



FINTECH DISRUPTION AND OPERATIONAL RISK IN THE BANKING SECTOR: EVIDENCE FROM A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

The rapid advancement of financial technology (fintech) has significantly disrupted the traditional banking sector by introducing innovative services and business models that enhance efficiency, reduce costs, and promote financial inclusion. However, these benefits also bring emerging operational risks, such as cybersecurity threats, data privacy concerns, and regulatory compliance challenges. This systematic literature review synthesizes findings from 13 peer-reviewed journal articles published in the last five years, selected through a rigorous PRISMA-based methodology. The analysis identifies key themes, including the transformative role of technologies like artificial intelligence, blockchain, and big data analytics; the reconfiguration of risk management frameworks; and the evolving relationship between digital innovation and operational resilience. The results indicate that while fintech adoption offers substantial opportunities for competitiveness and customer engagement, it also necessitates proactive governance, robust cybersecurity measures, and continuous workforce upskilling. The discussion emphasizes the need for collaborative efforts among regulators, financial institutions, and technology providers to develop adaptive strategies that can mitigate risks in an evolving digital landscape. By addressing both the opportunities and vulnerabilities presented by fintech disruption, this review enhances our understanding of its implications for operational risk in banking and provides directions for future research.

1. INTRODUCTION

Fintech disruption in the banking sector refers to the transformative impact of technology on traditional banking services and practices. As technology evolves, fintech companies are challenging the status quo by offering innovative solutions that redefine consumer interactions with financial services. This disruption reshapes the industry landscape, driving competition and compelling traditional banks to adapt and embrace digital transformation to remain relevant. As fintech disruption accelerates, banks face increasing pressure to modernize operations and enhance customer experiences. By leveraging advanced technologies such as data analytics, artificial intelligence, and blockchain, fintech companies provide personalized, efficient, and secure financial services tailored to the needs of today's digital-savvy consumers. This shift towards a tech-driven banking ecosystem is revolutionizing personal finance management and forcing banks to rethink their business models and strategies to stay competitive. Success in this new era hinges on the ability of banks to quickly and effectively adapt to the evolving needs of their customers.

The emergence of financial technology has profoundly transformed the traditional banking landscape, introducing innovative services and operational methods (Bhattacharjee et al., 2024). This technological revolution, commonly referred to as "fintech," encompasses advancements from blockchain and artificial intelligence to big data analytics, fundamentally altering the delivery and consumption of financial services (Obeng et al., 2024). The resulting disruption has led to new business models that

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challenge established banking structures, prompting a reassessment of risks within the financial ecosystem (Diéguez et al., 2023; Chen, 2024).

While fintech innovations promise enhanced efficiency, reduced costs, and increased financial inclusion, they also introduce complex operational risks that require careful consideration and mitigation by both financial institutions and regulators (Vučinić & Luburić, 2022). These risks include cybersecurity threats, data privacy concerns, regulatory compliance challenges, and potential disruptions to traditional banking services. As fintech continues to reshape the financial landscape, stakeholders must collaborate to develop robust risk management frameworks that address these evolving threats, ensuring the stability and integrity of the financial system. By adapting to industry dynamics and embracing innovative solutions, financial institutions can capitalize on fintech benefits while effectively managing associated risks for sustainable growth and success in the digital age.

This systematic literature review synthesizes existing research on the impact of fintech disruption on operational risk within the banking sector, identifying key themes, challenges, and areas for future inquiry. The dramatic growth of fintech has fundamentally reshaped the financial landscape, presenting both substantial opportunities and significant challenges for existing financial institutions (Allen et al., 2021). This paradigm shift necessitates a critical examination of how digital proximity, replacing traditional physical interactions, affects operational efficiency and introduces new risks (Martinčević et al., 2021).

The integration of advanced technologies, such as artificial intelligence, machine learning, and blockchain, necessitates a thorough reevaluation of risk management frameworks to address the intricate relationship between technological innovation and operational resilience (Vučinić & Luburić, 2022; Pattnaik et al., 2023). As financial institutions embrace these cutting-edge solutions, they must prioritize strong cybersecurity measures to safeguard sensitive customer data and prevent cyberattacks. Additionally, continuous training and educating employees on the latest digital threats and best practices will be crucial for maintaining operational resilience amid an evolving technological landscape. By adopting proactive and adaptable risk management strategies, banks can effectively navigate the challenges of digital transformation while protecting their reputation and fostering customer trust.

Considering fintech disruption, it is increasingly vital for banks to comprehend and manage operational risk within this changing environment. While advanced technological solutions offer both opportunities and challenges, a comprehensive evaluation of risk management is essential. By understanding the potential impacts of fintech on operational efficiency and recovery capabilities, banks can better adapt and thrive in the digital age. Embracing technological innovation can enhance operational efficiency, streamline processes, and improve customer experience. However, it also introduces new risks, including cybersecurity threats, data breaches, and system failures. To mitigate these risks effectively, banks must invest in robust risk management strategies, cybersecurity measures, and ongoing monitoring. By staying ahead of the curve and continuously adapting to this evolving landscape, banks can not only survive but also flourish in the competitive fintech environment.

The purpose of this study is to analyze the impact of technological innovation on the banking industry and the associated risks and opportunities. By examining the strategies banks can implement to effectively manage these risks while leveraging technology, this study aims to provide insights into how banks can succeed in the digital age. Furthermore, it will explore the role of cybersecurity measures and ongoing monitoring in ensuring the security and stability of banking operations in an increasingly digital world. Ultimately, the goal is to offer recommendations for banks to remain competitive and successful in the rapidly changing financial technology landscape.

This study is guided by two primary research questions. First, it seeks to examine how fintech disruption influences operational risk in the banking sector and what factors determine whether these impacts are beneficial or detrimental. Second, it aims to explore the strategies and risk management frameworks that banks can adopt to effectively mitigate operational risks while leveraging fintech innovations for competitive advantage.

Literature Review

Fintech Disruption in the Banking Sector

Financial technology (fintech) has emerged as a transformative force in the global banking landscape, significantly altering the design, delivery, and consumption of financial services. Scholars define fintech disruption as the integration of advanced digital technologies—such as artificial intelligence, blockchain, big data analytics, and mobile applications—into traditional banking operations. This integration fosters new business models and innovative services (Pompella & Costantino, 2021). The rise of fintech solutions is driven by evolving customer expectations for faster, more accessible, and personalized services, alongside competitive pressure from non-bank entrants, including BigTech firms (Khan et al., 2025). In emerging economies, the adoption of fintech has accelerated due to high mobile penetration and government-led digital transformation initiatives (Kurniati & Suryanto, 2022). Islamic banking institutions are also embracing fintech innovations to enhance operational efficiency and customer satisfaction while navigating unique Shariah-compliance considerations (Abdul Rahman et al., 2023). However, while fintech offers opportunities for efficiency and growth, it also introduces new operational and strategic challenges for banks.

Operational Risk in the Digital Banking Era

Operational risk, as defined by the Basel Committee, refers to the risk of loss resulting from inadequate or failed internal processes, people, systems, or external events. This risk has become increasingly complex with the rise of fintech. The integration of third-party platforms, real-time payment systems, and cloud-based infrastructure introduces vulnerabilities related to cybersecurity, fraud, and compliance (Uddin et al., 2023). If not managed effectively, digital transformation can exacerbate existing operational weaknesses. Additionally, fintech-driven innovations often require rapid product rollouts and iterative development cycles, which can place strain on governance and risk management frameworks (Riikkinen & Pihlajamaa, 2022). In cross-border operations, differing regulatory environments further complicate these risks, particularly when fintech platforms facilitate instant, multi-jurisdictional transactions (Mashamba & Gani, 2023).

Previous Empirical Findings

Prior research has documented a range of impacts from fintech adoption on banking performance, risk management, and market structure. Wang et al. (2024) found that fintech integration reshaped the loan structures of urban commercial banks in China, steering them toward more retail-oriented and data-driven lending. Shang and Chiu (2023) demonstrated that mobile payment innovations, supported by strategic frameworks like the RACE model, can enhance both customer engagement and operational efficiency. In Europe, Visconti-Caparrós and Campos-Blázquez (2021) observed that alternative payment methods, such as Bizum, not only changed consumer behavior but also created new operational dependencies on digital ecosystems. Meanwhile, Alsmadi et al. (2023) emphasized that fintech acts as a business enabler, suggesting its benefits depend on complementary organizational capabilities. While the literature highlights the transformative potential of fintech, it reveals a fragmented understanding of its relationship with operational risk in the banking sector. Most studies focus either on the performance benefits of fintech adoption or on general technological risk factors, lacking a systematic integration of these perspectives. Furthermore, there is limited cross-comparative evidence across regions and banking types, particularly regarding how fintech-related operational risks are managed in diverse regulatory contexts. This gap justifies a systematic literature review to synthesize current evidence and identify patterns, contradictions, and future research directions.

2. METHODS

To address the identified research gap, this study employs a Systematic Literature Review (SLR) approach, which enables the collection, evaluation, and synthesis of existing scholarly evidence on fintech disruption and operational risk in the banking sector. The SLR follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency, replicability, and rigor in the review process. Peer-reviewed articles were retrieved from the Scopus database, selected for its reputation as one of the most trusted and comprehensive academic indexing platforms. Scopus offers

extensive coverage, regular updates, and strict inclusion criteria, ensuring that only reputable journals are indexed; journals may also be removed if they no longer meet these standards.

The literature search employed the following search string: TITLE (fintech AND disruption AND banking) AND (LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA, "ECON")) AND (LIMIT-TO (SRCTYPE, "j") OR LIMIT-TO (SRCTYPE, "p")). The search was conducted on 7 August 2025. Figure 1 outlines the document selection process used in this study.

Identification began with a Scopus search, followed by screening based on field relevance, source type, and publication year (2020–2025). Documents such as books, book chapters, grey literature, or those unrelated to the fintech disruption context were excluded. Only journal articles published within the last five years and with accessible full texts were considered. The final stage yielded studies eligible for quantitative synthesis (meta-analysis).

The review incorporated both inclusion and exclusion criteria. Studies were included if they:

1. Were published between 2020 and 2025, ensuring recency in the rapidly evolving fintech landscape.
2. Focused on the banking sector, either globally or within specific regional contexts.
3. Examined the relationship between fintech innovations and operational or strategic risks.
4. Employed empirical, case study, or mixed-methods research designs.

Studies were excluded if they were purely theoretical, not peer-reviewed, or outside the scope of financial services. A standardized data extraction form was used to collect key details, including author(s), year of publication, methodology, results, and country context. Extracted data were analyzed thematically to identify common patterns, divergences, and emerging themes related to fintech's impact on operational risk in banking. This synthesis offers a structured understanding of how various banking environments respond to technological disruption.

The PRISMA flow diagram in figure 1 outlines the step-by-step selection process used to ensure methodological rigor in this systematic literature review. The process began with identifying 106 records from the Scopus database. An initial screening for subject relevance excluded 29 records unrelated to business, finance, or economics, narrowing the pool to 77 documents. In the next stage, non-journal sources, such as books and book chapters, were removed, eliminating 43 items and leaving 34 articles. A further filter included only peer-reviewed journal publications from the past five years, resulting in the removal of 14 articles and a final count of 20. Duplicate entries were then identified and excluded, removing 2 more articles and yielding 18 unique studies. These articles underwent a full-text eligibility assessment, during which 4 were excluded due to inaccessible complete texts from the database. The remaining 14 articles were reviewed for thematic relevance, leading to the exclusion of 1 article that did not align with the focus on fintech disruption in the banking sector. Ultimately, 13 studies met all inclusion criteria and were incorporated into the final quantitative synthesis (meta-analysis). This systematic, multi-stage filtering process ensured that only the most recent, relevant, and high-quality evidence formed the basis of the review, enhancing the validity and reliability of the study's findings.

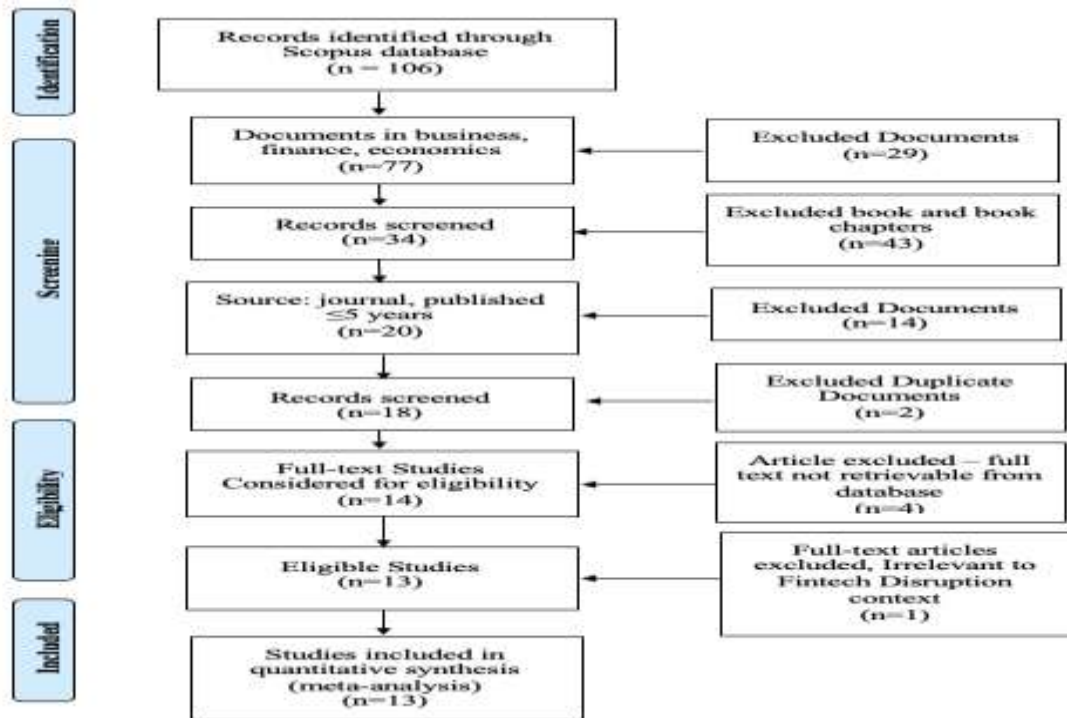


Figure 1. Document Selection

3. RESULTS AND DISCUSSIONS

The literature reviewed from table 1 indicates that fintech disruption has complex and context-dependent effects on operational risk and performance in the banking sector. Empirical analyses reveal that while digital transformation enhances efficiency and competitiveness, it can also increase exposure to operational risks due to higher transaction volumes and competitive pressures for cyber investments. However, cybersecurity threats alone are not necessarily direct contributors to these risks within the Basel framework (Uddin et al., 2023; Khan et al., 2025). Research from China and Sub-Saharan Africa demonstrates that fintech influences banks' funding and loan structures, optimizing credit portfolios and increasing equity financing, although it has limited effects on deposit bases or long-term debt (Wang et al., 2024; Mashamba & Gani, 2023).

Consistently, fintech adoption is linked to improved banking performance, with technological capabilities, business enablers, and strategic positioning accounting for significant variations in performance across different contexts (Alqararah et al., 2025; Alsmadi et al., 2023). Post-pandemic studies emphasize fintech's role in modernizing both conventional and Islamic banking, leading to reduced service costs and processing times, as well as enhanced accuracy and profitability (Pompella & Costantino, 2021; Abdul Rahman et al., 2023). Strategic collaboration has emerged as a vital adaptation mechanism, with banks forming iterative partnerships with fintech startups to align market insights and innovation cycles (Riikkinen & Pihlajamaa, 2022). Additionally, defensive strategies in mobile payments and competitive innovation frameworks help banks maintain their market positions (Shang & Chiu, 2023; Visconti-Caparrós & Campos-Blázquez, 2021).

Government and regulatory involvement is crucial in shaping the fintech-banking relationship. The case of Indonesia illustrates proactive policy support for collaboration between banks and fintechs, fostering structural, technological, and marketing transformations (Kurniati & Suryanto, 2022). Broader cross-country analyses highlight the need for transparency, stability, and regulatory adaptability in a rapidly evolving digital financial landscape. Overall, these findings suggest that fintech disruption is not inherently detrimental to the banking sector; rather, its effects depend on the interplay of strategic alignment, technological readiness, regulatory frameworks, and effective operational risk management.

Table 1. Papers on Fintech in Banking Sector

| No | Author | Title | Year | Methodology | Results | Country |
|----|-----------------------------------|---|------|---|---|-----------------|
| 1 | Uddin, M. et al. | Does digital transformation matter for operational risk exposure? | 2023 | Two-stage regression (2SLS) addresses endogeneity bias | Digitalization increases operational risk exposure in banks. Excessive digitalization contributes to operational risk under Basel frameworks. Cybersecurity threats do not inherently increase operational risks. | Cross-countries |
| 2 | Pompella, M. et al. | Financial Innovation and Technology after COVID-19: A few directions for Policy Makers and Regulators in the view of old and new disruptors | 2021 | Mixed methodology combining literature review, macro and micro-level analyses | The results indicate that blockchain and fintech are enhancing rather than disrupting traditional banking, with COVID-19 accelerating a gradual modernization process while underscoring the need for regulatory adaptation to ensure transparency and stability. | Cross-countries |
| 3 | Shang, S. S. C., & Chiu, L. S. L. | A RACE pathway for inventing and sustaining mobile payment innovation - A case study of a leading Bank in Taiwan | 2023 | Qualitative case analysis to explore competitive advantages. The research framework is based on the RACE model | The study reveals challenges in mobile payment advancement due to competitive tensions. It shows the importance of the RACE model in developing competitive advantages. | Taiwan |
| 4 | Del Sarto, N., et al. | Digital banking: how social media is shaping the game | 2024 | Qualitative approach was deemed most appropriate for the research question | The study reveals profound impacts of digital transformation on banking. It emphasizes the importance of organisational culture and client engagement. Insights from six banks highlight enhanced customer service and financial literacy. | Italian |
| 5 | Wang, X., et al. | Impact of fintech on the loan structure of urban commercial banks in China | 2024 | Empirical research methods analyze fintech's impact on loan structures. Data processing and statistical analysis were performed using Stata15 | Fintech improves credit and guaranteed loans for urban commercial banks. It reduces mortgages and pledged loans significantly. The study shows loan structure optimization in urban commercial banks | China |
| 6 | Khan, H. H., et al. | Digital disruption in financing: Are fintech and bigtech credit reshaping corporate access to capital? | 2025 | The study employs a two-step system GMM approach for estimation | Alternative digital credit alleviates financing constraints in developing countries. It reduces investment-to-cash flow sensitivity, particularly for small and young firms. Fintech and big tech enterprise enhance competition, lowering firms' financing constraints | Cross-countries |

| No | Author | Title | Year | Methodology | Results | Country |
|----|---------------------------|--|------|--|--|--------------|
| 7 | Riikkinen, M., et al. | Achieving a strategic fit in fintech collaboration – A case study of Nordea Bank | 2022 | The research employed a longitudinal case study of Nordea, focusing on startup collaboration during the fintech boom from 2015 to 2018 | The banking industry is experiencing a "fintech revolution," prompting banks to collaborate with startups for corporate innovation. Achieving strategic fit with startups is an iterative process influenced by technological and market knowledge accumulation. Nordea's collaboration modes evolved in response to the phases of disruption and learning goals | Nordea |
| 8 | Kurniati, P. S., et al. | The Role Of The Indonesian Government In The Era Of Banking Disruption Innovation | 2022 | The study employed a descriptive analysis method with a qualitative approach to understanding the subject matter deeply | The study concludes that the government encourages collaboration between banking and fintech sectors to foster growth. Digital disruption has significantly changed the financial services landscape, impacting structure, technology, and marketing models | Indonesia |
| 9 | Alqararah et al. | The Role of Digital Transformation Capabilities in Improving Banking Performance in Jordanian Commercial Banks | 2025 | Multiple linear regression analysis was performed, revealing significant relationships between digital transformation capabilities and perceived performance | The study found a significant positive relationship between digital transformation capabilities and perceived performance among bank managers. Technological adaptation, strategic positioning, and competitive positioning explained 68% of the variance in perceived performance | Jordan |
| 10 | Visconti-Caparrós, et al. | The development of alternate payment methods and their impact on customer behavior: The Bizum case in Spain | 2021 | The researchers employed a qualitative case study approach to explore Bizum's digital business ecosystem | The research reveals that Bizum's digital business ecosystem (DBE) aids traditional banks in creating superior digital value rapidly adopted by users in Spain. The study highlights the successful defensive strategy of traditional banking entities in leading the new mobile instant payment ecosystem | Spain |
| 11 | Alsmadi, et al. | Impact of business enablers on banking performance: A moderating role of Fintech | 2023 | The research employed a quantitative design to examine the impact of business enablers and Fintech on the banking industry | The study concludes that business enablers significantly enhance bank performance through Fintech advancements. Fintech is identified as an opportunity rather than a disruption for the banking industry. The research highlights the importance of technological infrastructure and willingness to adopt Fintech | Saudi Arabia |

| No | Author | Title | Year | Methodology | Results | Country |
|----|--------------------------|---|------|--|---|--------------------|
| 12 | Rahman, A. et al. | Fintech innovations and Islamic banking performance: Post-pandemic challenges and opportunities | 2023 | A comparative index approach was used for quantitative analysis of fintech adoption performance. Qualitative insights were gathered through interviews, surveys, and past published articles | The study highlights FinTech's pivotal role in enhancing the performance of Islamic banks during and after the pandemic. Adoption of technology has reduced customer service time and costs while increasing accuracy. FinTech innovations have transformed financial activities, making them more profitable and productive | Cross-countries |
| 13 | Mashamba, T., & Gani, S. | Fintech, bank funding, and economic growth in Sub-Saharan Africa | 2023 | A fixed-effect structural equation modeling (SEM) approach was applied to account for individual and country-specific effects | Fintech disruptions increased equity funding for banks but had negligible effects on deposits and long-term debt financing. The study found no evidence of Fintech mediating the impact on economic growth via bank funding. The resilience of bank funding structures to Fintech disruptions was emphasized, highlighting the importance of prudent funding management | Sub-Saharan Africa |

The synthesis of the reviewed literature indicates that fintech disruption in the banking sector presents a duality of opportunity and risk. Digital transformation initiatives can enhance efficiency, competitiveness, and customer experience (Alqararah et al., 2025; Abdul Rahman et al., 2023), but they also increase operational risk, particularly when fueled by rapid scaling and intense competition (Uddin et al., 2023). This aligns with the Basel Committee's perspective that adopting technology without adequate control frameworks can inadvertently heighten risk exposure. Notably, evidence suggests that while cybersecurity threats are significant, they do not directly correlate with increased operational risk, implying that mature cyber governance structures may mitigate some of these threats.

The reviewed studies also highlight a strategic shift in how banks respond to fintech innovations. Rather than being displaced, many traditional banks are adopting collaborative and adaptive strategies, forming partnerships with fintech startups to achieve a "strategic fit" that evolves with market and technological changes (Riikkinen & Pihlajamaa, 2022). The defensive positioning seen in cases like Bizum in Spain (Visconti-Caparrós & Campos-Blázquez, 2021) demonstrates how incumbents can leverage their customer base and regulatory credibility to dominate emerging payment ecosystems. Similarly, mobile payment innovation pathways in Taiwan (Shang & Chiu, 2023) emphasize the necessity of structured innovation frameworks—such as the RACE model—to navigate competitive tensions and maintain long-term market advantages. Regional evidence adds nuance to the global narrative.

In China, fintech adoption has optimized loan structures by increasing credit and guaranteed loans while decreasing reliance on mortgages (Wang et al., 2024), reflecting a shift towards more flexible credit models. Conversely, findings from Sub-Saharan Africa (Mashamba & Gani, 2023) indicate that while fintech boosts equity funding for banks, it does not fundamentally change deposit structures or stimulate economic growth through bank funding, suggesting that traditional funding channels remain robust in certain markets. This underscores the importance of contextualizing fintech's impact within local financial ecosystems and regulatory conditions. The role of regulation and government intervention is crucial in mediating the risks and benefits of fintech disruption. The Indonesian example (Kurniati & Suryanto, 2022) illustrates how targeted policy measures can promote bank-fintech collaboration, fostering innovation while maintaining systemic stability. Cross-country policy-oriented research (Pompella & Costantino, 2021) reinforces the need for regulatory adaptation to balance modernization with transparency, risk oversight, and consumer protection. This supports the growing consensus that effective governance structures, combined with technological readiness, determine whether fintech serves as a disruptive threat or a synergistic enabler in the banking sector. Overall, the literature suggests that the trajectory of fintech disruption is influenced by strategic alignment, regulatory adaptability, and the maturity of operational risk management. Banks that approach fintech integration through structured innovation processes, collaborative ecosystems, and proactive governance are better positioned to harness its benefits while managing potential risks. This reinforces the notion that fintech is not inherently disruptive in a negative sense but serves as a catalyst for structural transformation—rewarding preparedness, agility, and resilience in the digital banking era.

4. CONCLUSION

This systematic literature review analyzed 13 studies on fintech disruption and operational risk in the banking sector, revealing that the effects of fintech are complex and context dependent. While digital transformation enhances efficiency, customer service quality, and competitive positioning, it also introduces new operational vulnerabilities, especially in high-volume, digitally intensive banking environments (Uddin et al., 2023; Khan et al., 2025). Contrary to common beliefs, cybersecurity threats do not inherently increase operational risk when strong governance frameworks are in place. Instead, risks primarily arise from the strategic and operational decisions banks make when adopting fintech solutions. The review contributes to theory by reframing fintech disruption as a continuum rather than a binary phenomenon, where disruption and enablement can coexist within the same institutional context. The concepts of "strategic fit" (Riikkinen & Pihlajamaa, 2022) and structured innovation pathways (Shang & Chiu, 2023) emerge as key factors that

determine whether fintech adoption leads to sustained competitive advantage or increased operational risk. Additionally, the findings enrich the literature by incorporating regional evidence, emphasizing how local market structures and regulatory conditions influence fintech's impact on banking performance and stability. For practitioners, the implications are clear: fintech integration should be pursued through balanced strategies that prioritize operational risk management alongside innovation objectives. Banks that foster collaboration with fintech startups, invest in digital capabilities, and maintain rigorous risk governance frameworks are more likely to achieve performance gains while mitigating destabilizing risks. Furthermore, context-sensitive adoption strategies, tailored to local market dynamics and customer behavior, are crucial for maximizing the benefits of fintech transformation. For policymakers and regulators, the review highlights the need for adaptive regulatory frameworks that promote innovation while ensuring transparency, systemic stability, and consumer protection. The Indonesian case (Kurniati & Suryanto, 2022) and broader cross-country evidence suggest that policy interventions can effectively enable constructive bank-fintech synergies. However, regulatory oversight must evolve alongside technological advancements to address emerging risks without hindering innovation. In conclusion, fintech disruption should not be viewed solely as a destabilizing force within the banking sector; rather, it acts as a catalyst for transformation that rewards institutions capable of strategic agility, technological readiness, and strong operational risk management. Future research should focus on longitudinal analyses to capture the evolving nature of fintech-bank interactions and comparative studies that further investigate the role of institutional and regulatory diversity in shaping outcomes.

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