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Implementation of Prudential Principle in Sharia Digital Banking Financing for Risk Mitigation

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Abstract
This study analyzes the implementation of the prudential principle in Islamic banking financing within the digital era as a strategic instrument for risk mitigation. The rapid digital transformation in Islamic banking has shifted financing processes from conventional mechanisms toward technology-driven systems, including digital onboarding, electronic identity verification, big data analytics, and automated risk assessment. While digitalization enhances efficiency and financial inclusion, it simultaneously introduces new risks such as cybersecurity threats, data manipulation, operational failures, and Sharia compliance challenges. Employing a descriptive qualitative approach, this research integrates empirical insights, juridical-normative analysis, and bibliometric mapping. Primary data were obtained through interviews with Islamic banking practitioners engaged in digital financing and risk management, while secondary data were drawn from regulations, academic literature, and industry reports. Bibliometric analysis using VOSviewer identified dominant themes and research gaps related to prudential principles, Islamic banking, and digital risk governance. Findings reveal that the prudential principle has evolved into a multidimensional governance system encompassing financing analysis, technology validation, cybersecurity, data protection, operational supervision, and Sharia compliance. The study concludes that digital transformation reinforces rather than diminishes the relevance of prudential principles, contributing to theoretical discourse on Islamic digital finance and offering practical recommendations to strengthen risk management, financial stability, and public trust.

INTRODUCTION

Digital transformation in the banking industry has fundamentally changed the way institutions financial institutions carry out their intermediation function, including in the Islamic banking sector. The financing process that previously relied heavily on face-to-face interaction, checking physical. documents, and

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manual assessment is now moving toward digital-based systems, from digital onboarding, electronic identity verification, use of big data, credit scoring, to technology information-based financing monitoring (Fahira et al., 2022). In the Indonesian context, this direction of transformation is also aligned with the agenda to strengthen national Islamic banking as reflected in the Roadmap for the Development and Strengthening of Islamic Banking in Indonesia 2023–2027, which positions strengthening the industry structure, competitiveness, Islamic characteristics, as well as digital acceleration as part of the development strategy for the Islamic banking industry (Authority, 2023).

These changes are not only technological, but also structural and epistemological in financial intermediation practice, because digitalization shifts the decision-making paradigm from being relationship-based to data- and algorithm-based. In this context, the financing process becomes increasingly dependent on the quality of data, the sophistication of analytical systems, and the integrity of the technology infrastructure used by banks (Fuster et al., 2019). Consequently, the success of digital transformation is determined not only by the ability to adopt technology, but also by the institution's readiness to build adaptive governance, an integrated risk management system, and supervisory mechanisms capable of ensuring the accuracy, security, and accountability of the financing process. Therefore, digital transformation in Islamic banking fundamentally requires a redefinition of the bank's basic operating principles, especially the principle of prudence, so that they remain relevant in facing the complexities of a dynamic digital financial environment (Buchak et al., 2018).

The development of the Islamic banking industry is not only marked by increased number of customers and institutional performance, but also accompanied by rising operational challenges and demands for ideal, workable, and prudent service. These conditions indicate that every innovation and service transformation in Islamic banking must remain within the corridor of the prudence principle in order to maintain stability and public trust in Islamic financial institutions (Lubis, 2018).

Financing digitalization not only provides efficiency, service speed, and expansion financial access, but also introduces new risk complexities. Financing risk in Islamic banking in the digital era is no longer limited to customers' inability to meet payment obligations, but also includes risks of data validity, manipulation of digital identity, cyber security, system failure, dependence on third-party technology providers, and bias in the use of algorithms for assessing creditworthiness. The Basel Committee emphasizes that modern operational risk must understood in an integrated manner with governance, information technology, business continuity, and the bank's operational resilience (Basel Committee on Banking Supervision, 2011). Accordingly, as financing processes become more digital, the need to reinterpret the prudential principles more adaptively and contextually becomes stronger.

Digital risk in the financial services sector is no longer merely a potential threat, but has become a real phenomenon. The Financial Services Authority (OJK) records 2,688 complaints related to external fraud from 2024 to January 2025, including identity theft, phishing, social engineering, account takeover, and misuse of customers' personal data. Additionally, the Indonesia Anti-Scam Centre (IASC) received more than 74,243 reports of digital fraud up to March 2025, indicating increasing cybercrime risk in the financial services sector. This condition shows that digital transformation that provides convenience and service efficiency is also accompanied by growing threats to data security, digital identity validity, and public trust in financial institutions. In the context of Islamic banking, these risks become even more complex because, besides impacting operational and financial aspects, they also have the potential to affect shariah compliance and the reputation of the institution if not managed through adequate prudential principles operational and financial aspects, and also potentially affect shariah compliance (sharia compliance) and the institution's reputation if not managed through the application of adequate prudential principles (OJK, 2025).

The prudence principle or prudential principle is the main foundation in governance banking because banks intermediates public funds that must be managed safely, soundly, and responsibly. In banking literature, prudence is understood as the bank's obligation to conduct careful risk analysis before financing, including assessment of character, capacity, capital, collateral, business prospects, and customer economic conditions (Rose & Hudgins, 2013; Saunders & Cornett, 2018). In the context of Islamic banking, this principle has a broader dimension because it not only concerns financial feasibility but also contract compliance, transaction fairness, information transparency, prohibition of gharar, maysir, riba, and protection of the public interest of all parties (Chapra & Khan, 2000; Dusuki, 2008).

The escalating complexity of risk in digital financing calls for repositioning the prudential principle from a normative framework to an operational instrument that is adaptive to technological developments. The prudence principle can no longer be applied in a conventional way based on static document analysis; it must be developed through a risk-based approach that integrates the use of digital technology, real-time data analysis, and strengthening internal control systems. In this context, digitalization not only changes the way banks channeling financing, but also transforming how banks understand, measure, and manage risk. Therefore, a conceptual reconstruction of the principle of prudence is needed to bridge the demands of digital efficiency with the need for comprehensive risk protection, so that it remains aligned with the main objectives of Islamic banking in maintaining stability, justice, and economic welfare.

Literature on risk management in Islamic banking also shows that the characteristics of risk at Islamic financial institutions differs from conventional banks because the structure of the contract used can generate financing risk, market risk, operational risk, Shariah compliance risk, return risk, and reputational risk simultaneously IFSB, through the prudential standards for Islamic financial services institutions, emphasizes the importance of an identification, measurement, monitoring, reporting, and risk control system tailored to the characteristics of Shariah contracts (IFSB, 2005). Moreover, the prudential approach in Islamic finance cannot stop at formal compliance with rules, but must lead to strengthening internal governance, Shariah supervision, and substantial risk control systems (Board, 2009).

Based on the above exposition, this article aims to analyze the application of the principle prudence in Islamic banking financing in the digital era as a risk mitigation instrument. The analysis is directed at how Islamic banks translate the principle of prudence in the digital financing process, from the customer selection stage, data verification, financing feasibility analysis, contract determination, financing disbursement, to post-financing monitoring. This focus is important because digitalization can accelerate service processes, but the acceleration may weaken the quality of assessment if not supported by a risk management system, technology governance, and strong Shariah supervision.

This study aims to identify normative and operational challenges in the application of prudence in Shariah financing based on digital platforms. Normative challenges relate to the need to balance digital innovation with compliance to banking regulations, Shariah principles, and customer protection. Meanwhile, operational challenges relate to the readiness of technology infrastructure, data quality, information security, human resource competency, and the effectiveness of internal supervision. In the Indonesian regulatory context, POJK Number 11/POJK.03/2022 states that banks must implement risk management in information technology operations through the processes of identification, measurement, monitoring, and risk control, and ensure the adequacy of the risk management information system (OJK, 2022).

The main argument of this article is that the application of the prudence principle in financing in Islamic banking in the digital era cannot be understood only as an administrative procedure, but as a multidimensional risk governance framework. The prudence principle must covering the integration between financing analysis, technology validation, Shariah compliance, data protection, and accountability in decision making. In other words, the use of digital technology should not replace the substance of prudence, but should strengthen the bank's ability to read risks more quickly, accurately, and responsibly. In this perspective, technology is a supporting instrument, while governance quality and the integrity of financing decisions remain the core of prudential principles.

Previous studies have primarily examined the prudential principle in Islamic banking from normative, regulatory, or financing perspectives, while research on digital banking has largely focused on technological adoption, financial inclusion, and operational efficiency. Although these studies provide valuable insights, limited attention has been given to integrating prudential principles, digital financing, risk mitigation, and Sharia compliance into a comprehensive analytical framework. Consequently, there remains a theoretical and practical gap in explaining how prudential principles should be reconstructed to address the emerging risks associated with digital transformation in Islamic banking. To address this gap, this study offers a novel contribution by integrating empirical evidence, juridical-normative analysis, and bibliometric mapping using VOSviewer to examine the implementation of prudential principles in Islamic banking financing within the digital era. Unlike previous studies that mainly emphasize financing quality or regulatory compliance, this research develops a multidimensional perspective that incorporates digital governance, cybersecurity, data protection, operational resilience, and Sharia compliance as interconnected elements of prudential risk management. The findings are expected to enrich the theoretical development of Islamic digital finance by extending the concept of prudential governance beyond conventional financing assessment. Practically, this study provides strategic recommendations for Islamic banks, regulators, and policymakers to strengthen digital risk governance, improve financing quality, enhance public trust, support sustainable Islamic financial inclusion, and reinforce the long-term stability of the Islamic banking industry.

METHODS

This research uses a descriptive qualitative approach with an empirical method that This study uses a descriptive qualitative approach with an empirical method, combined with a juridical-normative approach and bibliometric analysis. This approach was chosen because the study not only aims to analyze the prudential principle in Islamic bank financing as a norm and theoretical concept, but also to directly understand the practice of its implementation in the field, particularly in the context of digitalization of banking services. Thus, this research integrates three analytical dimensions: normative, empirical, and the development of scientific literature (Anidar et al., 2026; Baroud et al., 2025; Efendi et al., 2026; Engkizar et al., 2026; Hasan et al., 2025). This type of research falls into the field research category supported by library research. The data consist of primary and secondary data. Primary data were obtained through in-depth interviews with informants who have experience and competence in Islamic banking financing, especially those involved in digital-based financing processes. The informants in this study include Islamic bank employees such as financing analysts, account officers, risk management officers, and parties involved in information technology or digital banking management. The informants were selected through purposive sampling, based on relevance criteria to the research focus, work experience, and involvement in the financing process (Abishev et al., 2025; Creswell & Poth, 2018; Engkizar et al., 2026).

Secondary data were obtained from various written sources such as regulations from the financial services authority, basel committee on banking supervision standards, Islamic Financial Services Board guidelines, books, reputable scientific journal articles, as well as industry reports related to Islamic banking, risk management, digital banking, and fintech. The literature used prioritizes publications from the last five years to ensure relevance with the developments of Islamic banking digitization. Data collection techniques were conducted through in-depth interviews and documentary studies. The interviews were conducted semi-structured with question guides covering aspects of applying prudential principles in financing, digital data verification processes, financing feasibility analysis, use of technology in risk assessment, and challenges and risk mitigation strategies faced by Islamic banks in the digital era. Meanwhile, the documentation study was conducted by reviewing regulatory documents, policy reports, and relevant academic literature.

This research also utilizes VOSviewer as a tool to assist bibliometric analysis to strengthen the literature review. Bibliometric data are obtained from scientific databases such as Scopus, Web of Science, or Google Scholar with keywords such as prudential principle, Islamic banking financing, digital banking, Islamic fintech, and risk management. The data are then analyzed using VOSviewer to generate keyword network map (co-occurrence), author networks (co-authorship), and inter-article connections (co-citation). The results of this analysis are used to identify research trends, dominant themes, and research gaps that form the basis for strengthening the research argument.

Data analysis techniques are carried out through interactive qualitative analysis comprising three stages, namely reducing data, presenting data, and drawing conclusions. Interview data are analyzed by identifying main themes related to the application of prudence principles, the use of technology in financing, and the forms of risk that arise in digital financing. Furthermore, the data are linked to the theoretical frameworks and relevant regulations through conceptual analysis. Meanwhile, the bibliometric analysis results are used to strengthen data interpretation by showing the position of the research in the map of scientific study development (Engkizar et al., 2025; 2026; Jaafar et al., 2025; Miles & Huberman, 2014).

To ensure data validity, this study uses triangulation techniques, including triangulation of sources as well as triangulation of methods. Triangulation of sources is conducted by comparing interview results across informants, while triangulation of methods is done by comparing interview data with documentation data and literature analysis results. Thus, the research findings are expected to have high reliability and credibility.

Through this methodology, the research aims to produce a comprehensive analysis on the application of prudence principles in Islamic banking financing in the digital era. The empirical approach provides a real-world picture of practices in the field, while the normative and bibliometric approaches provide a strong theoretical and contextual basis. With this combination, the study is expected to explain in depth how prudence can be adaptively implemented as a risk mitigation instrument in a digital-based Islamic banking financing system.

RESULT AND DISCUSSION

Based on bibliometric analysis results using the VOSviewer application, research on the prudential principle in Islamic banking financing in the digital era shows development which has become increasingly significant in recent years. The analysis was conducted on various scientific articles indexed in academic databases using keywords such as prudential principle, Islamic banking financing, digital banking, Islamic fintech, risk management, and Sharia compliance. The bibliometric mapping results indicate that studies on prudence principles in Islamic banking are no longer focused solely on normative aspects and regulatory compliance, but are beginning to develop toward the integration of digital technology, risk governance, cybersecurity, and data-driven financing system transformation.

The results of visualizing co-occurrence keywords show several main clusters that are connected. connected. The first cluster is dominated by keywords such as Islamic banking, prudential principle, risk management, and financing risk. This cluster shows that previous research still places the prudence principle as part of the financing risk mitigation framework in Islamic banks. The main focus in this cluster relates to controlling non-performing financing (NPF), financing viability analysis, Sharia compliance, and the application of the 5C principle in Islamic financing. This finding demonstrates that the prudential approach in Islamic banking is traditionally understood as a financing safety instrument to maintain the bank's stability and health.

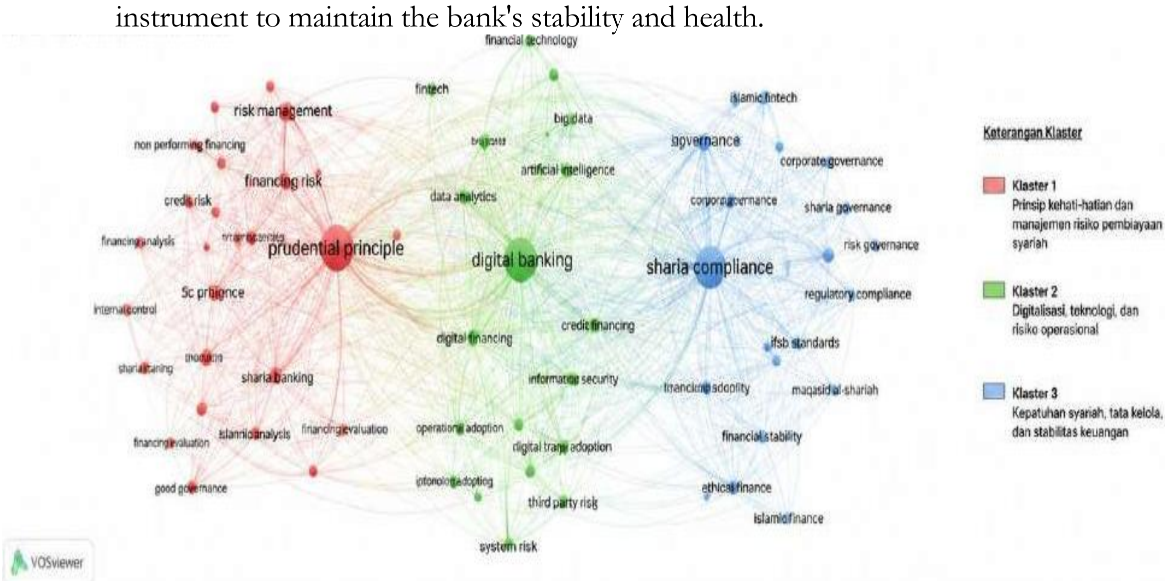

Fig 1. Network visualization Vosviewer co-occurrence keyword

The second cluster shows the interconnection between keywords digital banking, financial technology, cyber security, big data, and operational risk. This cluster indicates a shift in research focus from conventional prudential approaches toward digital risk governance. The digitization of financing has spurred the emergence of various new risks such as manipulation of digital data, cybersecurity, technology system failures, and dependence on third-party technology service providers. In this context, the prudential principle is no longer sufficient when implemented through administrative checks and manual analysis, but must be expanded through the integration of digital surveillance systems, electronic data validation, and real-time technology-based risk monitoring. This finding reinforces the argument that the digitization of Islamic banking has transformed how banks understand and manage financing risk (Van Eck & Waltman, 2017).

Meanwhile, the third cluster shows the interconnection between Sharia compliance keywords, Islamic fintech, governance, and financial stability. This cluster shows that the development of Islamic financial technology (Islamic fintech) creates a need for stronger Sharia governance and more adaptable prudential supervision. Analysis results indicate that various studies are beginning to place Sharia compliance as an integral part of digital risk mitigation (Safitri & Anwar, 2022). Thus, risks in Sharia financing in the digital era are not only related to financial and operational risks but also Sharia compliance risk and reputation risk that can affect the social legitimacy of Islamic financial institutions.

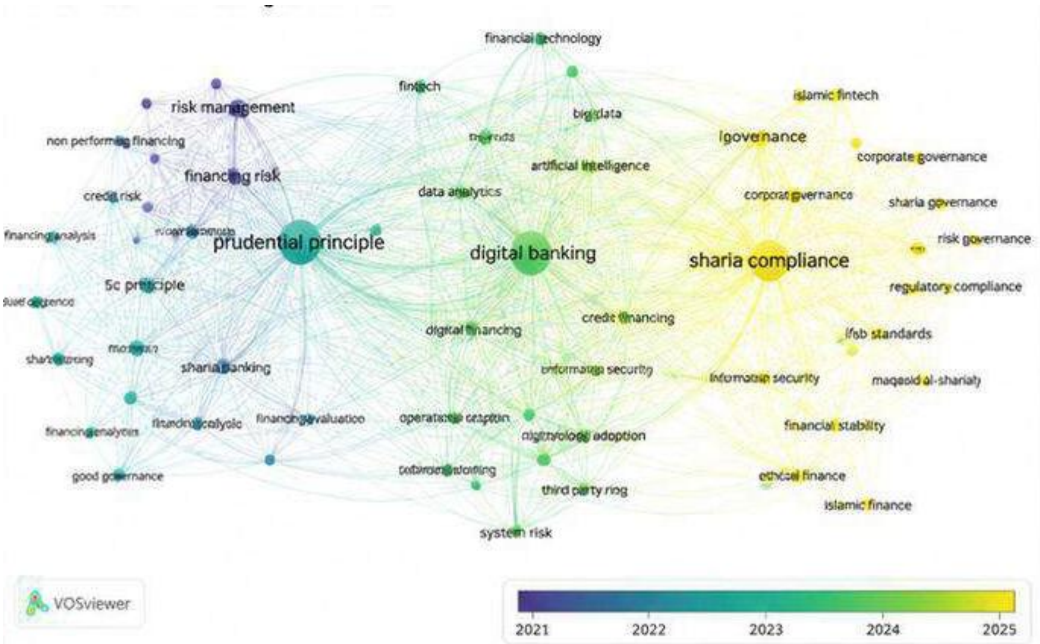

Fig 2. Overlay visualization by Keyword base publication year

Overlay visualization analysis with VOSviewer shows that research on prudential principle in Islamic banking has developed quite dynamically from 2021 to 2025. In the early period, studies were still dominated by financing risk management issues and regulatory compliance. However, recent research has begun to show increased attention to topics such as digital banking, Islamic fintech, AI-based risk assessment, cybersecurity, and digital governance. This shift in themes indicates that digital transformation has become a central issue in the development of prudential Islamic banking systems. Furthermore, terms such as data-driven risk management and digital financial resilience have emerged, indicating that the risk mitigation paradigm in Islamic banking is moving toward a technology- and data-driven approach (Al Hammadi et al., 2024; Narayan & Phan, 2021).

The bibliometric analysis results also show the existence of limitations in research that, in particular, specifically linking prudential principles, digital Islamic financing, and risk mitigation within a single integrated analytical framework. Most studies still discuss prudential aspects normatively or only focus on digital transformation and fintech without linking them in depth to the risk mitigation mechanisms of Islamic financing (Donthu et al., 2021; Hassan et al., 2022). Thus, the VOSviewer mapping results show a fairly clear research gap, namely the limited number of studies that address how prudence principles are reconstructedin the context of digitally based Islamic finance comprehensively.

These bibliometric findings are further reinforced by field interview results that showing that Shariah banks are currently under pressure to accelerate digital financing services without reducing the quality of risk analysis and Shariah compliance. Interviewees explained that the digital onboarding process, electronic identity verification, and data-based credit scoring indeed improve service efficiency, but at the same time raise new challenges related to data validity, information security, and monitoring of digital transactions. This condition indicates that the application of prudence in the digital era can no longer be understood merely as an administrative procedure, but as a multidimensional risk governance system that integrates technology, Shariah compliance, and operational risk controls.

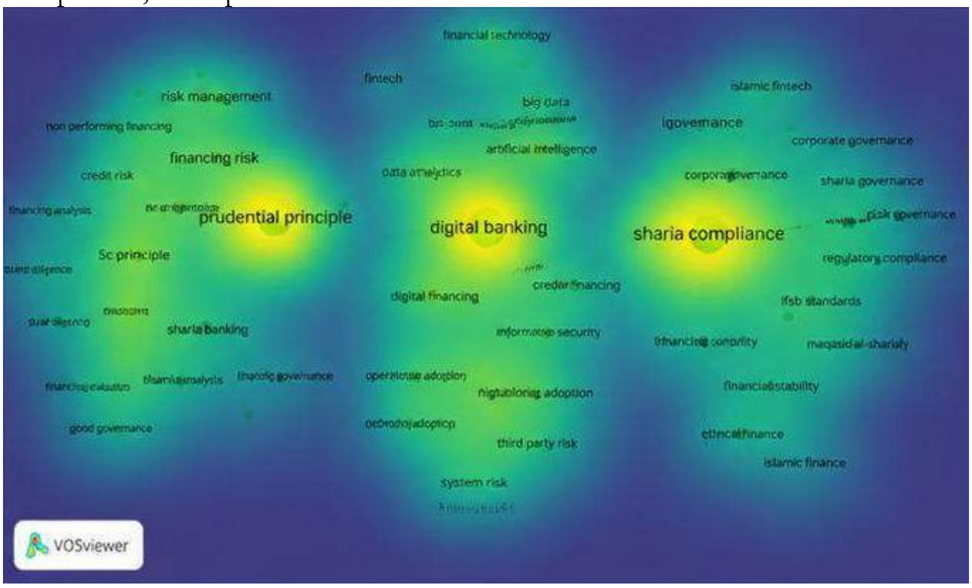

Fig 3. Density visualization Vosviewer base density of research topics

Conceptually, the results of the VOSviewer analysis show that prudence in the Islamic banking financing is undergoing an epistemological transformation. If previously the prudential principle was understood mostly as a mechanism to protect against conventional financing risks, in the digital era this principle has evolved into a governance instrument which covers technology oversight, data protection, cybersecurity, strengthening risk management information systems, and control of digital financing algorithms. Thus, digitalization does not remove the importance of the precautionary principle, but rather expands its scope of implementation in modern Sharia financing systems.

The development of digital financing in Islamic banking not only provides opportunities to increase service efficiency, but also gives rise to various forms of new risks that require strengthening the application of the precautionary principle. These risks are no longer limited to conventional financing risks, but have developed to include risks cyber security, digital identity manipulation, technology system failures, compliance risks to Sharia compliance, as well as reputational risk. This phenomenon is reflected in the increasing number of public complaints related to digital fraud and abuse of technology-based financial services technology. To provide a more systematic overview of risk characteristics faced by Islamic banking in the digital era, the following is presented as a classification of digital risks along with their impacts and empirical indicators.

Table 1. A classification of digital risks along with their impacts and empirical indicators

Risk Type	Risk Form	Empirical Indicator	Risk Mitigation Strategy
Digital Identity Manipulation Risk	Electronic identity forgery and customer data theft	A total of 2,688 external fraud complaints were reported in the financial services sector	Implementation of electronic Know Your Customer (e-KYC), biometric verification, facial recognition, and integration with the national civil registration database
Cybersecurity Risk	Phishing, malware attacks, account takeover, and data breaches	A total of 2,688 external fraud complaints were reported in the financial services sector	Strengthening the cybersecurity framework, implementing multi-factor authentication (MFA), and conducting regular penetration testing
Operational Risk	Digital process failures and electronic verification errors	Operational disruptions in digital banking services	Establishment of digital Standard Operating Procedures (SOPs), technology-based internal controls, and continuous operational monitoring
System Failure Risk	Application downtime, system errors, and server failures	Disruptions in electronic banking services	Implementation of a Disaster Recovery Center (DRC), backup systems, and a Business Continuity Plan (BCP)
Sharia Compliance Risk	Non-compliance of digital contracts and automated processes with Sharia principles	Ongoing Sharia supervision of digital banking services	Continuous oversight by the Sharia Supervisory Board (SSB) supported by digital monitoring systems and periodic Sharia audits
Reputational Risk	Declining public trust due to digital security incidents	A total of 74,243 digital fraud reports received by the Indonesia Anti-Scam Center (IASC)	Transparent information disclosure, customer data protection, digital security awareness, and prompt complaint handling

The table above shows that digitalization of Islamic banking has expanded the spectrum of risks that must be managed through the application of prudential principles. Financing risks are no longer only related to the borrower's ability to meet obligations, but also include the validity of digital identity, information security, continuity of technology systems, and compliance with Shariah principles. Therefore, the prudential principle in the digital era should be understood as a multidimensional risk governance framework integrated with the digital risk management system.

Based on the research results, the model for applying prudential principles in banking Shariah banking in the digital era should be built through four main pillars. First, strengthening verification and validation of digital identity to prevent financing fraud. Second, strengthening cyber security systems and customer data protection to maintain information integrity. Third, enhancing operational resilience through development of digital risk management and service continuity (business continuity management). Fourth, strengthening technology-based Shariah supervision so that all digital financing processes remain in line with Shariah principles. Through the integration of these four pillars, prudence serves not only as a regulatory compliance instrument but also as a fundamental foundation in maintaining stability, sustainability, and public trust in the Islamic banking industry in the digital era.

This research result confirms that the success of digitalization of Islamic banking is highly and depends on the bank's ability to build an adaptive, risk-based prudential model. Digital technology essentially only serves as a supporting instrument, while the core of prudential principles remains in governance quality, integrity of financing processes, accuracy of risk analysis, and commitment to Shariah principles. Therefore, the integration of digital transformation and the prudential principle becomes a strategic need for Islamic banking to maintain industry stability, enhance public trust, and strengthen competitiveness in the digital economy era.

The findings demonstrate that the prudential principle in Islamic banking has undergone a fundamental transformation in response to digitalization. Rather than functioning solely as a mechanism for assessing financing feasibility through conventional criteria, it has evolved into a multidimensional governance framework encompassing cybersecurity, digital identity verification, operational resilience, data protection, and Sharia compliance. This finding directly addresses the research objective of analyzing the implementation of prudential principles in Islamic banking financing within the digital era as a risk mitigation strategy. From a theoretical perspective, this transformation reflects the evolution of prudential governance from a compliance-oriented approach toward an integrated risk governance model, as emphasized (Basel Committee on Banking Supervision, 2011). These scholars argue that prudential principles should continuously adapt to emerging operational risks resulting from technological innovation. The present findings extend these theoretical perspectives by demonstrating that, within Islamic banking, prudential governance must additionally integrate Sharia compliance and digital governance as inseparable components of financing risk management. This result is also consistent with previous studies by Al Hammadi and Safitri and Anwar, which emphasize that digital transformation can improve operational efficiency only when supported by effective governance, technology oversight, and comprehensive risk management (Al Hammadi et al., 2024; Safitri & Anwar, 2022). However, unlike previous studies that primarily focused on fintech adoption or regulatory compliance, this research provides empirical evidence that prudential principles function as an integrated framework connecting technological governance, operational control, and Sharia supervision. Consequently, the study implies that Islamic banks should regard digital technology not merely as an operational innovation but as an instrument requiring stronger prudential governance to ensure sustainable financing quality, institutional resilience, and public trust.

The research results show that risk mitigation control in Islamic banking cannot be separated from the aspect of Sharia compliance (Sharia compliance). The VOSviewer analysis shows a strong interconnection among the keywords Islamic fintech, governance, financial stability, and Sharia compliance, indicating that risk in digital Islamic financing is more complex than in conventional banking. In this context, the precautionary (prudent) principle not only serves to maintain the quality of financing and financial stability, but also to protect social legitimacy and public trust in Sharia financial institutions. Research by Safitri and Anwar emphasizes that risk management in Islamic banks must include monitoring compliance with the contract (*akad*), transaction transparency, and protection against elements of *gharar* as well as digital uncertainty (Safitri & Anwar, 2022). Therefore, risk mitigation in the digital era must be carried out through integration between Sharia monitoring systems, technology controls, and data-based compliance audits. Findings this shows that failure to maintain Sharia compliance in digital services can potentially create a reputational risk that is greater than financial risk alone.

Sharia banks face a dilemma between accelerating digital services and the quality of risk analysis financing. Digital onboarding, electronic identity verification, and the use of big data indeed increase service efficiency, but at the same time may potentially weaken the verification process if it is not accompanied by a strong monitoring system. From a risk mitigation perspective, this condition shows that digital technology cannot be used as a substitute for the substance of the principle of prudence, but only as a supporting instrument in strengthening the accuracy of financing decision-making. Research by Al Hammadi shows that the use of fintech and digital systems in Sharia banks is only effective in reducing risk if it is supported by adequate technology capacity, internal governance, and human resource competency (Al Hammadi et al., 2024). Thus, risk mitigation in digital Sharia financing requires a combination of technology, strengthening the competencies of financing analysts, and an internal monitoring system that can quickly read risk patterns and accurately.

The findings indicate that the increasing incidence of financial fraud, cybersecurity breaches, and operational disruptions significantly elevates reputational risk in Islamic banking. This finding suggests that reputation should no longer be viewed merely as an indirect consequence of operational failure, but as a strategic asset that determines the sustainability and competitiveness of Islamic financial institutions. Public trust constitutes the foundation of Islamic banking because customers expect not only financial security but also ethical conduct and compliance with Sharia principles. Consequently, incidents such as data breaches, digital identity theft, or disruptions to electronic banking services may undermine customer confidence in the integrity, reliability, and accountability of Islamic banking operations. From the perspective of the prudential principle, protecting institutional reputation should therefore be regarded as an essential component of comprehensive risk mitigation rather than simply a consequence of effective financial risk management. This interpretation is consistent with the prudential governance framework, which emphasizes that maintaining stakeholder confidence is fundamental to ensuring financial stability and institutional resilience. Accordingly, Islamic banks should strengthen cybersecurity governance, customer data protection, transparent communication, and effective crisis management as integral elements of prudential risk management to preserve public trust and reinforce the long-term sustainability of the Islamic banking industry.

Conceptually, the results of this study show that risk mitigation in financing Sharia banking in the digital era is undergoing an epistemological transformation. If previously risk mitigation was understood mostly as a financing safeguarding process through the 5C principle and customer creditworthiness analysis, then in the digital era risk mitigation has evolved into a data-driven risk management approach that integrates data analysis, cybersecurity, algorithm monitoring, and digital operational resilience. These findings align with research by Narayan and Phan, which explains that the resilience of modern financial institutions greatly depends on the institution's ability to build digital financial resilience through the integration between technological innovation and risk management systems (Narayan & Phan, 2021). Therefore, controlling risk mitigation in modern Sharia banking is not enough to be carried out only through compliance with formal regulations, but must be directed toward developing an adaptive, integrative, and stability-oriented prudential model for the long-term stability of the Sharia financial industry.

CONCLUSION

This study concludes that the implementation of the prudential principle in Islamic banking financing has undergone a significant transformation in response to digitalization. Rather than functioning solely as a regulatory requirement for financing assessment, the prudential principle has evolved into a comprehensive governance framework integrating financing analysis, cybersecurity, digital identity verification, data protection, operational resilience, technology governance, and Sharia compliance. These findings directly answer the research objective by demonstrating that effective risk mitigation in the digital era requires Islamic banks to adopt a multidimensional prudential approach capable of addressing both conventional financing risks and emerging digital risks.

The study further demonstrates that digital transformation does not diminish the relevance of prudential principles; instead, it reinforces their strategic role in maintaining financing quality, institutional resilience, and public trust. The integration of technological innovation with sound risk governance and Sharia compliance is therefore essential to ensuring the sustainability and competitiveness of Islamic banking in the digital economy. This finding also contributes to the development of Islamic digital finance literature by extending the concept of prudential governance beyond traditional financing analysis toward an integrated digital risk governance framework.

Practically, the findings suggest that Islamic banks should strengthen electronic identity verification, cybersecurity governance, customer data protection, technology-based Sharia supervision, and continuous digital risk monitoring as integral components of prudential risk management. Regulators and policymakers are also encouraged to develop adaptive prudential policies and digital governance standards that respond to the increasing complexity of technology-driven financial services. Future research is recommended to employ quantitative or mixed-method approaches and broader empirical data across Islamic banking institutions to further validate and refine the proposed digital prudential governance framework.

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