



## REGULATORY CHALLENGES IN SUPERVISING DIGITAL SHARIA FINANCIAL PRODUCT INNOVATION: INDONESIA'S FINANCIAL SERVICES AUTHORITY AFTER THE ENACTMENT OF THE P2SK LAW

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### Abstract

*This article analyzes the challenges faced by Indonesia's Financial Services Authority (OJK) in supervising digital sharia financial product innovation following the enactment of the Law on Financial Sector Development and Strengthening (P2SK Law). The rapid expansion of digital sharia financial services, including fintech and digital banking, has generated complex regulatory issues concerning legal certainty, consumer protection, and compliance with sharia principles. This study employs a normative juridical method through the analysis of statutory regulations, OJK regulatory frameworks, and sharia governance mechanisms within Indonesia's financial sector. The findings reveal that the P2SK Law has strengthened OJK's supervisory mandate and provided a more comprehensive legal foundation for overseeing digital financial innovation. However, significant challenges persist in adapting regulatory frameworks to technological developments, ensuring effective sharia compliance, enhancing supervisory capacity, and strengthening institutional coordination among relevant stakeholders. These challenges may reduce the effectiveness of regulatory oversight and create legal uncertainty in the digital sharia finance ecosystem. The study concludes that an integrated, adaptive, and technology-oriented supervisory framework is essential to balance innovation, legal certainty, consumer protection, and adherence to sharia principles, thereby supporting the sustainable development of Indonesia's digital sharia financial sector.*

**Keywords:** Digital Sharia Finance; Financial Services Authority (OJK); P2SK Law.

### I. INTRODUCTION

The rapid development of digital technology has significantly transformed the global financial sector, reshaping the way financial services are produced, distributed, and accessed (Oyegbade et al. 2022). Digitalization has accelerated the emergence of innovative financial products and services that offer greater efficiency, accessibility, and convenience to consumers. In Indonesia, the growth of digital finance has been particularly remarkable, supported by increasing internet penetration, smartphone usage, and the expanding digital economy. Financial technology (fintech), digital banking, and online payment systems have become integral components of the financial ecosystem, enabling broader financial

inclusion and encouraging economic growth (Del Sarto and Ozili 2025). However, the expansion of digital finance also creates new regulatory challenges that require adaptive and responsive supervisory frameworks.

Alongside the development of digital finance, Indonesia has experienced substantial growth in the sharia financial sector. As the country with the largest Muslim population in the world, Indonesia possesses considerable potential to become a global center for Islamic finance (Utomo et al. 2021). The government has actively promoted the development of sharia financial institutions as part of its broader strategy to strengthen the national economy and increase financial inclusion (Rachmad 2025). Islamic banking, sharia capital markets, Islamic insurance, and various forms of sharia-based financing have demonstrated continuous growth over recent years. The integration of digital technology into these sectors has further expanded opportunities for innovation, resulting in the emergence of digital sharia financial products designed to meet the evolving needs of consumers while adhering to Islamic legal principles.

Digital sharia financial innovation encompasses a wide range of products and services, including digital Islamic banking, peer-to-peer financing platforms, crowdfunding mechanisms, mobile payment systems, and other fintech-based solutions (Dawood et al. 2022). These innovations provide significant benefits by increasing access to financial services, reducing transaction costs, and reaching underserved communities. Moreover, digital platforms enable sharia financial institutions to compete more effectively in a rapidly evolving market environment (Abdullah et al. 2024). Through technological innovation, financial institutions can improve operational efficiency, enhance customer experience, and develop products that are more responsive to consumer demands.

Despite these advantages, the rapid expansion of digital sharia financial products presents significant legal and regulatory challenges. Unlike conventional financial products, digital sharia financial services must satisfy two interconnected requirements. First, they must comply with national laws and financial regulations governing financial institutions and digital transactions. Second, they must adhere to Islamic legal principles that prohibit practices such as *riba* (interest), *gharar* (excessive uncertainty), and *maysir* (gambling), while promoting fairness, transparency, and ethical conduct (Shahariman et al. 2024). This dual compliance framework creates unique supervisory complexities, particularly when technological innovation develops faster than existing regulatory mechanisms.

The Financial Services Authority (Otoritas Jasa Keuangan/OJK) plays a central role in ensuring the stability and integrity of Indonesia's financial system. As an independent regulatory institution, OJK is responsible for regulating and supervising financial sector activities, including those conducted by sharia financial institutions (Suaidi 2025). Its responsibilities include maintaining financial stability, protecting consumers, ensuring compliance with applicable regulations, and supporting sustainable financial sector development. The increasing adoption

of digital technology within the financial industry has expanded the scope of OJK's supervisory responsibilities, requiring the institution to address emerging risks associated with technological innovation.

A major development in Indonesia's financial regulatory framework occurred with the enactment of Law Number 4 of 2023 concerning Financial Sector Development and Strengthening, commonly known as the P2SK Law (Albar, Karo, and Nindyatami 2022). This legislation represents a comprehensive reform aimed at strengthening the resilience, inclusiveness, and competitiveness of the national financial sector. The P2SK Law also reinforces OJK's supervisory authority by providing a broader legal basis for regulating financial innovation and addressing systemic risks arising from technological developments (Mardjono and Lie 2026). Through this legal framework, the government seeks to create a more integrated and adaptive financial regulatory system capable of responding to contemporary challenges.

Nevertheless, the enactment of the P2SK Law does not automatically eliminate the practical difficulties associated with supervising digital sharia financial product innovation. One of the most significant challenges concerns the maintenance of sharia compliance in digital environments. Digital financial products often involve sophisticated technological systems, automated decision-making processes, and innovative contractual structures that may not fit within traditional sharia governance models. Consequently, ensuring that digital financial innovations remain consistent with Islamic legal principles requires continuous monitoring and effective coordination between OJK, the National Sharia Council (DSN-MUI), and sharia supervisory boards within financial institutions (Abdullah et al. 2024).

Consumer protection also remains a critical concern. The use of digital platforms increases exposure to risks such as cybersecurity threats, personal data breaches, fraud, and information asymmetry. In the context of sharia finance, these risks carry additional implications because financial transactions are expected to uphold ethical values and public trust. Failure to adequately protect consumers may undermine confidence in both digital financial services and the broader sharia financial system. Furthermore, supervisory capacity presents another important challenge. Effective oversight of digital financial innovation requires expertise not only in law and finance but also in information technology, cybersecurity, data governance, and sharia finance. Regulatory institutions must continuously enhance their human resources, technological infrastructure, and supervisory methodologies to keep pace with rapidly evolving innovations (Olawale et al. 2024). Without adequate institutional capacity, regulatory oversight may become ineffective and unable to address emerging risks.

Another challenge lies in regulatory harmonization. Digital sharia finance operates at the intersection of multiple regulatory regimes, including banking law, fintech regulation, consumer protection law, data protection rules, and sharia

governance standards. Overlapping regulations and fragmented policy approaches may create legal uncertainty for both regulators and market participants. Therefore, the development of a coherent and integrated supervisory framework is essential to ensure effective governance and sustainable innovation.

Against this background, examining the challenges faced by OJK in supervising digital sharia financial product innovation after the enactment of the P2SK Law is highly relevant. Understanding these challenges is essential for assessing the effectiveness of the current regulatory framework and identifying strategies to strengthen supervisory mechanisms. Such analysis contributes not only to academic discussions on financial regulation and Islamic finance but also to policy development aimed at fostering sustainable digital innovation while maintaining legal certainty, consumer protection, sharia compliance, and financial system stability.

## **II. PROBLEM FORMULATION**

Based on the foregoing introduction, the problem formulations of this study are as follows:

1. How does the enactment of the P2SK Law affect the scope and effectiveness of the Financial Services Authority's supervision over digital sharia financial product innovation in Indonesia?
2. What are the main regulatory and institutional challenges faced by the Financial Services Authority in ensuring legal certainty, consumer protection, and sharia compliance in the supervision of digital sharia financial products after the enactment of the P2SK Law?

## **III. RESEARCH METHODS**

This study employs a normative legal research method to examine the regulatory challenges faced by the Financial Services Authority (OJK) in supervising digital sharia financial product innovation following the enactment of the Financial Sector Development and Strengthening Law (P2SK Law) (Kharisma 2021). The normative approach is appropriate because the research focuses on analyzing legal norms, principles, and regulatory frameworks governing digital sharia finance and its supervision within Indonesia's financial system.

The study utilizes both a statutory approach and a conceptual approach. The statutory approach involves examining relevant legislation, regulatory policies, and legal frameworks governing financial services, digital financial innovation, sharia finance, and consumer protection. This approach aims to identify the scope of supervisory authority, regulatory mechanisms, and institutional arrangements applicable to digital sharia financial products. Through this analysis, the research evaluates the adequacy of existing regulations in addressing the challenges posed by technological developments within the sharia financial sector.

The conceptual approach is employed to analyze the issue through the perspectives of financial regulation theory, responsive regulation theory, and sharia governance theory. These theoretical frameworks provide a basis for assessing whether the existing supervisory model is capable of balancing innovation, risk management, consumer protection, and compliance with Islamic legal principles (Taufik Syamlan et al. 2026). Furthermore, the conceptual approach facilitates a deeper understanding of the relationship between regulatory adaptation and the sustainability of digital financial innovation.

The legal materials used in this research consist of primary legal materials in the form of legislation and official regulatory instruments, secondary legal materials including academic journals, books, research reports, and scholarly commentaries, as well as tertiary legal materials such as legal dictionaries and reference sources. These materials are collected through library research and systematically reviewed according to their relevance to the research objectives.

The collected legal materials are analyzed qualitatively using legal interpretation and legal reasoning methods. The analysis focuses on identifying regulatory gaps, supervisory challenges, and institutional issues related to the oversight of digital sharia financial innovation. The findings are then used to formulate conclusions regarding the effectiveness of the current supervisory framework and to propose recommendations for strengthening regulatory governance in the digital sharia financial sector.

## **RESULTS AND DISCUSSIONS**

### **Strengthening OJK's Supervisory Authority under the P2SK Law**

The enactment of the Financial Sector Development and Strengthening Law (P2SK Law) represents a fundamental transformation in Indonesia's financial regulatory landscape, particularly regarding the supervision of digital sharia financial product innovation (Martin 2025). The law signifies a strategic response by the state to the rapid expansion of digital financial services, which have increasingly reshaped traditional financial institutions, business models, and regulatory frameworks. In recent years, digitalization has become one of the most influential forces within the financial sector, creating new opportunities for financial inclusion, efficiency, and economic growth. At the same time, digital innovation has generated unprecedented legal and supervisory challenges that require regulators to adopt more adaptive and forward-looking approaches (Akpobome 2024). Within this context, the P2SK Law strengthens the institutional position of the Financial Services Authority (Otoritas Jasa Keuangan/OJK) by expanding its supervisory mandate and providing a broader legal basis for overseeing financial innovation, including innovation occurring within the sharia financial sector.

The strengthening of OJK's authority reflects a broader regulatory shift from a traditional supervisory paradigm toward a more responsive and innovation-oriented model of governance (Martin 2025). Historically, financial supervision was primarily designed to oversee conventional financial institutions operating through relatively stable organizational structures and predictable business models. Regulatory frameworks were developed on the assumption that financial activities occurred within clearly identifiable institutional boundaries, allowing risks to be monitored through periodic reporting, compliance reviews, and prudential assessments. However, the emergence of digital finance has fundamentally altered these assumptions (Burlacu et al. 2021). Digital platforms facilitate financial transactions that transcend conventional institutional categories, often integrating elements of banking, investment, financing, payment systems, and technological services within a single operational ecosystem. Consequently, conventional supervisory mechanisms frequently encounter difficulties in capturing the complexity and speed of innovation occurring within digital financial markets.

This challenge becomes even more significant within the context of sharia finance. Unlike conventional financial products, digital sharia financial products must satisfy dual regulatory requirements. In addition to complying with statutory regulations and prudential standards established by financial authorities, these products must also conform to Islamic legal principles governing financial transactions. The integration of technological innovation with sharia-based financial services therefore creates a unique regulatory environment characterized by multiple layers of compliance obligations. Digital sharia finance operates at the intersection of financial regulation, technological governance, consumer protection, and sharia compliance, making effective supervision substantially more complex than in conventional financial sectors (Harefa 2025).

The P2SK Law addresses these challenges by strengthening OJK's role not only as a regulator but also as an institution responsible for facilitating sustainable financial innovation (Meliala et al. 2025). This expanded role reflects the recognition that innovation is no longer a peripheral phenomenon but has become a structural component of the contemporary financial system. Financial regulators are therefore expected to balance two objectives that may appear contradictory. On the one hand, they must encourage innovation capable of enhancing efficiency, expanding financial access, and supporting economic growth. On the other hand, they must ensure that innovation does not undermine financial stability, consumer protection, market integrity, or compliance with legal and ethical standards (Ahlström and Monciardini 2022). The P2SK Law seeks to establish a regulatory framework capable of accommodating both objectives simultaneously.

One of the most important implications of the strengthened authority granted to OJK is the ability to conduct earlier intervention in the development of innovative financial products. Preventive supervision has become increasingly important within digital financial ecosystems because risks often emerge during the

design and implementation stages of financial innovation rather than after products have been fully commercialized. Traditional supervisory approaches generally focus on identifying violations after activities have commenced. However, such reactive methods are frequently insufficient in digital environments where technological innovation evolves rapidly and where financial risks may spread across platforms within a relatively short period of time. By providing OJK with broader supervisory authority, the P2SK Law supports the development of ex ante regulatory mechanisms that emphasize risk prevention rather than post-event correction (Sushanty 2025).

From the perspective of prudential regulation theory, this development represents a significant advancement in supervisory governance. Prudential regulation emphasizes the importance of identifying and mitigating risks before they generate broader consequences for financial institutions, consumers, or the financial system as a whole. The rapid growth of digital sharia financial products increases the importance of preventive supervision because innovative products frequently involve novel contractual arrangements, technological infrastructures, and risk-sharing mechanisms that may not be adequately addressed by existing regulations. Early regulatory engagement enables supervisory authorities to evaluate potential risks before they become systemic problems, thereby strengthening the resilience of the financial system.

Furthermore, the P2SK Law contributes to greater legal certainty within Indonesia's financial regulatory framework. Prior to the expansion of digital financial services, many regulatory instruments were developed with conventional financial institutions in mind. As a result, the emergence of fintech platforms, digital banking services, crowdfunding mechanisms, and other forms of financial innovation often created uncertainty regarding the scope of regulatory authority and applicable legal standards. Certain business models operated in areas where regulatory classifications remained unclear, creating difficulties for both market participants and supervisory institutions. The strengthened legal foundation provided by the P2SK Law reduces such uncertainty by clarifying OJK's authority to oversee innovation-driven financial activities (Purba and Siregar 2025). Greater legal certainty benefits regulators, financial institutions, investors, and consumers alike by promoting predictability and reducing regulatory ambiguity.

Within the context of digital sharia finance, legal certainty carries additional significance because compliance obligations extend beyond statutory regulations. Financial products must also satisfy the requirements of Islamic jurisprudence and sharia governance frameworks. Consequently, regulatory certainty contributes not only to market stability but also to the credibility of sharia financial institutions. Investors and consumers participating in sharia financial markets expect products to comply with both legal requirements and religious principles. Any uncertainty regarding the supervisory status of digital financial products may undermine public confidence and reduce participation in the sharia financial sector. Therefore, the

strengthened authority of OJK under the P2SK Law plays an important role in reinforcing trust within the digital sharia financial ecosystem (Purba and Siregar 2025).

Another important aspect of the P2SK Law is its emphasis on integrated supervision. Digital financial products increasingly operate across multiple sectors that were traditionally regulated separately. For example, a single digital platform may simultaneously provide financing services, investment opportunities, payment facilities, and technological infrastructure. Such convergence creates challenges for supervisory authorities because risks may emerge from interactions between different sectors rather than from activities occurring within a single regulatory domain. Fragmented supervision increases the likelihood of regulatory gaps, inconsistencies, and duplicated oversight. By strengthening OJK's authority and encouraging greater regulatory integration, the P2SK Law seeks to improve the coordination of supervisory activities and facilitate more comprehensive risk assessment.

Integrated supervision is particularly important within digital sharia finance because sharia-based products frequently combine multiple contractual structures and financial functions. A digital platform may incorporate financing contracts, investment arrangements, and payment mechanisms within a single service. These integrated business models require supervisory approaches capable of evaluating risks holistically rather than through isolated regulatory perspectives. Consequently, the P2SK Law supports the development of supervisory frameworks that reflect the interconnected nature of contemporary financial innovation.

Nevertheless, the expansion of legal authority does not automatically guarantee effective supervision. One of the most significant findings emerging from the analysis is that institutional effectiveness depends not only on legal empowerment but also on regulatory capacity. Digital financial innovation evolves at a pace that often exceeds the speed of legal and institutional adaptation. New business models may emerge before regulatory guidelines have been developed, creating situations in which supervisory authorities must respond to unfamiliar technological and financial structures. In such circumstances, legal authority alone may be insufficient if regulators lack the expertise, resources, and technological capabilities necessary to implement effective oversight.

The complexity of digital financial innovation also requires significant institutional learning (Lu 2023). Supervisors must understand not only legal and financial principles but also technological systems, data governance frameworks, cybersecurity risks, and algorithmic decision-making processes. Within digital sharia finance, this challenge becomes even greater because regulators must simultaneously assess compliance with Islamic financial principles. Consequently, effective supervision increasingly depends on multidisciplinary expertise that combines legal knowledge, financial analysis, technological literacy, and understanding of sharia governance. The success of the P2SK Law therefore

depends on OJK's ability to continuously strengthen institutional capacity and adapt supervisory methodologies to emerging technological realities.

From a theoretical perspective, these developments illustrate the growing relevance of responsive regulation theory within contemporary financial governance. Responsive regulation emphasizes that supervisory strategies should adapt to the characteristics and risk profiles of regulated activities rather than relying exclusively on rigid regulatory rules (Black and Baldwin 2014). Digital financial innovation challenges traditional command-and-control approaches because technological developments occur too rapidly for static regulatory frameworks to remain effective. The strengthened authority provided by the P2SK Law creates opportunities for OJK to adopt more flexible and risk-based supervisory models capable of responding to evolving market conditions while preserving regulatory objectives.

Ultimately, the P2SK Law establishes a stronger legal and institutional foundation for supervising digital sharia financial product innovation in Indonesia. The law recognizes that financial innovation and regulatory oversight must evolve together to ensure sustainable market development. While the expansion of OJK's authority represents a significant step toward strengthening financial governance, its long-term effectiveness will depend on the institution's ability to translate legal authority into practical supervisory capacity. Continuous regulatory adaptation, institutional learning, technological investment, and enhanced coordination among stakeholders remain essential for ensuring that digital sharia financial innovation develops in a manner consistent with financial stability, consumer protection, legal certainty, and sharia principles. Through such an approach, the objectives of the P2SK Law can be realized not only as a legal reform initiative but also as a framework for sustainable and responsible financial innovation in Indonesia.

The strengthening of OJK's supervisory authority through the P2SK Law must also be understood within the broader context of regulatory modernization. Contemporary financial regulation is increasingly confronted with the phenomenon of regulatory disruption, whereby technological innovation develops at a pace that significantly exceeds the capacity of legal frameworks to adapt (Abikoye, Umeorah, et al. 2024). In conventional regulatory environments, legal norms generally evolve through a relatively gradual process involving legislative review, institutional consultation, and policy implementation. Digital financial innovation, however, follows a markedly different trajectory. New products, services, and business models can emerge within a matter of months, often creating legal questions that existing regulations were never designed to address. This discrepancy between the speed of innovation and the speed of regulation creates what scholars frequently describe as a regulatory gap. The P2SK Law seeks to reduce this gap by granting OJK broader authority to respond more effectively to emerging developments in the financial sector. Nevertheless, the existence of regulatory authority alone does not guarantee regulatory responsiveness. Effective supervision

requires institutions capable of continuously interpreting and adapting legal norms to changing technological realities.

Within the digital sharia financial sector, this challenge becomes particularly pronounced because innovation occurs within a dual regulatory environment. Digital financial products are expected to comply not only with financial regulations but also with Islamic legal principles. Consequently, OJK must supervise activities that are simultaneously subject to prudential requirements, consumer protection standards, technological governance frameworks, and sharia compliance obligations. The convergence of these regulatory dimensions creates a supervisory environment that is considerably more complex than that found within conventional financial sectors. In practice, regulators are often required to assess whether innovative products satisfy legal requirements while also ensuring that such products remain consistent with the ethical and contractual principles underpinning Islamic finance. This dual-layered supervisory responsibility demonstrates that digital sharia finance cannot be regulated solely through conventional financial governance mechanisms (Olatinsu 2025).

Furthermore, the emergence of platform-based financial ecosystems has altered the nature of financial intermediation itself. Traditional financial institutions typically operate through clearly defined organizational structures, enabling regulators to identify responsibility, monitor transactions, and enforce compliance through established supervisory mechanisms. Digital financial platforms, by contrast, frequently involve multiple interconnected actors, including technology providers, financial institutions, third-party service providers, investors, and consumers (Fasnacht n.d.). The decentralization of operational functions creates challenges regarding accountability and legal responsibility. In many cases, risks no longer originate exclusively from financial activities but also emerge from technological infrastructure, cybersecurity vulnerabilities, and data management practices. As a result, OJK's supervisory responsibilities increasingly extend beyond traditional financial oversight and require a more comprehensive understanding of digital ecosystems.

The expansion of OJK's authority under the P2SK Law therefore reflects an acknowledgment that financial supervision must evolve alongside technological transformation. However, this evolution also requires the development of new supervisory methodologies. Conventional compliance-based supervision relies heavily on periodic reporting, document verification, and retrospective assessment of institutional performance. Such approaches may prove inadequate in digital environments where transactions occur continuously and risks can materialize rapidly. Effective supervision of digital financial innovation increasingly depends upon real-time monitoring, data analytics, predictive risk assessment, and technology-assisted regulatory mechanisms. Consequently, the modernization of supervisory authority must be accompanied by the modernization of supervisory

tools. Without technological adaptation, expanded legal authority may have limited practical impact on regulatory effectiveness.

Another important dimension concerns the relationship between financial innovation and systemic risk. Financial innovation is frequently associated with economic efficiency, market expansion, and increased accessibility. However, innovation also introduces uncertainty because newly developed products often possess risk characteristics that have not yet been fully understood. Digital financial platforms may facilitate rapid market growth while simultaneously increasing interconnectedness among financial actors (Oyegbade et al. 2023). In such circumstances, localized operational failures may produce broader consequences for financial stability. The supervisory role of OJK is therefore not limited to ensuring compliance at the institutional level but also encompasses the responsibility to identify systemic vulnerabilities arising from technological innovation. The P2SK Law strengthens OJK's ability to perform this function by establishing a more comprehensive legal framework for risk-based supervision.

The significance of risk-based supervision becomes even more apparent when viewed through the perspective of Islamic finance. One of the fundamental objectives of sharia financial regulation is the preservation of fairness, transparency, and economic stability. These objectives correspond closely with prudential regulatory principles that emphasize the prevention of excessive risk-taking and the protection of public interests. Consequently, the supervision of digital sharia financial innovation should not be understood merely as a technical regulatory exercise. Rather, it constitutes a broader effort to ensure that financial innovation contributes positively to economic welfare while remaining consistent with ethical and legal standards. This perspective highlights the importance of integrating prudential supervision with sharia governance mechanisms in order to create a regulatory environment capable of supporting sustainable innovation. Moreover, the strengthened authority granted to OJK under the P2SK Law has significant implications for legal certainty within Indonesia's financial sector. Legal certainty remains a fundamental requirement for market development because investors, financial institutions, and consumers depend upon predictable regulatory environments when making economic decisions. Regulatory ambiguity can discourage innovation by increasing compliance costs and creating uncertainty regarding the legality of new business models. Conversely, excessive regulatory rigidity may inhibit innovation by limiting the flexibility required for technological experimentation. The challenge facing OJK is therefore to maintain an appropriate balance between regulatory certainty and regulatory flexibility. This balance is particularly important within digital sharia finance, where legal uncertainty may affect not only commercial confidence but also public perceptions regarding the legitimacy of financial products from a religious perspective.

The effectiveness of supervisory reform also depends upon the quality of institutional coordination. Digital sharia financial innovation operates within a

governance structure involving multiple regulatory and supervisory actors. Effective supervision therefore requires coordination mechanisms capable of facilitating information exchange, harmonizing regulatory standards, and resolving jurisdictional overlaps. Without adequate coordination, expanded authority may generate duplication of regulatory functions or inconsistencies in enforcement practices. Institutional fragmentation may undermine the objectives of the P2SK Law by reducing the efficiency and coherence of supervisory activities. Consequently, strengthening supervisory authority must be accompanied by efforts to strengthen inter-institutional governance and collaborative regulatory frameworks.

Ultimately, the expansion of OJK's authority through the P2SK Law represents a necessary but not sufficient condition for effective supervision of digital sharia financial innovation (Latifah 2025). Legal empowerment provides an essential foundation for regulatory action, yet the practical success of supervision depends upon institutional capacity, technological adaptation, regulatory coordination, and continuous policy development. The long-term sustainability of Indonesia's digital sharia financial sector will therefore be determined not solely by the existence of stronger legal mandates but by the ability of regulatory institutions to transform those mandates into effective governance practices capable of responding to ongoing technological and market transformation.

### **Challenges in Supervising Digital Sharia Financial Products**

The supervision of digital sharia financial products following the enactment of the Financial Sector Development and Strengthening Law (P2SK Law) presents a multidimensional challenge that extends beyond the question of formal regulatory authority (Hermawan 2025). While the P2SK Law strengthens the legal position of the Financial Services Authority (OJK) in overseeing financial innovation, the practical implementation of supervision remains confronted by technological, institutional, and normative complexities. The rapid expansion of digital financial services has transformed the operational structure of sharia finance, requiring supervisory institutions to adapt their approaches to new business models that differ significantly from conventional financial practices. Consequently, the effectiveness of supervision is no longer determined solely by the existence of legal authority but also by the capacity of regulatory institutions to respond to evolving technological developments while preserving compliance with both statutory law and sharia principles.

One of the most significant challenges concerns the maintenance of sharia compliance within digital financial innovation. Unlike conventional financial products, digital sharia financial services must satisfy dual compliance requirements. In addition to meeting regulatory standards established by financial authorities, these products must also conform to Islamic legal principles governing financial transactions. The emergence of digital platforms has transformed

traditional contractual arrangements such as murabaha, mudharaba, musharaka, and wakala into technology-based mechanisms that rely heavily on automated systems and digital interfaces (Suzuki and Miah 2022). While such innovations improve efficiency and accessibility, they also generate legal questions regarding the validity of contractual consent, disclosure obligations, transparency, and the implementation of risk-sharing principles within digital environments.

Traditionally, sharia compliance supervision relied upon direct examination of contractual structures and operational practices before products were introduced into the market. However, digital platforms operate through dynamic systems that can be modified continuously through software updates, algorithmic adjustments, and changes in technological architecture (Sturgeon 2021). This flexibility creates difficulties in ensuring that every modification remains consistent with previously approved sharia standards. As a result, supervision must evolve from a static compliance model toward a continuous monitoring framework capable of assessing the ongoing conformity of digital products with Islamic legal principles. Failure to establish such mechanisms may result in situations where products remain formally approved while operational practices gradually deviate from their original sharia foundations.

These challenges are further complicated by the institutional structure of sharia governance in Indonesia. The supervision of sharia financial activities involves multiple actors, including OJK, sharia supervisory boards within financial institutions, and national sharia authorities responsible for issuing guidance and standards. Although this structure aims to strengthen oversight, differences in interpretation and institutional coordination may create uncertainty regarding the application of sharia principles to innovative financial products. Digital innovation frequently introduces transaction models that have no direct equivalent in traditional Islamic financial practice, thereby requiring fresh legal interpretation. In the absence of clear and harmonized guidance, differing interpretations may emerge, creating uncertainty for both regulators and market participants (Fattah et al. 2022). Such uncertainty has the potential to weaken regulatory credibility and reduce investor confidence in digital sharia financial services.

Another major challenge relates to regulatory harmonization. Digital sharia financial products operate within a complex legal environment where multiple regulatory frameworks intersect. These products are simultaneously subject to financial regulation, digital technology governance, consumer protection standards, and sharia compliance requirements. Although each framework serves an important purpose, their coexistence may generate overlapping obligations and inconsistent regulatory expectations. Regulatory fragmentation creates difficulties in determining the scope of supervisory authority and may lead to gaps in oversight (Sharma et al. 2021). Such conditions increase the risk of regulatory arbitrage, whereby market participants exploit inconsistencies among legal frameworks to avoid stricter regulatory requirements. Consequently, effective supervision requires

greater regulatory integration and coordination among institutions responsible for overseeing different aspects of digital financial activities.

Consumer protection represents another critical aspect of supervisory challenges in the post-P2SK era. Digital financial services have significantly increased accessibility and convenience, enabling consumers to access financial products without geographical limitations (Shaikh et al. 2023). Nevertheless, greater accessibility is often accompanied by increased exposure to legal and technological risks. Consumers frequently engage with digital financial products through standardized online agreements and automated processes that may not be fully understood. Information asymmetry between providers and users remains a significant concern, particularly when contractual terms are presented in highly technical language or embedded within digital platforms. In many cases, consumers may lack sufficient knowledge to evaluate the legal and financial implications of their transactions.

Within the framework of sharia finance, consumer protection extends beyond conventional legal considerations and incorporates broader ethical obligations. Islamic financial transactions are founded upon principles of justice, transparency, mutual consent, and the prevention of harm (Marzuki 2024). Therefore, supervisory mechanisms must ensure not only legal compliance but also adherence to ethical standards that distinguish sharia finance from conventional financial systems. Practices that obscure contractual information, misrepresent risks, or exploit consumer vulnerabilities are inconsistent with the objectives of Islamic finance and may undermine public trust in sharia financial institutions. Consequently, effective consumer protection serves both a legal and moral function within the digital sharia financial ecosystem.

The increasing reliance on digital technology also raises concerns regarding data protection and privacy. Digital financial platforms collect, process, and store vast amounts of personal and financial information (Awotunde et al. 2021). While such data supports operational efficiency and service customization, it simultaneously creates vulnerabilities related to unauthorized access, misuse of information, and cybersecurity threats. The protection of personal data has become an essential component of modern financial supervision because data breaches may result in significant financial losses and reputational damage. From a sharia perspective, safeguarding personal information aligns with the broader objective of protecting individual rights and preserving human dignity (Salman 2025). Therefore, regulatory oversight must ensure that digital financial institutions implement adequate data governance and cybersecurity measures capable of protecting consumer interests.

Institutional capacity constitutes an equally important determinant of supervisory effectiveness. The expansion of OJK's authority under the P2SK Law provides a stronger legal foundation for supervision; however, authority alone does not guarantee successful implementation. Effective oversight of digital sharia

finance requires regulators to possess multidisciplinary expertise encompassing financial regulation, information technology, cybersecurity, risk management, and Islamic jurisprudence. The increasingly sophisticated nature of financial technology creates a growing demand for specialized knowledge that traditional supervisory models may not adequately provide. Limitations in human resources and technical expertise may reduce the ability of regulators to identify emerging risks and respond promptly to technological developments (Retna Safriliana et al. 2025).

Furthermore, technological infrastructure has become an indispensable component of modern financial supervision. Digital financial activities generate vast quantities of real-time data that cannot be effectively monitored through conventional supervisory techniques (Abikoye, Akinwunmi, et al. 2024). The use of advanced analytical tools, digital reporting systems, and technology-based supervisory mechanisms is essential for identifying patterns of risk and detecting potential regulatory violations. Without sufficient technological investment, supervisory institutions may struggle to maintain oversight over rapidly evolving digital platforms. Consequently, strengthening institutional capacity must be regarded as a strategic priority alongside regulatory reform.

From a theoretical perspective, these findings support the arguments of institutional capacity theory and responsive regulation theory, both of which emphasize that effective regulation depends on the interaction between legal authority, organizational capability, and adaptive governance. The P2SK Law has strengthened the legal authority of OJK, but the practical realization of its objectives depends on the institution's ability to adapt to technological transformation and coordinate effectively with other supervisory bodies (Turyansyah 2025). Regulatory effectiveness is therefore not merely a function of legal mandates but also of institutional readiness and governance quality.

Ultimately, the sustainability of digital sharia financial innovation depends on the establishment of a supervisory framework capable of balancing innovation with accountability (Nafidzulhaq 2024). Legal certainty, consumer protection, sharia compliance, and technological adaptation must be integrated into a coherent regulatory strategy. Addressing regulatory fragmentation, strengthening institutional coordination, enhancing supervisory capacity, and improving governance mechanisms are essential steps toward ensuring that the objectives of the P2SK Law are translated into effective regulatory practice. Through such efforts, OJK can fulfill its expanded supervisory mandate while supporting the continued growth of a sustainable, trustworthy, and globally competitive digital sharia financial sector

#### **IV. CONCLUSION**

The enactment of the Financial Sector Development and Strengthening Law (P2SK Law) has significantly strengthened the legal foundation for the supervision

of digital sharia financial product innovation in Indonesia. By expanding the authority of the Financial Services Authority (OJK), the law reflects a regulatory shift toward a more adaptive and integrated supervisory framework capable of responding to the rapid development of financial technology. This expanded authority provides OJK with a stronger institutional basis to oversee digital financial activities while maintaining financial stability, consumer protection, and compliance with applicable legal norms.

The findings of this study demonstrate that the effectiveness of supervision cannot be measured solely by the existence of broader legal authority. The supervision of digital sharia financial products remains challenged by the rapid pace of technological innovation, regulatory fragmentation, overlapping supervisory frameworks, and the complexity of maintaining continuous sharia compliance within digital environments. The integration of digital technology into sharia financial services has transformed traditional contractual and operational structures, requiring supervisory mechanisms that are more dynamic, technology-oriented, and capable of addressing emerging risks in real time. Furthermore, effective supervision depends on strong institutional coordination among OJK, sharia supervisory bodies, and other relevant stakeholders. Consumer protection, data governance, cybersecurity, and sharia compliance must be treated as interconnected components of a comprehensive supervisory framework. In addition, strengthening institutional capacity through technological investment, regulatory innovation, and human resource development is essential to ensure that supervisory practices remain responsive to evolving market conditions.

Therefore, the successful implementation of the P2SK Law requires not only legal reform but also continuous institutional adaptation. An integrated, risk-based, and adaptive supervisory model is necessary to balance financial innovation with legal certainty, consumer protection, and adherence to sharia principles. Such an approach will contribute to the sustainable development of Indonesia's digital sharia financial sector while reinforcing public trust, regulatory effectiveness, and the overall resilience of the national financial system.

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