


TOWARD A RISK-BASED OVERSIGHT BLUEPRINT FOR ZAKAT: INTEGRATING SHARIAH GOVERNANCE, THREE-LINES ASSURANCE, AND PROPORTIONATE GOVTECH IN INDONESIA

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ABSTRAK

Zakat governance in Indonesia continues to face a significant gap between its vast potential and actual performance, reflected in disparities in collection and distribution outcomes, inconsistent reporting practices, and emerging risks associated with uneven digital transformation. These challenges are further intensified by increasing public demands for transparency, the involvement of multiple supervisory actors, and growing exposure to information technology and data-related risks. This study aims to identify the principal weaknesses and risk dimensions of zakat governance oversight, examine risk-based supervisory practices from selected Muslim-majority jurisdictions, and formulate a contextualized Risk-Based Supervision (RBS) framework for Indonesia. Using a qualitative approach based on an integrative literature review, data were collected from academic publications, policy reports, regulatory documents, and institutional records and analyzed through thematic synthesis. The findings reveal four interrelated governance weaknesses, namely regulatory and institutional limitations, weaknesses in supervisory processes, challenges in digital and data governance, and deficiencies in performance and risk measurement. These weaknesses generate five key risk dimensions: governance and compliance, shariah, operations, information technology and data, and reputation. Comparative analysis indicates that effective zakat oversight is characterized by continuous shariah auditing, proportionate supervision based on institutional risk profiles, and digital governance supported by robust data-management systems. The study proposes an integrated RBS model that combines shariah governance, three-lines assurance, GovTech-enabled supervision, and risk-based performance indicators. It recommends establishing national supervisory standards, strengthening the role of Sharia Supervisory Boards, developing interoperable data infrastructures, and implementing a phased reform roadmap to improve accountability, transparency, and the welfare impact of zakat distribution in Indonesia.

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INTRODUCTION

Zakat occupies a pivotal position within the ecosystem of Islamic social finance as a mechanism for wealth redistribution, poverty alleviation, and social inclusion. Beyond its religious obligation, zakat functions as an instrument capable of supporting sustainable development by channeling resources from economically advantaged groups to vulnerable communities. In countries with large Muslim populations, particularly Indonesia, zakat is increasingly expected to complement public welfare programs and contribute to broader socioeconomic development objectives. However, despite its significant potential, the effectiveness of zakat institutions remains uneven, reflecting persistent governance and oversight challenges that limit the realization of its full developmental impact.

Indonesia possesses one of the largest zakat potentials in the world due to its sizeable Muslim population and growing economic capacity. Nevertheless, a considerable gap continues to exist between potential zakat collections and actual realized collections. This disparity is accompanied by variations in institutional performance, inconsistencies in beneficiary targeting, differing levels of accountability, and heterogeneous reporting practices among zakat management organizations. Such conditions suggest that institutional governance remains a critical determinant of zakat effectiveness. Earlier studies have demonstrated that governance quality, institutional capacity, and reporting practices significantly influence the efficiency and effectiveness of zakat collection and distribution activities.¹ Weak governance mechanisms not only reduce operational efficiency but may also weaken public confidence in zakat institutions, thereby affecting donor participation and compliance.

The challenge becomes increasingly complex in the context of rapid digital transformation. Over the past decade, many zakat institutions have adopted digital technologies to facilitate fundraising, donor engagement, beneficiary management, and reporting activities. Digital platforms have expanded access, accelerated transactions, and improved service delivery. At the same time, however, digitalization has generated new governance risks related to data quality, cybersecurity, system interoperability, privacy protection, and operational resilience. The growing dependence on digital infrastructure means that weaknesses in information technology systems may directly affect organizational credibility and public trust. Research on digital zakat management highlights that while technological innovation offers substantial opportunities for improving efficiency, it also introduces significant challenges associated with data governance and information security.² Consequently,

¹ N. A. Wahab and A. R. Abdul Rahman, "A Framework to Analyse the Efficiency and Governance of Zakat Institutions," *Journal of Islamic Accounting and Business Research* 2, no. 1 (2011): 43–62, <https://doi.org/10.1108/17590811111129508>; N. A. Mubtadi and D. Susilowati, "Analysis of Governance and Efficiency on Zakat Distribution: Evidence from Indonesia," *International Journal of Zakat* 3, no. 2 (2018): 1–15, <https://doi.org/10.37706/ijaz.v3i2.74>.

² K. A. Meerangani et al., "Digitalisation of Zakat Management System in Malaysia: Potential and Challenges," *International Journal of Academic Research in Economics and Management Sciences* 11, no. 2

traditional supervisory approaches that emphasize administrative compliance alone are no longer sufficient to address the increasingly sophisticated risk environment faced by zakat institutions.

The growing complexity of zakat governance is further amplified by the multi-actor institutional landscape in Indonesia. Oversight responsibilities involve multiple stakeholders, including the Ministry of Religious Affairs, the National Board of Zakat (BAZNAS), local zakat authorities, licensed amil zakat institutions, auditors, and Sharia Supervisory Boards. While such diversity creates opportunities for collaboration, it also generates coordination challenges, overlapping responsibilities, and potential inconsistencies in supervisory practices. In this environment, effective oversight requires a framework capable of integrating governance, risk management, shariah compliance, and digital supervision into a coherent and proportionate system. Without such a framework, supervisory interventions may become fragmented, reactive, and insufficiently responsive to emerging risks.

Although the literature on zakat governance has expanded considerably, important gaps remain. Existing studies primarily focus on institutional efficiency, governance quality, transparency, accountability, and zakat compliance behavior.³ These studies have contributed significantly to understanding the relationship between governance practices and organizational performance. However, they rarely provide a comprehensive supervisory architecture capable of translating governance principles into operational oversight mechanisms. More specifically, limited attention has been given to the development of Risk-Based Supervision (RBS) frameworks that integrate institutional risk assessment, proportional supervisory planning, risk indicators, digital monitoring systems, and corrective feedback mechanisms within the zakat sector.

A second research gap concerns the limited integration between shariah governance literature and risk-based regulatory approaches. Studies on Islamic financial institutions emphasize the importance of Sharia Supervisory Boards, continuous shariah auditing, and shariah governance frameworks in strengthening institutional legitimacy and ensuring compliance with Islamic principles.⁴ Meanwhile, research in financial regulation highlights the effectiveness of risk-based supervision in allocating supervisory resources according to institutional risk profiles and enhancing regulatory

(2022): 168–85, <https://doi.org/10.6007/IJAREMS/v11-i2/13984>; T. Aspiranti et al., “Shariah Governance Reporting of Islamic Banks: A Multi-Country Analysis,” *Cogent Business & Management* 10, no. 1 (2023): 2247220, <https://doi.org/10.1080/23311975.2023.2247220>.

³ Wahab and Abdul Rahman, “A Framework to Analyse the Efficiency and Governance of Zakat Institutions”; Muhtadi and Susilowati, “Analysis of Governance and Efficiency on Zakat Distribution: Evidence from Indonesia”; A. A. Sawmar and M. Iqbal, “Enhancing Zakat Compliance Through Good Governance: A Conceptual Framework,” *ISRA International Journal of Islamic Finance* 13, no. 1 (2021): 136–51, <https://doi.org/10.1108/IJIF-08-2019-0139>.

⁴ A. Hassan et al., “Shari’ah Governance and Agency Dynamics of Islamic Financial Institutions,” *ISRA International Journal of Islamic Finance* 14, no. 1 (2022): 89–106, <https://doi.org/10.1108/IJIF-12-2020-0252>; Aspiranti et al., “Shariah Governance Reporting of Islamic Banks: A Multi-Country Analysis.”

outcomes.⁵ Despite the conceptual compatibility of these two streams of literature, they have largely evolved independently. Consequently, there remains limited scholarly effort to integrate risk management principles, shariah governance mechanisms, and supervisory practices into a unified oversight model specifically designed for zakat institutions.

The urgency of addressing these gaps is reinforced by developments in contemporary risk management theory. Studies on Enterprise Risk Management (ERM), ISO 31000, and COSO-ERM consistently demonstrate that effective risk management contributes to organizational resilience, operational effectiveness, and long-term value creation when embedded within governance and strategic decision-making processes.⁶ At the same time, research on risk-based regulation warns that supervisory failure can occur when oversight systems lack reliable data, proportional supervisory mechanisms, and sufficient institutional capacity.⁷ These lessons are highly relevant to zakat institutions, which face unique risks including beneficiary mistargeting, shariah non-compliance, reconciliation irregularities, operational inefficiencies, reputational vulnerabilities, and cybersecurity threats. Therefore, the development of a comprehensive risk-based supervisory framework is not merely a regulatory innovation but a strategic necessity for ensuring the sustainability and credibility of zakat governance.

Comparative experiences from other Muslim-majority jurisdictions further strengthen the rationale for this research. Evidence from Malaysia demonstrates that active shariah governance, continuous shariah auditing, and enhanced disclosure practices contribute positively to institutional legitimacy and stakeholder trust.⁸ Experiences from Pakistan highlight the importance of clear governance structures, minimum supervisory standards, and coordinated oversight mechanisms within

⁵ J. Kandrac et al., “The Effect of Bank Supervision and Examination on Risk Taking: Evidence from a Natural Experiment,” *The Review of Financial Studies* 34, no. 6 (2021): 3181–220, <https://doi.org/10.1093/rfs/hhaa132>; G. Alina, “Risk-Based Regulation and Supervision of Second-Tier Banks,” *Business: Theory and Practice* 25, no. 2 (2024): 345–57, <https://doi.org/10.3846/btp.2024.19604>.

⁶ A. Olechowski et al., “The Role of ISO 31000 Risk Management Principles in Project Management,” *International Journal of Project Management* 34, no. 7 (2016): 1223–37, <https://doi.org/10.1016/j.ijproman.2016.05.008>; C. Callahan and J. Soileau, “Does Enterprise Risk Management Enhance Operating Performance?,” *Journal of Accounting and Public Policy* 36, no. 6 (2017): 527–48, <https://doi.org/10.1016/j.jaccpubpol.2017.07.002>; S. H. Björnsdóttir et al., “Benchmarking ISO Risk Management Systems to Assess Efficacy,” *Sustainability* 14, no. 9 (2022): 4937, <https://doi.org/10.3390/su14094937>; S. Resende et al., “Enterprise Risk Management and Firm Performance: The Dynamic Capabilities Perspective,” *Corporate Social Responsibility and Environmental Management* 31, no. 3 (2024): 1297–315, <https://doi.org/10.1002/csr.2719>.

⁷ M. Moniruzzaman, “Risk of Regulatory Failure of ‘Risk-Based Regulation’ While Using Econometric Tools,” *Asian Journal of Economics and Banking* 6, no. 1 (2022): 103–15, <https://doi.org/10.1108/AJEB-08-2021-0086>; Kandrac et al., “The Effect of Bank Supervision and Examination on Risk Taking: Evidence from a Natural Experiment”; N. Fraccaroli et al., “Does Regulatory and Supervisory Independence Affect Financial Stability?,” *Journal of Banking & Finance* 162 (2025): 107403, <https://doi.org/10.1016/j.jbankfin.2025.107403>.

⁸ Hassan et al., “Shari‘ah Governance and Agency Dynamics of Islamic Financial Institutions”; Aspiranti et al., “Shariah Governance Reporting of Islamic Banks: A Multi-Country Analysis.”

decentralized institutional arrangements.⁹ Meanwhile, broader developments in financial-sector supervision illustrate the effectiveness of combining risk profiling, off-site monitoring, thematic on-site examinations, and corrective feedback systems as components of a comprehensive risk-based supervisory architecture.¹⁰ These international experiences provide valuable lessons that can inform the design of a context-sensitive supervisory model for Indonesia.

Against this backdrop, the present study pursues three primary objectives. First, it seeks to identify and analyze the principal weaknesses and risk dimensions affecting zakat governance oversight in Indonesia. Second, it aims to examine and synthesize good practices in risk-based supervision from selected Muslim-majority jurisdictions with diverse governance and digitalization characteristics. Third, it seeks to formulate a contextualized Risk-Based Supervision model and implementation roadmap capable of strengthening zakat governance in Indonesia through the integration of risk management, shariah governance, and digital oversight mechanisms.

This study offers both theoretical and practical contributions. From a theoretical perspective, it bridges three distinct but complementary bodies of literature: risk management, shariah governance, and financial-sector supervision. By integrating these perspectives into a unified conceptual framework, the study extends current knowledge on zakat governance beyond traditional discussions of efficiency and compliance. From a practical perspective, the study provides an operational blueprint consisting of risk profiling mechanisms, risk registers, risk heat maps, Key Performance Indicators (KPIs), Key Risk Indicators (KRIs), supervisory dashboards, and governance arrangements that can support regulators and zakat institutions in implementing proportionate and evidence-based oversight. Ultimately, the proposed framework is expected to strengthen accountability, improve supervisory effectiveness, enhance public trust, and contribute to more effective and sustainable welfare outcomes for mustahik in Indonesia.¹¹

RESEARCH METHODS

This study employed a qualitative research design based on an integrative literature review to develop a contextualized Risk-Based Supervision (RBS) framework for zakat governance in Indonesia. The approach was selected because the study sought to synthesize existing theoretical and empirical knowledge, identify governance weaknesses, extract supervisory lessons from selected Muslim-majority jurisdictions, and formulate a conceptual oversight model rather than test causal

⁹ JITC Editorial Board, "System of Zakat and Ushr: A Paradigm Shift After the Eighteenth Amendment to the Constitution of Pakistan," *Journal of Islamic Thought and Civilization* 11, no. 1 (2021): 83–98.

¹⁰ Kandrak et al., "The Effect of Bank Supervision and Examination on Risk Taking: Evidence from a Natural Experiment"; Alina, "Risk-Based Regulation and Supervision of Second-Tier Banks."

¹¹ Wahab and Abdul Rahman, "A Framework to Analyse the Efficiency and Governance of Zakat Institutions"; Mubtadi and Susilowati, "Analysis of Governance and Efficiency on Zakat Distribution: Evidence from Indonesia"; Sawmar and Iqbal, "Enhancing Zakat Compliance Through Good Governance: A Conceptual Framework."

relationships through primary data collection. Integrative reviews are particularly suitable for generating new conceptual frameworks by combining evidence from diverse sources and disciplinary perspectives.¹²

Data were derived exclusively from secondary sources, including peer-reviewed journal articles, academic books, policy reports, regulatory documents, and publications issued by zakat authorities and related institutions. The literature search was conducted through major academic databases, including Scopus, Web of Science, DOAJ, and Google Scholar, using combinations of keywords such as zakat governance, risk-based supervision, shariah governance, enterprise risk management, three-lines model, and digitalization of supervision. Source selection followed predefined inclusion criteria emphasizing relevance, methodological rigor, and conceptual contribution to governance, risk management, or supervisory design. Studies lacking scholarly credibility or direct relevance to the research objectives were excluded.

The review process followed the principles of systematic literature review and PRISMA-based screening procedures, including identification, screening, eligibility assessment, and final selection of sources.¹³ Subsequently, data were extracted and coded according to several analytical categories, namely governance weaknesses, supervisory mechanisms, shariah governance practices, digital governance arrangements, performance indicators, and risk indicators.

The analysis employed thematic synthesis and constant comparative techniques to identify recurring patterns, similarities, and differences across studies.¹⁴ The resulting themes were then integrated into a conceptual framework consisting of five risk dimensions, a three-lines assurance structure, supervisory instruments, governance technology architecture, and a phased implementation roadmap. This methodological approach ensured a logical connection between the identified governance challenges, comparative evidence from other jurisdictions, and the proposed Risk-Based Supervision model developed in this study.

RESULTS AND DISCUSSION

This section presents a synthesized review of the literature, structured around three research objectives: (i) mapping the principal oversight weaknesses and the risk profile of zakat governance in Indonesia; (ii) distilling good practices in risk-based supervision from selected Muslim-majority

¹² R. Whittemore and K. Knafl, "The Integrative Review: Updated Methodology," *Journal of Advanced Nursing* 52, no. 5 (2005): 546–53, <https://doi.org/10.1111/j.1365-2648.2005.03621>; H. Snyder, "Literature Review as a Research Methodology: An Overview and Guidelines," *Journal of Business Research* 104 (2019): 333–39, <https://doi.org/10.1016/j.jbusres.2019.07.039>.

¹³ D. Tranfield et al., "Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review," *British Journal of Management* 14, no. 3 (2003): 207–22, <https://doi.org/10.1111/1467-8551.00375>; M. J. Page et al., "The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews," *BMJ* 372 (2021): n71, <https://doi.org/10.1136/bmj.n71>.

¹⁴ Whittemore and Knafl, "The Integrative Review: Updated Methodology."

jurisdictions; and (iii) formulating a context-sensitive risk-based supervision (RBS) model together with an implementation roadmap for Indonesia. Because this study is purely literature-based, the term “findings” denotes recurrent empirical patterns, testable conceptual propositions, and policy design proposals derived from secondary evidence and theoretical frameworks. Each subsection integrates a discussion that interprets the significance of the findings, situates them within the extant scholarship, and draws out their implications for policy design.

Key Supervisory Weaknesses and the Risk Profile of Zakat Governance in Indonesia

The governance of zakat institutions in Indonesia has gained increasing attention as zakat is expected to serve not only as a religious obligation but also as an instrument for poverty alleviation, social inclusion, and sustainable development. The expansion of zakat collection activities, coupled with rapid digital transformation and growing demands for transparency, has created a more complex governance landscape that requires stronger and more adaptive oversight mechanisms. A review of the existing system indicates that the effectiveness of zakat governance remains constrained by four interconnected areas of weakness: regulatory and institutional arrangements, supervisory practices, digital and data governance, and performance and risk measurement frameworks. These weaknesses affect key aspects of zakat management, including beneficiary targeting, shariah compliance, financial accountability, operational effectiveness, and institutional reputation.

Among these challenges, shortcomings in the regulatory and institutional framework are particularly significant. Existing regulations primarily emphasize administrative compliance and reporting obligations but do not yet provide a comprehensive risk-based supervisory architecture. Consequently, oversight activities tend to focus on procedural conformity rather than on identifying and mitigating material organizational risks. The situation is further complicated by substantial differences in institutional capacity, governance quality, internal controls, and reporting practices among zakat organizations. Such disparities contribute to uneven performance, reduce transparency, and may weaken public trust. Previous studies have confirmed that variations in governance structures and reporting incentives can significantly influence institutional effectiveness and accountability.¹⁵ Without a standardized Risk-Based Supervision (RBS) framework, supervisory resources are unlikely to be allocated efficiently according to institutional risk levels.

The effectiveness of zakat governance is influenced not only by regulatory arrangements but also by the quality of supervisory practices. One of the major challenges lies in the fact that supervisory mechanisms remain largely reactive rather than preventive. In contemporary governance systems, effective oversight should enable regulators to recognize emerging risks at an early stage and

¹⁵ Wahab and Abdul Rahman, “A Framework to Analyse the Efficiency and Governance of Zakat Institutions”; Muftadi and Susilowati, “Analysis of Governance and Efficiency on Zakat Distribution: Evidence from Indonesia.”

implement corrective measures before those risks evolve into operational disruptions or reputational damage. However, supervisory practices within the zakat sector have yet to be fully embedded within a structured risk-based framework. Existing off-site supervision is primarily centered on reviewing periodic reports and assessing compliance with reporting obligations. Although these activities are necessary for maintaining accountability, they offer only a limited understanding of future vulnerabilities because they rely heavily on historical information rather than forward-looking risk indicators.

As a result, many governance deficiencies are detected only after they have already produced adverse consequences. A more robust supervisory approach would integrate early-warning mechanisms capable of identifying warning signals before significant problems emerge. Such signals may include recurring reconciliation discrepancies, unusual variations in beneficiary allocation, repeated operational irregularities, or abnormal fundraising and distribution patterns. These indicators would allow supervisory authorities to shift from a compliance-driven approach toward a more proactive risk-management orientation. Likewise, on-site examinations are often conducted without a systematic methodology for prioritizing institutions according to their risk exposure. Inspection activities are frequently triggered by complaints, urgent issues, or limitations in supervisory resources rather than by comprehensive risk assessments. Consequently, institutions with relatively low levels of risk may receive disproportionate attention, while organizations facing more significant governance challenges may not be monitored adequately. Research on regulatory oversight consistently demonstrates that effective supervision depends on the principles of proportionality and risk prioritization. Without these principles, supervisory interventions tend to be fragmented and less capable of addressing areas that pose the greatest threat to institutional performance and accountability.¹⁶

At the same time, the rapid expansion of digital technologies has introduced new opportunities as well as additional governance challenges. Digital transformation has improved the efficiency of zakat collection and distribution processes by enabling faster transactions, broader access to services, and greater transparency in financial flows. Digital platforms have strengthened interactions among zakat institutions, donors, and beneficiaries, contributing to improved service quality and operational effectiveness. Nevertheless, these advantages are accompanied by increasingly complex risks. One critical concern relates to data quality and consistency. Information on donors and beneficiaries is often generated through different systems and according to different standards, creating inconsistencies that may affect decision-making and reduce the accuracy of distribution programs. Furthermore, many institutions continue to operate isolated information systems that lack

¹⁶ Kandrac et al., “The Effect of Bank Supervision and Examination on Risk Taking: Evidence from a Natural Experiment.”

interoperability, making it difficult to consolidate information and undertake integrated supervisory monitoring at the national level. Studies on digital zakat management similarly indicate that technological progress is frequently accompanied by challenges associated with system integration, interoperability, and information security.¹⁷

In addition, growing dependence on digital infrastructure exposes institutions to cybersecurity threats, including unauthorized access, data breaches, system interruptions, and malicious cyberattacks. Such incidents can undermine operational continuity and erode stakeholder confidence. Therefore, strengthening governance in the digital era requires comprehensive data-governance policies, reliable cybersecurity controls, transparent audit trails, and advanced analytical tools capable of supporting risk monitoring and anomaly detection. Together, these measures are essential for ensuring that digital transformation enhances both operational efficiency and institutional resilience.

A further challenge in zakat governance relates to the insufficient incorporation of risk assessment into organizational performance evaluation. In practice, many zakat institutions continue to measure success primarily through conventional Key Performance Indicators (KPIs), including fundraising growth, distribution effectiveness, administrative efficiency, and reporting punctuality. While these metrics provide valuable insights into operational achievements, they do not offer a comprehensive picture of institutional resilience because they largely overlook the risks that may threaten long-term performance and sustainability. Contemporary governance and risk-management literature increasingly emphasizes that organizational effectiveness should be evaluated not only through outcomes achieved but also through the institution's ability to identify, monitor, and mitigate potential risks. Consequently, Key Risk Indicators (KRIs) have emerged as an essential complement to traditional performance metrics, serving as early-warning instruments that enable organizations to anticipate and respond to emerging vulnerabilities before they escalate into significant problems.¹⁸

Within the zakat sector, relevant risk indicators may encompass the frequency of stakeholder complaints, the effectiveness of complaint-resolution mechanisms, incidents of shariah non-compliance, unresolved reconciliation discrepancies, cybersecurity breaches, inaccuracies in beneficiary targeting, and operational disruptions during critical service periods. The absence of such indicators limits the ability of supervisory authorities to establish risk-based priorities, allocate oversight resources efficiently, and implement timely corrective measures. As a result, significant governance risks may remain undetected until they adversely affect institutional performance and stakeholder confidence.

¹⁷ Meerangani et al., "Digitalisation of Zakat Management System in Malaysia: Potential and Challenges."

¹⁸ Callahan and Soileau, "Does Enterprise Risk Management Enhance Operating Performance?"; Resende et al., "Enterprise Risk Management and Firm Performance: The Dynamic Capabilities Perspective."

Collectively, these weaknesses illustrate that zakat governance operates within a multidimensional risk environment involving strategic, operational, compliance, technological, and reputational dimensions. Strategic risks are linked to the alignment of institutional objectives with poverty alleviation and broader development outcomes, whereas operational risks arise from beneficiary verification, financial controls, and distribution processes. Compliance and shariah risks relate to adherence to Islamic principles and organizational procedures, while technological risks stem from deficiencies in cybersecurity, data governance, and system integration. Reputational risks are increasingly important due to growing public expectations for transparency, accountability, and service quality. The shariah governance literature consistently argues that organizational legitimacy depends on effective internal controls, accountability mechanisms, and transparent disclosure practices.¹⁹ Therefore, strengthening zakat governance requires a transition from a compliance-centered supervisory approach toward a comprehensive Risk-Based Supervision framework that prioritizes material risks and societal impact. Nevertheless, the success of such a transition depends on several enabling factors, including standardized data architectures, harmonized risk indicators, clearly defined institutional mandates, stronger integration between risk management and shariah governance functions, and enhanced analytical capacity among supervisors. Without these supporting conditions, risk-based supervision may remain largely symbolic and fail to generate meaningful improvements in governance quality, a challenge that has also been highlighted in the broader literature on risk-based regulatory systems.²⁰

Key Lessons from Selected Islamic Jurisdictions

Comparative experiences from several Islamic jurisdictions provide important insights for strengthening zakat governance and supervisory systems. The first lesson emphasizes the integration of shariah governance within the overall organizational control framework. In Malaysia, shariah oversight is not limited to approving policies and programs but is embedded throughout operational activities. The Shariah Supervisory Board actively reviews implementation processes, monitors compliance, and ensures that corrective actions are taken when weaknesses are identified. Such an approach enhances accountability, minimizes agency-related risks, and reinforces public confidence by ensuring that shariah principles are consistently applied in daily operations. Evidence suggests that

¹⁹ Hassan et al., “Sharī‘ah Governance and Agency Dynamics of Islamic Financial Institutions”; Aspiranti et al., “Shariah Governance Reporting of Islamic Banks: A Multi-Country Analysis.”

²⁰ Moniruzzaman, “Risk of Regulatory Failure of ‘Risk-Based Regulation’ While Using Econometric Tools.”

strong shariah governance contributes positively to institutional legitimacy, stakeholder trust, and regulatory compliance.²¹

A second lesson relates to the application of Risk-Based Supervision (RBS), where supervisory intensity is aligned with institutional risk profiles. This approach combines ongoing off-site monitoring with targeted on-site examinations, enabling regulators to allocate resources more efficiently and concentrate oversight on higher-risk areas. Corrective actions are supported through structured recommendations and graduated enforcement measures that promote continuous improvement.²² Pakistan’s experience further demonstrates the value of establishing minimum supervisory standards to maintain consistency and accountability while preserving institutional flexibility within decentralized governance arrangements.²³

The third lesson highlights the importance of digital transformation supported by effective data governance. Malaysia’s e-zakat initiatives demonstrate that digital platforms can improve efficiency, transparency, and traceability. However, these benefits depend on strong cybersecurity safeguards, interoperable systems, reliable privacy protections, and advanced analytical capabilities.²⁴ Consequently, successful digitalization requires integrated data architectures and standardized governance mechanisms that simultaneously enhance operational performance and supervisory effectiveness.

Table 1. Comparative Study of Risk-Based Supervision (RBS) of Zakat Governance—Malaysia, Pakistan, GCC (Saudi/UAE)

Aspect	Malaysia	Pakistan	GCC (Saudi/UAE)
Authority & institutional structure	State-level religious authorities (e.g., MAIWP/PPZ, Zakat Selangor). National policy coordination is limited; operational practice largely sits at the state level.	Zakat & Ushr scheme post-18th Amendment; authority is dispersed across federal–provincial levels; implementation largely through social/health departments.	Strong integration with welfare policy; central government bodies dominate; cross-ministerial coordination runs on e-government platforms.
Supervisory framework (RBS)	Risk profile shapes supervisory intensity; a blend of off-site dashboards and thematic on-site reviews is becoming established within major authorities.	RBS not yet fully standardized; focus on minimum compliance and program-targeting accuracy; high inter-provincial variation.	RBS is comparatively mature and data-rich; proportionate oversight anchored in risk analytics and “trigger events”; compliance standards are explicit.
Role of DPS & sharia governance	Active DPS; continuous sharia audit practices stress-test disbursement processes and sharia documentation; sharia reporting is relatively rich.	DPS exists but capacity varies; sharia audits tend to be periodic; documentation and standardization differ across provinces.	DPS and sharia functions are embedded within public-sector corporate governance; internal controls are stringent and digitized.

²¹ Hassan et al., “Sharī’ah Governance and Agency Dynamics of Islamic Financial Institutions”; Aspiranti et al., “Shariah Governance Reporting of Islamic Banks: A Multi-Country Analysis.”

²² Kandrak et al., “The Effect of Bank Supervision and Examination on Risk Taking: Evidence from a Natural Experiment”; Alina, “Risk-Based Regulation and Supervision of Second-Tier Banks.”

²³ JITC Editorial Board, “System of Zakat and Ushr: A Paradigm Shift After the Eighteenth Amendment to the Constitution of Pakistan.”

²⁴ Meerangani et al., “Digitalisation of Zakat Management System in Malaysia: Potential and Challenges.”

Aspect	Malaysia	Pakistan	GCC (Saudi/UAE)
Digitalization of zakat services	End-to-end e-zakat (payment, verification, reporting); emphasis on service excellence and user experience.	Digitalization is advancing but uneven; beneficiary information systems vary by province.	Robust e-government; inter-agency API integration; automated audit trails and real-time reporting.
Data governance & security	Data policies are being strengthened; some authorities integrate with local registries; interoperability issues persist across states.	Minimum data standards are uneven; data quality and integration are primary challenges; security depends on local capacity.	High security standards; end-to-end encryption, role-based access control, periodic penetration testing; data sharing is tightly regulated.
Salient KRIs & KPIs	SLAs for muzakki/mustahik services, reporting timeliness, disbursement-to-collection ratio, rate of sharia findings, complaint ratio.	Targeting accuracy, timeliness of disbursement via public facilities, compliance with basic reporting.	System uptime, reconciliation exception rate, data-security incidents, data-driven targeting accuracy, adherence to findings.
Primary supervisory tools	Off-site dashboards, thematic on-site inspections, continuous sharia audits, complaint analytics, “mystery donor.”	Document reviews, field sampling for targeted programs, basic compliance audits, verification via public service facilities.	Real-time off-site analytics, high-risk thematic inspections, IT and data-governance control testing, end-to-end process audits.
Core strengths	Advanced digital services; active DPS; a culture of service excellence; ongoing sharia audit practice.	Integration of zakat with public social programs; focus on poverty alleviation and safety nets; wide reach through state facilities.	Cross-agency interoperability; strong risk-analytics capability; high security and reporting standards; rapid supervisory response.
Key challenges	Inter-state fragmentation; data interoperability; consistency of supervisory standards.	Low standardization; uneven data quality; varying provincial supervisory capacity.	Dependence on costly central infrastructure; a highly centralized context that is difficult to replicate as-is.
Practices Indonesia can adopt	Continuous sharia audits; KPI/KRI-based off-site dashboards; measurable public-service SLAs.	National minimum standards for targeting and reporting; use of public facilities as verification channels.	National beneficiary registry; API-based reporting; mandatory information-security and audit-trail standards.
Adjustments required	Harmonize inter-regional standards; establish a national data framework; train DPS and the second line.	Standardize data definitions and indicators; strengthen provincial capacity; apply proportionate supervision.	Phase implementation; focus on a minimum viable data standard; stage investment in GovTech.
Risks if adopted without adaptation	High compliance overhead for smaller institutions; duplicative reporting across regions.	Persistent data inconsistencies; supervision not focused on material risks.	Excessive cost and complexity; organizational resistance to data centralization.
Transferability to Indonesia	High for continuous sharia audit and service dashboards.	Moderate for minimum standards and social verification channels.	Moderate for data architecture and security, requiring a phased rollout.
Brief recommendations	Start with core indicators and sharia-audit modules; pilot in selected provinces.	Set national minimum data and indicator standards; issue a simple guide for thematic inspections.	Build a national beneficiary registry and API scheme; enforce security and audit-trail standards from the outset.

Source: Analysis Result, 2026

Comparative experiences across countries demonstrate that supervisory practices cannot be transferred directly from one context to another. Effective governance mechanisms must be carefully tailored to institutional characteristics, regulatory environments, and operational realities. A key principle is proportionality, whereby the intensity of supervision should correspond to an institution’s risk profile and organizational capacity. High-risk institutions may require continuous sharia auditing

and more rigorous oversight, whereas smaller organizations with less complex operations can be supervised through simplified audit approaches. The same principle applies to digital supervisory systems. National monitoring dashboards should be implemented gradually, beginning with high-impact indicators that offer substantial benefits with minimal integration costs. Such a phased strategy supports organizational readiness and system compatibility, ensuring that governance reforms enhance performance and risk management rather than merely fulfilling formal compliance obligations.²⁵

Risk-Based Supervision Model and Strategic Implementation Roadmap for Strengthening Zakat Governance in Indonesia

The findings generated in this study provide the foundation for the development of a comprehensive Risk-Based Supervision (RBS) framework tailored to the characteristics of zakat governance in Indonesia. The proposed framework departs from traditional compliance-oriented oversight and instead places risk management at the center of supervisory activities. Three guiding principles underpin the model. First, supervisory attention should focus on risks that have the greatest potential to influence institutional effectiveness and social outcomes. Second, supervisory intensity should be proportional to the magnitude of risk faced by each institution. Third, shariah governance should not operate separately from organizational risk management but should be embedded within the overall supervisory architecture. Through the integration of these principles, the model seeks to strengthen accountability, improve public confidence, and enhance the developmental impact of zakat distribution.

A key element of the framework is the establishment of a composite risk profile for each amil zakat institution. Rather than applying uniform supervisory treatment to all organizations, the model recognizes that institutions possess different capacities, governance structures, operational complexities, and risk exposures. Consequently, risk profiling becomes the primary reference for supervisory planning and resource allocation. The assessment framework is constructed around five interrelated dimensions: governance and compliance, shariah governance, operational performance, information technology and data management, and institutional reputation. Together, these dimensions provide a holistic representation of institutional vulnerability and resilience.

The governance and compliance dimension evaluates the adequacy of policies, the effectiveness of internal control mechanisms, reporting reliability, and the degree to which audit recommendations are implemented. The shariah dimension examines whether institutional activities consistently adhere to Islamic principles through systematic reviews, documentation quality, and monitoring of non-compliance findings. Operational assessment focuses on the efficiency and

²⁵ Callahan and Soileau, "Does Enterprise Risk Management Enhance Operating Performance?"; Olechowski et al., "The Role of ISO 31000 Risk Management Principles in Project Management."

reliability of service delivery, including beneficiary verification procedures, timeliness of distribution, and service quality for both muzakki and mustahik. The information technology and data dimension considers cybersecurity arrangements, access-management controls, encryption practices, vulnerability assessments, and incident histories. Meanwhile, the reputational dimension captures public perceptions through complaint trends, stakeholder satisfaction, responsiveness, and media coverage. By aggregating performance across these dimensions, institutions can be categorized into high-, medium-, or low-risk groups, thereby creating a foundation for proportionate supervision.

The application of proportionality constitutes another important characteristic of the proposed model. Institutions identified as high risk receive the most intensive supervisory treatment, including frequent off-site monitoring and multiple thematic examinations each year. Organizations classified as medium risk are monitored at regular intervals and subjected to targeted examinations guided by emerging risk indicators. Low-risk institutions receive less intensive oversight through periodic monitoring and selective field reviews. Such differentiation enables supervisory authorities to deploy limited resources more effectively by focusing on institutions whose risks carry the greatest potential consequences for beneficiaries, donors, and public trust. Furthermore, the framework is designed to remain dynamic. Sudden increases in complaints, recurring reconciliation discrepancies, operational anomalies, or cybersecurity incidents can trigger immediate supervisory responses regardless of an institution's previous risk classification.

To support this approach, the model incorporates a comprehensive set of supervisory instruments. Central to off-site supervision is a digital dashboard that consolidates institutional performance and risk information in real time. This platform enables supervisors to continuously monitor key indicators while identifying deviations that may require intervention. Core indicators include distribution-to-collection ratios, timeliness of reporting, complaint frequency, complaint-resolution effectiveness, reconciliation exceptions, shariah non-compliance incidents, cybersecurity events, and system availability during critical operational periods. Beyond its reporting function, the dashboard serves as an early-warning mechanism capable of identifying emerging risks before they develop into significant governance failures.

Off-site monitoring is complemented by thematic on-site examinations designed to validate information obtained through digital channels and provide a deeper understanding of institutional practices. These examinations are conducted using structured work programs that specify objectives, risk areas, evidence requirements, testing procedures, and reporting formats. Depending on the risk profile of the institution, examinations may focus on beneficiary-targeting processes, financial controls, governance arrangements, cybersecurity practices, or documentation supporting shariah decisions. Additional supervisory techniques can also be employed when required. For example, mystery donor exercises may be used to assess service quality and integrity, while specialized digital

audits can evaluate system controls, access management, audit trails, and data-security measures. Through this combination of monitoring tools, supervisors can move beyond formal compliance reviews and obtain a more comprehensive understanding of operational realities.

An important innovation within the proposed framework is the integration of the Three Lines Model with shariah governance mechanisms. In this arrangement, operational management functions as the first line of defense and assumes responsibility for executing activities in accordance with established procedures. The second line consists of risk management and compliance functions that monitor key risk indicators, assess the effectiveness of controls, and challenge decisions that may create material risks. Alongside these functions, the Sharia Supervisory Board (SSB) plays a strategic role by ensuring that organizational activities remain aligned with Islamic principles through continuous review and periodic audit processes. The third line is represented by internal audit functions that independently evaluate the effectiveness of governance, risk management, and control arrangements. External supervisory authorities complement this structure by providing additional assurance and validation.

To ensure that responsibilities remain clear and transparent, all roles within the three-line structure are formally documented using a RACI matrix. This approach clarifies who is responsible, accountable, consulted, and informed for each critical process. The effectiveness of this arrangement also depends on sustained investment in human capital. Risk officers, shariah supervisors, and internal auditors require continuous professional development to ensure that supervisory practices remain effective and responsive to evolving challenges. Previous studies indicate that institutions where Sharia Supervisory Boards are fully integrated into governance and risk-management processes tend to demonstrate lower levels of non-compliance and stronger organizational legitimacy.²⁶

The framework further incorporates a structured feedback mechanism to ensure that supervisory findings lead to meaningful corrective action. Findings are classified according to severity and linked to remediation plans with clearly defined deadlines. Failure to implement corrective measures results in progressively stronger responses, ranging from technical assistance and intensified monitoring to restrictions on activities and administrative sanctions. Progress in implementing corrective actions is continuously tracked and reported. Evidence from financial-sector supervision demonstrates that supervisory systems incorporating transparent and enforceable feedback arrangements contribute to more prudent risk behavior and reduce the likelihood of outcomes detrimental to the public interest.²⁷

²⁶ Hassan et al., “Sharī‘ah Governance and Agency Dynamics of Islamic Financial Institutions”; Aspiranti et al., “Shariah Governance Reporting of Islamic Banks: A Multi-Country Analysis.”

²⁷ Kandrak et al., “The Effect of Bank Supervision and Examination on Risk Taking: Evidence from a Natural Experiment”; Fraccaroli et al., “Does Regulatory and Supervisory Independence Affect Financial Stability?”

A robust digital infrastructure is another prerequisite for effective implementation. Accordingly, the model proposes a GovTech architecture that positions data governance as a strategic component of supervision. A national beneficiary registry forms the foundation of interoperability by establishing standardized identification procedures, minimum data requirements, and updating protocols. Information on collections, distributions, complaints, and audit findings is consolidated within a centralized supervisory data warehouse, thereby enabling integrated monitoring and advanced analysis. Every material change to institutional data is recorded through auditable digital trails to strengthen transparency and accountability.

Data protection and cybersecurity are equally critical. The framework incorporates layered encryption, role-based access controls, penetration testing, and comprehensive incident-response mechanisms. Advanced analytics are embedded within the system to support anomaly detection and predictive monitoring. These capabilities enable supervisors to identify unusual transaction patterns, abrupt changes in beneficiary records, and distribution anomalies that may indicate operational or governance weaknesses. Experiences from zakat digitalization initiatives demonstrate that digital transformation generates sustainable benefits only when interoperability and data governance are incorporated into system design from the outset rather than introduced as secondary considerations.²⁸

To translate supervisory objectives into measurable outcomes, the model introduces a standardized system of Key Performance Indicators (KPIs) and Key Risk Indicators (KRIs). Each indicator is supported by a clear definition, measurement methodology, reporting frequency, data source, and escalation threshold. Indicators such as payout-to-collection ratios, complaint levels, unresolved reconciliation exceptions, cybersecurity incidents, and shariah-compliance findings serve not only as measures of performance but also as signals of emerging risks. Standardized indicators facilitate benchmarking across institutions and improve the consistency of supervisory decision-making.

Recognizing the diversity of institutional capabilities across Indonesia, implementation is designed as a phased process. The first phase focuses on establishing minimum data standards, introducing core indicators, and piloting dashboard systems. The second phase expands implementation through more sophisticated risk indicators and strengthened feedback mechanisms. The third phase emphasizes interoperability and integration with external databases to improve beneficiary verification and reduce targeting errors. Throughout all stages, investment in

²⁸ Meerangani et al., "Digitalisation of Zakat Management System in Malaysia: Potential and Challenges."

organizational capability remains essential because the effectiveness of risk-based supervision depends heavily on institutional readiness, risk culture, and process integration.²⁹

The broader policy implications are substantial. Successful implementation requires clear delineation of responsibilities among regulators, zakat institutions, auditors, and shariah governance bodies. Sustainable funding mechanisms must support both digital infrastructure and supervisory capacity building. Equally important is effective change management, as the transition from compliance-based oversight to risk-based supervision requires significant shifts in organizational behavior, governance practices, and performance expectations. Without adequate change-management strategies, even technically sound reforms may encounter institutional resistance and fail to deliver their intended outcomes.

Ultimately, transparency and accountability remain the cornerstones of the proposed framework. While confidential information must be safeguarded, selected performance indicators should be made publicly accessible to strengthen stakeholder confidence and encourage social accountability. Existing research demonstrates that stronger governance transparency contributes positively to donor trust, improves zakat compliance behavior, and reinforces institutional legitimacy.³⁰ Taken together, the proposed framework offers an integrated approach that combines risk management, shariah governance, digital innovation, and supervisory effectiveness within a single operational architecture. Its value lies not only in translating theoretical concepts into practical supervisory tools but also in providing a realistic roadmap for directing supervisory attention toward areas with the greatest risk exposure and highest social significance. Through this approach, zakat governance can become more accountable, more resilient, and more effective in delivering sustainable welfare outcomes for mustahik across Indonesia.

CONCLUSION

This study sought to identify the key weaknesses in zakat governance oversight in Indonesia, examine relevant risk-based supervisory practices from selected Muslim-majority jurisdictions, and develop a contextualized Risk-Based Supervision (RBS) model for the Indonesian zakat sector. Four major findings emerged. First, zakat governance remains constrained by weaknesses in regulatory and institutional arrangements, supervisory processes, digital and data governance, and performance and risk measurement systems. These weaknesses collectively generate five principal risk dimensions: governance and compliance, shariah, operations, information technology and data, and reputation.

²⁹ Callahan and Soileau, “Does Enterprise Risk Management Enhance Operating Performance?”; Olechowski et al., “The Role of ISO 31000 Risk Management Principles in Project Management”; Resende et al., “Enterprise Risk Management and Firm Performance: The Dynamic Capabilities Perspective.”

³⁰ Sawmar and Iqbal, “Enhancing Zakat Compliance Through Good Governance: A Conceptual Framework.”

Second, comparative evidence indicates that effective zakat oversight is characterized by continuous shariah auditing, proportionate supervision based on institutional risk profiles, and digitalized governance supported by robust data management frameworks. Third, the proposed RBS model integrates shariah governance, the three-lines assurance framework, risk-based performance indicators, supervisory dashboards, and GovTech solutions into a coherent oversight architecture. Fourth, successful implementation requires a phased roadmap emphasizing institutional readiness, standardized data systems, capacity development, and enforceable supervisory feedback mechanisms.

Based on these findings, four recommendations are proposed:

1. Establish a national Risk-Based Supervision framework with standardized KPI and KRI indicators, risk-profiling methodologies, and supervisory guidelines for all zakat institutions.
2. Strengthen the three-lines assurance model by enhancing the role of the Sharia Supervisory Board (SSB) as an active component of risk oversight and continuous shariah compliance monitoring.
3. Develop an integrated GovTech ecosystem, including a national beneficiary registry, interoperable data systems, early-warning dashboards, and stronger cybersecurity standards.
4. Implement the reform through a phased approach, beginning with pilot projects and capacity-building programs, while linking institutional incentives to remediation performance and compliance outcomes.

These measures are expected to improve transparency, accountability, supervisory effectiveness, and ultimately the welfare impact of zakat distribution in Indonesia.

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