), Shaikh and Amin (2025), Koziel and Shen (2025)	Fintech adoption depends on usefulness, ease of use, awareness, compatibility, and customer confidence.
Financial inclusion and digital access	Jena (2025), Martínez de Ibarreta et al. (2025), Umar et al. (2025), Aracil et al. (2025)	Digital banking can expand financial access, but digital literacy and infrastructure remain barriers.
Banking innovation and digital transformation	Del Sarto et al. (2025), Ulrich-Diener et al. (2025), Moharrak and Mogaji (2024)	Banking innovation requires organizational readiness, regulation, employee capability, and customer engagement.
Sustainability and green banking	Mir et al. (2025), Jena (2025), Warokka et al. (2025)	Digital banking is increasingly connected with sustainability, green banking, and inclusive development.
Bank performance and ecosystem value	Ky et al. (2025), Aracil et al. (2025), Warokka et al. (2025)	Fintech can support bank performance when supported by infrastructure, access, and institutional alignment.

3.1 Digital Service Quality and Customer Satisfaction

The first theme shows that digital service quality is one of the main factors shaping customer satisfaction in banking. In the digital banking context, service quality is reflected in application reliability, ease of use, convenience, information security, privacy, and customer trust. Al-Habashneh et al. (2025) found that the quality of smartphone-based banking applications significantly affects customer satisfaction among Jordanian Islamic bank customers. Their study emphasizes that information security, trust, and privacy are important dimensions of digital banking application quality.

Qatawneh and Makhlouf (2025) also found that smart mobile banking services influence senior bank clients' intention to use banking applications. Their study highlights convenience, security, trust, and ease of use as important elements of mobile banking services. This finding shows that customer satisfaction in digital banking depends not only on the availability of digital channels, but also on how easily and safely customers can use them. Mir et al. (2025) add another perspective by showing that digital banking, green services, and green loans positively affect customer satisfaction. This suggests that digital banking can strengthen customer satisfaction when it improves convenience and supports responsible banking practices. Overall, these studies indicate that customer satisfaction is strongly connected to the quality of the digital service experience.

3.2 Trust, Security, and Privacy in Digital Banking

Trust, security, and privacy are repeatedly discussed in the reviewed literature. Customers may be interested in digital banking services, but they may hesitate to use them if they are worried about fraud, data misuse, cybercrime, or system failure. Hurani and Abdel-Haq (2025) found that trust, brand strength, awareness, perceived usefulness, and ease of use influence fintech adoption among bank customers. This indicates that customers are more likely to adopt fintech services when they believe that the provider is credible and secure. Jena (2025) found that perceived insecurity negatively affects fintech adoption in rural India. This finding is important because it shows that security concerns can reduce adoption, especially among customers who may have lower digital confidence. Martínez de Ibarreta et al. (2025) also show that digital banking adoption is affected by digital skills, age, and geographic barriers. These findings indicate that trust and security should be supported by digital literacy and customer education. The issue of trust also appears in AI-based banking. Moharrak and Mogaji (2024) explain that generative AI creates opportunities for banking innovation, but also creates challenges related to reliability, regulatory compliance, data privacy, and ethical implementation. Therefore, banks need to treat privacy and security as part of service quality, not only as technical matters.

3.3 Fintech Adoption and Customer Readiness

The third theme concerns fintech adoption and customer readiness. The reviewed articles show that customers adopt digital financial services when they perceive the service as useful, easy to use, trustworthy, and compatible with their needs. Hurani and Abdel-Haq (2025) show that fintech adoption among bank customers is influenced by trust, brand strength, awareness, perceived usefulness, and ease of use. These factors indicate that fintech adoption depends on both customer perception and institutional credibility. Shaikh and Amin (2025) explain digital banking adoption through innovation diffusion factors. Their study suggests that relative advantage, compatibility, technological self-efficacy, and expected benefits influence non-users' adoption of digital banking services. This means that customers are more likely to adopt digital banking when they believe that the service provides clear benefits and fits their financial behavior. Koziel and Shen (2025) show that mobile fintech users differ based on demographic and psychographic profiles. This finding suggests that banks should not assume that all digital customers have the same needs. Customers using mobile payments, digital savings, robo-advisory, or digital investment services may have different levels of familiarity and intention to continue using the services. Therefore, customer segmentation is important in digital banking strategy.

3.4 Financial Inclusion and Digital Access

The reviewed literature also shows that digital banking and fintech can support financial inclusion. Jena (2025) found that fintech adoption can improve financial inclusion in rural India. Umar et al. (2025) found that digital finance improves SME financial inclusion in Africa. These findings indicate that digital financial services can help underserved customers and businesses access financial services more easily. Aracil et al. (2025) explain that mobile money can help expand banks' financial services in developing countries. Mobile money can introduce users to digital transactions and later connect them with broader financial services such as deposits and credit. This shows that fintech and banks can complement each other in expanding financial access. However, digital inclusion is not automatic. Martínez de Ibarreta et al. (2025) show that branch closures and digital barriers can create new forms of exclusion, especially for older adults, rural populations, and customers with limited digital skills. Therefore, digital banking development should be supported by digital literacy, customer assistance, accessible infrastructure, and hybrid service models.

3.5 Banking Innovation and Digital Transformation

Banking innovation appears as another important theme in the reviewed articles. Del Sarto et al. (2025) show that social media is shaping digital banking by supporting customer engagement, financial literacy, community building, and communication between banks and customers. This suggests that digital banking innovation is not limited to mobile applications, but also includes how banks interact with customers through digital platforms. Ulrich-Diener et al. (2025) found that bank digitalization is influenced by barriers related to strategic management, technology, regulation, employees, and organizational involvement. This finding shows that digital transformation requires more than technological investment. Banks need organizational readiness, employee capability, and strategic commitment. Moharrak and Mogaji (2024) show that generative AI can support banking through automation, personalization, customer service, fraud detection, and decision-making support. However, AI adoption also requires attention to reliability, regulation, responsiveness, and data protection. This indicates that innovation in banking must be balanced with governance and customer protection.

3.6 Sustainability, Green Banking, and Bank Performance

Digital banking is also increasingly connected with sustainability and bank performance. Mir et al. (2025) found that green banking practices influence customer satisfaction. Their study suggests that customers may respond positively to banking services that combine digital convenience with environmental responsibility. Digital banking can also support sustainability by reducing paper use and physical service dependency. Warokka et al. (2025) show that fintech development in ASEAN-4 countries is influenced by banking conditions, financial access, technological readiness, innovation, and digital infrastructure. This indicates that fintech development requires a supportive ecosystem. Digital banking cannot grow effectively without infrastructure, access, and institutional support. Ky et al. (2025) found that mobile money adoption is positively related to bank performance in the East African Community. This finding suggests that fintech can support banks through income diversification and broader deposit access. Therefore, fintech should not only be seen as a threat to traditional banks, but also as an opportunity for collaboration and performance improvement.

4. DISCUSSIONS

Overall, the reviewed literature shows that customer satisfaction in digital banking is shaped by the interaction between service quality, trust, customer readiness, inclusion, and innovation. Digital banking does not create satisfaction simply because it uses new technology. Customers become satisfied when digital services are easy to use, reliable, secure, private, and relevant to their needs.

Trust appears as the key link between digital innovation and customer acceptance. Mobile banking, fintech platforms, social media banking, and AI-supported services can improve convenience and engagement, but their value depends on whether customers believe that banks can protect data, manage risks, and provide reliable services. Therefore, privacy, cybersecurity, and regulatory responsibility should be treated as part of digital banking service quality.

The reviewed studies also show that digital banking can expand access for rural users, SMEs, and underserved customers, but it may exclude users with limited digital literacy, weak infrastructure, or low confidence in technology. Thus, banks need to balance technological innovation with customer education, accessible design, and service support. Digital banking should be understood as a customer-oriented service transformation rather than merely a technological upgrade.

4. CONCLUSION

This literature review examined selected articles published or accepted between 2024 and 2025 on digital banking services and customer satisfaction. Using thematic analysis, the study found that recent literature can be grouped into seven main themes: digital service quality, trust and security, fintech adoption, financial inclusion, banking innovation, sustainability-oriented banking, and bank performance. The findings show that customer satisfaction in digital banking depends on service quality, especially convenience, reliability, ease of use, security, and privacy. Digital banking can improve customer experience, but technology alone is not enough. Customers also need to trust that banks can protect their data and provide safe, reliable services. The review also shows that digital banking can support financial inclusion for rural users, SMEs, senior customers, and underserved groups. However, barriers such as digital literacy, infrastructure, and cybersecurity concerns still need attention. In addition, digital banking innovation, including fintech, social media, green banking, mobile money, and generative AI, can improve service delivery and bank performance when supported by organizational readiness and regulation.

Overall, modern banking success depends on balancing digital innovation with customer-oriented service quality. Digital banking should therefore be understood as a customer-oriented service transformation rather than merely a technological upgrade.

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