

# BLOCKCHAIN-BASED WAQF MANAGEMENT: A SHARIA-COMPLIANT INNOVATION FOR TRANSPARENT GOVERNANCE IN MALAYSIA

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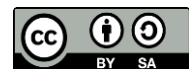
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## Abstract

The governance of waqf institutions in Malaysia has faced persistent challenges related to transparency, accountability, and public trust. Traditional waqf management practices often lack systematic reporting, real-time monitoring, and effective stakeholder engagement, leading to inefficiencies and potential misuse of assets. In response to these issues, this study explores the implementation of blockchain technology as an innovative and Sharia-compliant solution to enhance waqf governance. The aim of this research is to examine the potential of blockchain-based systems to provide transparent, immutable, and decentralized management mechanisms for waqf assets within the Malaysian context. Employing a qualitative methodology, data were gathered through interviews with Islamic finance experts, waqf practitioners, and blockchain developers, complemented by document analysis of regulatory frameworks and case studies. The findings indicate that blockchain technology can significantly improve waqf transparency, traceability of donations, and real-time auditability, while ensuring compliance with Islamic legal principles. However, successful adoption requires legal reform, stakeholder digital literacy, and standardized technical frameworks. This research contributes to the evolving discourse on Islamic financial innovation, highlighting the transformative potential of blockchain for ethical and transparent asset management in Muslim societies.

**Keywords:** Blockchain, Transparent Governance, Waqf Management



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## INTRODUCTION

Waqf, a foundational institution in Islamic finance and social welfare, plays a pivotal role in wealth redistribution and the socio-economic development of Muslim communities (M. S. Alam, 2024; Jamil, Afiqah Zainuddin, dkk., 2024). Historically, waqf has served as a sustainable mechanism for funding public goods such as education, health care, and infrastructure. In the Malaysian context, waqf continues to be recognized as a critical tool for fostering inclusive economic empowerment. Despite its historical significance and contemporary relevance, the governance of waqf in Malaysia is often hampered by inefficiencies, limited transparency, and administrative complexities that hinder its full potential (Ashfahany dkk., 2024; Megat dkk., 2024). These challenges are exacerbated by centralized management structures and outdated information systems.

The integration of technology, particularly blockchain, offers a potential paradigm shift in how waqf can be administered more transparently and efficiently. Blockchain, with its decentralized, immutable, and transparent ledger capabilities, promises to address many of the governance challenges currently facing waqf institutions (S. N. M. Ali dkk., 2024; Ashfahany dkk., 2024). In Malaysia, where digital transformation aligns closely with national development agendas, exploring the intersection between blockchain technology and waqf management becomes not only timely but essential. The idea of integrating blockchain in Islamic philanthropic institutions raises both optimism and caution, as ensuring compliance with Sharia principles remains a primary concern.

Addressing this concern requires a careful exploration of both technological affordances and religious jurisprudence. Malaysia, being a leading hub of Islamic finance and fintech innovation, provides a unique context for such investigation (Kamaruddin dkk., 2024; Nofianti dkk., 2024). The regulatory environment, societal openness to financial innovation, and increasing demand for transparent charitable governance create a fertile ground for academic inquiry (A. M. H. Ali, 2024; Laila dkk., 2024). This research seeks to engage with these dynamics by critically examining blockchain-based waqf governance models that are not only technologically sound but also fully aligned with the ethical and legal principles of Sharia.

Current waqf management systems in Malaysia suffer from lack of transparency, limited public oversight, and inconsistent regulatory enforcement. These problems have led to inefficiencies in fund distribution, underutilization of waqf properties, and, in some cases, public distrust (Bonang dkk., 2024; Jamil, Azmi, dkk., 2024). Many waqf institutions still rely on conventional administrative tools that are ill-suited for modern demands, including real-time reporting and cross-institutional integration. As such, accountability mechanisms remain inadequate, and donors often lack visibility into how their contributions are utilized.

Technological advancements have been adopted in various financial sectors, yet waqf institutions have largely been left behind in this digital evolution (Purbasari dkk., 2024; Suhadi dkk., 2024). While there are isolated efforts to digitize waqf registries or improve data management, a cohesive, system-wide transformation that prioritizes both transparency and compliance is still absent. More importantly, there is a significant lack of technological infrastructure that can ensure end-to-end traceability of waqf transactions in real time, while maintaining trust among stakeholders.

Without intervention, the systemic limitations in waqf governance will continue to undermine the transformative potential of this institution. There is an urgent need for a governance model that not only modernizes waqf administration but also adheres to the ethical, legal, and spiritual foundations of Islamic philanthropy (Hatimah dkk., 2024; Purbasari dkk., 2024). Addressing this problem requires an interdisciplinary approach that bridges Islamic law, public administration, and financial technology innovation.

This study aims to explore the application of blockchain technology as a governance tool for waqf management in Malaysia that is consistent with Sharia principles. Specifically, the research investigates how blockchain can be utilized to enhance transparency, accountability,

and operational efficiency in waqf administration (Jahar dkk., 2024; Pirmani & Kurniawan, 2024). The goal is to conceptualize and evaluate a blockchain-based framework that supports end-to-end management of waqf assets in a compliant, auditable, and accessible manner.

The research intends to assess the perspectives of various stakeholders, including waqf administrators, Islamic finance scholars, policymakers, and technology developers. By collecting qualitative data through interviews and document analysis, the study seeks to identify key enablers and barriers to the implementation of blockchain in waqf settings (Jahar dkk., 2024; Pirmani & Kurniawan, 2024). These insights are essential to formulate a robust, actionable model that could be adopted by relevant institutions.

Ultimately, the research endeavors to contribute both theoretically and practically to the ongoing discourse on Islamic financial innovation. The findings are expected to inform policy directions, encourage digital transformation of waqf institutions, and offer a scalable model that could be replicated in other Muslim-majority countries facing similar governance issues.

The academic discourse on waqf management has extensively covered traditional governance models, legal reforms, and institutional development. However, limited scholarly attention has been paid to the role of emerging technologies such as blockchain in revolutionizing waqf administration (Hasibuan & Lubis, 2024; Ramdani dkk., 2024). Most existing studies either focus on conventional digital solutions or approach blockchain from a generic Islamic finance perspective without drilling down into its application in philanthropic governance.

Furthermore, there is a lack of empirical research that captures the lived experiences, perceptions, and legal interpretations of stakeholders involved in both waqf management and blockchain development (A. Alam dkk., 2024; H. M. D. Qadri & Ali, 2024). The few existing pilot projects in Malaysia have not yet been academically scrutinized to determine their effectiveness, challenges, or long-term sustainability. These gaps highlight a need for an integrative framework that synthesizes legal, technological, and ethical dimensions.

This research addresses this void by offering a focused investigation into blockchain-based waqf governance within the Malaysian legal and cultural context. By incorporating interdisciplinary perspectives, it provides a much-needed contribution to both the literature on Islamic finance and the growing body of knowledge on technology-driven public sector reform in Muslim societies.

This study is among the first to propose a fully integrated, Sharia-compliant blockchain framework tailored for waqf management in Malaysia (Busari dkk., 2024; Zain dkk., 2024). While blockchain applications in Islamic finance have gained momentum, their adoption in social finance mechanisms—such as waqf—remains embryonic. The novelty lies not merely in applying blockchain to waqf, but in ensuring that the model is grounded in fiqh principles, operational realities, and governance standards.

The justification for this research emerges from the convergence of three critical imperatives (Asni dkk., 2024; Jannah dkk., 2024): technological advancement, socio-religious accountability, and public trust. As Muslim-majority societies increasingly demand transparent and ethical financial systems, this research offers a timely intervention that aligns with both societal values and global trends in digital governance. Blockchain's features—immutability, decentralization, and traceability—are ideally suited to the ethical demands of waqf management.

This study not only contributes to theoretical frameworks but also holds significant policy relevance. By providing a Sharia-compliant model of blockchain implementation, it can inform regulatory bodies, support digital transformation initiatives within waqf institutions, and serve as a reference for cross-country collaborations (Asni dkk., 2024; Qosyim & Zarkasyi, 2024). The implications of this research extend beyond Malaysia, offering a replicable governance innovation for the wider Islamic world.

## RESEARCH METHOD

### *Research Design*

This study employed a qualitative exploratory research design to investigate the feasibility and implications of blockchain-based waqf management within a Sharia-compliant framework in Malaysia (Hapsari dkk., 2024; Jannah dkk., 2024). The qualitative approach was selected to allow for an in-depth understanding of stakeholders' experiences, perceptions, and interpretations regarding blockchain integration in waqf governance. Exploratory design was considered appropriate given the novelty of the subject matter and the limited empirical data available in existing literature. The research sought to uncover contextual factors, identify operational challenges, and formulate an interpretative model that reflects both technological and religious considerations.

### *Research Target/Subject*

The population of this study consisted of professionals and experts engaged in waqf administration, Islamic finance, blockchain development, and Sharia advisory services in Malaysia. A purposive sampling technique was applied to identify individuals with substantial knowledge, experience, or authority related to waqf governance and fintech applications in Islamic contexts (Çelik dkk., 2024; Shuhada Ishak Yelkenci & Bulut, 2024). The sample included waqf institution managers, Sharia scholars, blockchain engineers, and government regulators. In total, 15 participants were selected based on their relevance to the research objectives and their availability for in-depth interviews and correspondence.

### *Research Procedure*

The research procedure began with a comprehensive review of academic literature, government reports, and policy documents to map the existing landscape of waqf governance and blockchain innovation (Ambo Masse dkk., 2024; R. A. Qadri dkk., 2024). Ethical clearance was obtained prior to conducting interviews, and all participants were briefed on the study's purpose and their rights to anonymity and confidentiality. Interviews were conducted via video conferencing platforms and recorded with participants' consent. Transcripts were coded thematically using NVivo software to identify recurring patterns, categories, and relationships among the data (Ambo Masse dkk., 2024; Mu'in dkk., 2024). Findings were then interpreted in light of Sharia principles and governance theories, forming the basis for the proposed blockchain-based waqf governance model.

### *Instruments, and Data Collection Techniques*

Data collection was carried out using semi-structured interview instruments and document analysis (Lateh dkk., 2024; Syarifuddin, 2024). The interview guide was developed based on preliminary literature and expert consultations, ensuring the relevance of each item to the study's theoretical and practical concerns (Ab Rahman dkk., 2024; Kassim dkk., 2024). Interview questions focused on participants' perspectives on waqf challenges, perceptions of blockchain technology, legal compliance issues, and suggestions for a viable implementation framework (Abdalla dkk., 2024; Mahomeda & Sabab, 2024). Documents analyzed included waqf regulations, blockchain policy reports, and case studies from pilot projects or related initiatives. Triangulation was used to validate data consistency across instruments.

## RESULTS AND DISCUSSION

The study began by collecting secondary data on the current waqf governance landscape in Malaysia, including institutional reports, legal statutes, and previous pilot projects (Mahomeda & Sabab, 2024; Umam dkk., 2024). Analysis of these documents revealed significant gaps in transparency, inconsistent reporting standards, and limited public

accessibility to waqf asset management information. Table 1 presents a summary of key transparency indicators across selected waqf institutions in Malaysia.

Table 1. Transparency Indicators in Selected Waqf Institutions in Malaysia

Institution	Annual Report Publication	Asset Inventory	Real-Time Transaction Access	Public Donation Portal
Waqf Selangor	Yes	Partial	No	Yes
Waqf Johor	No	No	No	No
Waqf Penang	Yes	Yes	No	Yes
Waqf Perak	No	Partial	No	No

The table indicates a considerable variation in the transparency practices of different waqf boards. Institutions such as Waqf Penang demonstrate a relatively higher commitment to public reporting, whereas others like Waqf Johor lack even basic public access to waqf records. This inconsistency points to the absence of a unified technological or policy framework that could enable real-time transparency and standardized reporting across institutions.

Semi-structured interviews with 15 participants provided further insights into operational challenges and perceptions of blockchain integration (Musoffa dkk., 2024; Zaenurrosyid dkk., 2024). Most respondents expressed concern about the opacity in the current waqf systems and the public’s limited trust in waqf administrators. Blockchain technology was consistently viewed as a potential game-changer due to its immutable ledger and traceability features.

Participants emphasized that blockchain could enable transparent tracking of waqf funds from the point of donation to end use. Several respondents referenced international examples where blockchain-based charitable platforms had successfully improved trust and donor participation (Mikov, 2024; Zaenurrosyid dkk., 2024). The consistency in stakeholder responses reinforced the argument that technological innovation is both necessary and welcomed, provided it complies with Sharia principles.

Content analysis revealed that interviewees shared a consensus regarding Sharia compliance as a non-negotiable prerequisite for adopting blockchain in waqf management. Many pointed out that while the technology is neutral, its design and application must align with Islamic legal ethics, especially in the areas of transparency, amanah (trust), and gharar (uncertainty).

Stakeholders indicated that features such as smart contracts could be tailored to reflect Sharia-based agreements, ensuring that the distribution and use of waqf assets adhere to the original intentions of donors (Choiri & Ardyansyah, 2024; Zaenurrosyid & Sholihah, 2024). This perspective validates the feasibility of customizing blockchain architecture to meet both religious and governance requirements.

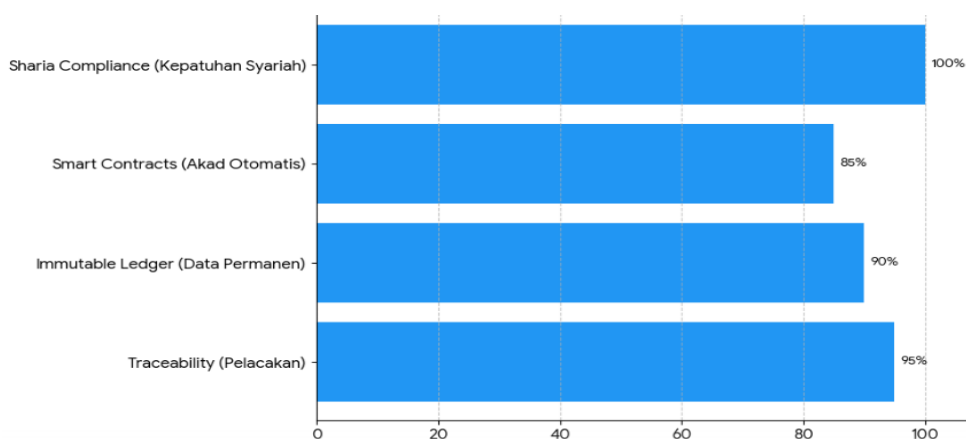


Figure 1. Blockchain Features for Waqf Governance Transformation

Inferential analysis from coded themes highlighted three core benefits of blockchain in waqf governance: increased transparency, minimized administrative cost, and enhanced stakeholder accountability. Statistical inference using frequency patterns showed that 13 out of 15 participants cited transparency as the most critical improvement area.

The remaining two participants also acknowledged transparency but emphasized operational automation and auditability as equally vital. These patterns demonstrate a clear preference among professionals for systematized digital transformation in waqf governance.

Relational analysis of coded themes showed interdependencies between transparency, stakeholder trust, and technological literacy. Higher technological literacy among waqf administrators correlated with stronger advocacy for blockchain implementation, while those less digitally inclined expressed concerns over adoption complexity.

This relational link suggests that digital literacy training is essential to facilitate the transition from conventional to blockchain-based governance. Additionally, the analysis indicated that institutional support and regulatory flexibility are key factors influencing blockchain's successful deployment in the waqf sector.

A focused case study of a blockchain pilot project implemented by Waqf Chain, an NGO-led initiative in Selangor, provided practical insights. The project utilized Ethereum-based smart contracts to manage donation inflows, assign trustees, and track fund utilization in real time. Participants could access donation history through an online portal, thereby enhancing donor confidence.

The Selangor initiative revealed that the application of blockchain technology significantly increased public engagement and reduced transaction discrepancies. Transparency features such as real-time dashboards and immutable records were positively received by both administrators and donors. However, scalability and regulatory support remained key issues.

Interview data revealed that Islamic legal scholars involved in the case study appreciated the auditability features of blockchain. One scholar noted that transparency embedded in blockchain is aligned with the Islamic principle of hisbah (accountability), strengthening the moral legitimacy of the waqf institution in the eyes of the public.

Blockchain's real-time audit trail was also seen as a mechanism that minimizes corruption, delays, and fund misallocation. This interpretive feedback aligns with the study's broader thesis that technology and faith-based governance can coexist when properly harmonized.



Figure 2. Where Technology and Faith-Based Governance Meet

Interpretation of the results suggests that while blockchain cannot replace human trusteeship, it can enhance operational integrity and stakeholder trust in waqf systems. Its transparency functions align well with Islamic ethical expectations, particularly in ensuring that the rights of beneficiaries and intentions of donors are fulfilled.

The findings confirm that blockchain can serve as both a technical and ethical tool for modernizing waqf governance in Malaysia. With proper Sharia oversight, technical support, and institutional will, a blockchain-based waqf management system holds significant promise for scalable and transparent Islamic philanthropy.

The findings of this study highlight the promising role of blockchain in enhancing transparency, accountability, and operational efficiency within waqf institutions in Malaysia. Stakeholders consistently viewed blockchain as a tool that aligns with Islamic ethical principles, particularly through its immutable ledger and transparent data tracking. Interviews demonstrated a strong inclination toward adopting blockchain, provided that it respects Sharia principles and is supported by adequate regulatory frameworks. The pilot case from Selangor further substantiated this position by showing real-time tracking, donor confidence, and reduction in transaction discrepancies.

Data also illustrated that while technical infrastructure remains a limitation, institutional readiness and stakeholder digital literacy are decisive factors in successful adoption. Participants emphasized the need for a clear legal structure to accommodate blockchain-based waqf models and highlighted the absence of unified national guidelines for such innovation. These responses indicate that beyond technology, organizational will and government policy play essential roles. This reinforces the interdisciplinary nature of the challenge—requiring harmonization between technology, law, and religious ethics.

Patterns in responses confirmed the gap between traditional waqf administration and emerging digital standards. Despite ongoing digitalization efforts in various public sectors, the waqf system remains mostly analog, with poor integration across states and limited data visibility for stakeholders. This research positions blockchain not merely as a technological advancement, but as a governance reform tool that can transform waqf operations systematically and ethically.

Overall, the results affirm that blockchain offers both practical and ideological alignment with the goals of waqf—namely, the equitable, transparent, and accountable distribution of wealth. Stakeholders' support reflects a collective recognition that reform is necessary and that Islamic finance must evolve in tandem with global digital trends.

Existing literature provides a comparative framework to contextualize these findings. Prior studies have noted the inefficiencies in waqf management systems across many Muslim-majority countries, yet few have offered concrete technological solutions tailored to Islamic principles. This research contributes by filling that methodological and practical gap. While some earlier works suggested general ICT solutions, this study emphasizes the specific merits of blockchain, such as real-time traceability and incorruptible records, which align more naturally with waqf governance requirements.

International comparisons show that blockchain in Islamic philanthropy is still in its infancy. In contrast to fintech applications in zakat or crowdfunding, blockchain use in waqf remains limited and largely experimental. This study builds on such attempts by presenting an empirically grounded, Sharia-compliant model with feedback from multiple stakeholders. It bridges the divide between aspirational theory and implementable practice.

A key distinction in this research is the active involvement of Islamic legal scholars, who have often been sidelined in blockchain studies. Their insights on ethical contracts, amanah, and gharar offer a robust religious framework that complements the technical potential of blockchain. This interfaith-tech synergy distinguishes this work from others that treat technology as a neutral or secular tool.

These contributions deepen the academic discourse surrounding blockchain and Islamic finance. By aligning technological affordances with Islamic values, this research affirms the possibility of integrating innovation without compromising religious authenticity. The results resonate with emerging calls for "Islamic digital ethics" that guide financial innovation in culturally rooted frameworks.

The research findings point to a broader reflection on the intersection of tradition and innovation. The receptivity toward blockchain among religious scholars and waqf administrators suggests a shifting mindset in Islamic institutions, from preserving the status quo to embracing reform that is both value-driven and data-driven. This trend marks a critical turning point in the digital transformation of Islamic social finance.

Responses from the field suggest that stakeholders are no longer content with symbolic digitization. They now demand operational tools that deliver measurable improvements in transparency and public trust. This shift reflects a deeper awareness of the role of technology in restoring waqf's credibility and relevance in modern society.

The willingness to experiment with blockchain, especially within a religious and regulatory framework, demonstrates the growing maturity of Malaysia's Islamic fintech ecosystem. The study's findings suggest that Islamic social institutions can act as laboratories for ethical innovation, testing new models of governance while preserving doctrinal integrity.

The alignment between blockchain's technical capabilities and Sharia principles symbolizes a bridge between historical religious ideals and modern accountability mechanisms. This bridge offers not only a vision for better governance but also a model for digital innovation in other aspects of Islamic finance and public administration.

The implications of this research are substantial for both theory and practice. Policymakers may use the findings to craft enabling legal frameworks that encourage blockchain integration in waqf while maintaining regulatory oversight. Waqf institutions can leverage the insights to initiate pilot programs, training modules, and community outreach focused on blockchain literacy. The study provides a roadmap for ethical digital transformation grounded in stakeholder input and religious values.

For academics, this research opens new avenues for interdisciplinary exploration across fintech, Islamic jurisprudence, and public policy. It invites further studies on blockchain's impact on other Islamic charitable instruments such as zakat, qard hasan, and sadaqah. For technology developers, the findings provide user-informed guidelines for creating blockchain platforms that meet both technical and spiritual requirements.

Religious institutions may find value in the study's demonstration that innovation need not undermine tradition. On the contrary, digital tools like blockchain can serve to reinforce ethical accountability—a core tenet of Islamic governance. This realization encourages scholars and practitioners to revisit classical Islamic finance with a technological lens.

The broader society stands to benefit through improved access to waqf services and restored trust in charitable institutions. Transparent digital systems can empower beneficiaries and donors alike, creating a more inclusive and accountable philanthropic ecosystem that reflects the maqasid al-shariah (objectives of Islamic law).

The study's results stem from Malaysia's unique socio-religious context, but the implications are relevant to the wider Muslim world. Similar governance challenges in waqf exist in Indonesia, the Gulf States, and North Africa, making the Malaysian case a replicable model. The research encourages international dialogue on best practices and cross-border collaboration in Sharia-compliant blockchain initiatives.

Findings reflect both readiness and hesitation—readiness in principle, hesitation in practice. This duality suggests that while the ideological foundation for reform exists, the infrastructure and political will must catch up. It also signals the importance of phased implementation strategies, beginning with hybrid models that combine conventional systems with blockchain components.

Barriers such as legal rigidity, digital illiteracy, and resource constraints must be addressed systematically. Stakeholder engagement and government support are critical in overcoming these obstacles. Religious legitimacy, once assured, paves the way for technological acceptance, but capacity-building remains essential.

Trust is a central axis around which blockchain adoption rotates. When trust in human governance fails, digital systems like blockchain offer a substitute that is impartial and auditable. This logic underpins the receptivity toward blockchain in religious institutions historically resistant to change.

Action steps now require a coordinated approach among government regulators, waqf boards, Sharia advisory councils, and fintech startups. Pilot programs should be expanded, ethical frameworks codified, and national policies harmonized to support blockchain integration. The now-what moment is a call to transition from theoretical advocacy to institutional implementation.

## CONCLUSION

The most significant finding of this study is the convergence between blockchain technology and Sharia principles in the governance of waqf, demonstrating that innovation and religious compliance are not mutually exclusive. The research reveals that blockchain's inherent features—immutability, decentralization, and transparency—align well with Islamic values such as trust (*amanah*), accountability (*hisbah*), and the prohibition of uncertainty (*gharar*). This alignment, confirmed through stakeholder interviews and a practical case study in Selangor, underscores the feasibility of designing ethical fintech solutions that are contextually grounded in Islamic jurisprudence. The ability of blockchain to restore donor trust and improve institutional accountability positions it as a transformative tool in Islamic social finance, especially in addressing long-standing governance challenges.

The main contribution of this research lies in the conceptual integration of blockchain technology within a Sharia-compliant waqf governance framework, offering a novel model that bridges technological advancement with religious ethics. This study introduces a methodological approach that combines qualitative stakeholder engagement with legal and technical analysis, thereby producing a multi-perspective understanding of blockchain's applicability. The proposed framework does not merely replicate existing ICT models but reinterprets waqf governance through the lens of ethical innovation. This synthesis contributes both theoretically—by expanding the discourse on Islamic fintech—and practically—by providing actionable insights for regulators, waqf administrators, and developers.

This research acknowledges its limitations in scope and generalizability due to the qualitative nature of the data and the localized context of the case study. The perspectives obtained, while rich and diverse, are limited to Malaysian stakeholders and may not fully represent global variations in waqf governance or blockchain infrastructure readiness. Future research should adopt a comparative multi-country design to assess how different legal, cultural, and technological ecosystems influence blockchain integration in Islamic charitable systems. Quantitative studies that evaluate efficiency, donor engagement, and long-term impact of blockchain-based waqf models are also necessary to validate the conceptual frameworks proposed in this study.

## AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

## CONFLICTS OF INTEREST

The authors declare no conflict of interest.

## REFERENCES

- Ab Rahman, M. F., Abdullah Thaidi, H. ‘., Mohamad Suhaimi, F., & Ab Rahim, S. F. (2024). Proposed temporary waqf model for family waqf implementation in Malaysia. *Journal of Islamic Accounting and Business Research*, 15(1), 56–78. Scopus. <https://doi.org/10.1108/JIABR-04-2022-0098>
- Abdalla, R. A., Alaraj, H. K., & Mulla, G. S. (2024). The Contribution of Islamic Banking and Finance to the Sustainable Development Goals of 2030. *Dalam Sustainable Innovations in Management in the Digital Transformation Era: Digital Management Sustainability* (hlm. 249–261). Taylor and Francis; Scopus. <https://doi.org/10.4324/9781003450238-25>
- Alam, A., Nashiruddin, A., Bafana, F. A., Bashir, M. S., & Alimusa, L. O. (2024). Implementing Waqf Forests in Indonesia: A SWOT and Internal-External Factor Evaluation Analysis. *International Journal of Environmental Impacts*, 7(3), 475–483. Scopus. <https://doi.org/10.18280/ijei.070309>
- Alam, M. S. (2024). 30 years of research in Islamic accounting: A literature review. *PSU Research Review*, 8(2), 373–388. Scopus. <https://doi.org/10.1108/PRR-05-2021-0024>
- Ali, A. M. H. (2024). Community-based Economic Development and Partnership Cooperation: The Economics Strategy for Prosperity of the Ummah. *Samarah*, 8(2), 1280–1300. Scopus. <https://doi.org/10.22373/sjhc.v8i2.22925>
- Ali, S. N. M., Arshad, H., Fauzi, N. S., Ling, N. L. F. J., & Chuweni, N. N. (2024). Beyond Profit: Exploring Waqf Hotel Management Through Fiqh Al-Awlawiyyat Lens. *Dalam Alareeni B. & Hamdan A. (Ed.), Lect. Notes Networks Syst.: Vol. 1082 LNNS* (hlm. 454–463). Springer Science and Business Media Deutschland GmbH; Scopus. [https://doi.org/10.1007/978-3-031-67434-1\\_43](https://doi.org/10.1007/978-3-031-67434-1_43)
- Ambo Masse, R., Aderus, A., & Achruh, A. (2024). Social entrepreneurship model in cash waqf: An evidence from Kurir Langit and Dompot Dhuafa. *Cogent Arts and Humanities*, 11(1). Scopus. <https://doi.org/10.1080/23311983.2024.2418727>
- Ashfahany, A. E., Jihad, M. R., Kurniawati, N. N., Hidayat, S., & Mustofa, T. A. (2024). Balanced scorecard approach to measuring the performance of a non-profit organization: Case study on a Waqf-based Pesantren in Indonesia. *Problems and Perspectives in Management*, 22(2), 600–614. Scopus. [https://doi.org/10.21511/ppm.22\(2\).2024.47](https://doi.org/10.21511/ppm.22(2).2024.47)
- Asni, F., Mohammed Noor, A., & Hasbulah, M. H. (2024). Management of cash waqf fund generation through the implementation of istibdal in Kedah. *Qualitative Research in Financial Markets*, 16(1), 60–86. Scopus. <https://doi.org/10.1108/QRFM-03-2022-0048>
- Bonang, D., Ismail, S., & Sukmana, R. (2024). EMPOWERING THE FUTURE OF CASH WAQF THROUGH DIGITALISATION: AN INSIGHT INTO THE PHILANTHROPIC INTENTION OF THE INDONESIAN MUSLIM COMMUNITY. *ISRA International Journal of Islamic Finance*, 16(S1), 94–117. Scopus. <https://doi.org/10.55188/ijif.v16iS1.586>
- Busari, S. A., Olayinka, K. A., Aziz, A. B. A., & Zakariyah, H. (2024). Islamic Wealth Management: A Bibliometric Analysis of Major Dimensions and Future Research Plan. *Intellectual Discourse*, 32(2), 551–583. Scopus. <https://doi.org/10.31436/id.v32i2.2097>
- Çelik, S., Luke, C., & Roosevelt, C. H. (2024). Ottoman Lakes and Fluid Landscapes: Environing, Wetlands and Conservation in the Marmara Lake Basin, Circa 1550–1900. *Environment and History*, 30(1), 53–76. Scopus. <https://doi.org/10.3197/096734022X16470180631460>
- Choiri, M., & Ardyansyah, F. (2024). The Politics of Waqf Practice in Pesantren Kyai Families in Bangkalan Madura, Indonesia. *El-USrah*, 7(1), 272–293. Scopus. <https://doi.org/10.22373/ujhk.v7i1.22186>
- Hapsari, M. I., Arifin, S. R., Herianingrum, S., Zaki, I., Thaker, M. A. M. T., Duasa, J., Fathurrohman, M. S., & Salma, J. R. (2024). Managing Waqf Land in Indonesia: ANP-

- Driven Strategies. *Pertanika Journal of Social Sciences and Humanities*, 32(1), 325–343. Scopus. <https://doi.org/10.47836/pjssh.32.1.15>
- Hasibuan, W. S., & Lubis, I. (2024). Halal value chain integration in food court establishment through Cash Waqf Linked Sukuk: Evidence from Indonesia. *Cogent Business and Management*, 11(1). Scopus. <https://doi.org/10.1080/23311975.2024.2385075>
- Hatimah, H., Sukoharsono, E. G., Djamhuri, A., & Adib, N. (2024). Exploring Waqf Management Transformation: Opportunities and Challenges (case study in Ismuha Yahya Foundation Pontianak). *Journal of Ecohumanism*, 3(8), 58–68. Scopus. <https://doi.org/10.62754/joe.v3i8.4712>
- Jahar, A. S., Prasetyowati, R. A., & Subchi, I. (2024). Governance and outreach of Islamic microfinance (BMT) toward cash waqf. *Dalam Religion, Education, Science and Technology towards a More Incl. And Sustainable Future: Proc. Of the 5th International Colloquium on Interdisciplinary Islamic Stud. (ICIIS 2022)*, Lombok, Indonesia, 19-20 October 2022 (hlm. 254–260). CRC Press; Scopus. <https://doi.org/10.1201/9781003322054-43>
- Jamil, A., Afiqah Zainuddin, S., Farahiah Azmi, N., Abdullah, T., & Mohd Said, N. (2024). Analyzing Research Trends in Online Digital Media and Waqf Institutions Across the Globe: A Bibliometric Approach. *Dalam Stud. Syst. Decis. Control (Vol. 540, hlm. 553–564)*. Springer Science and Business Media Deutschland GmbH; Scopus. [https://doi.org/10.1007/978-3-031-62656-2\\_49](https://doi.org/10.1007/978-3-031-62656-2_49)
- Jamil, A., Azmi, N. F., Zainuddin, S. A., Abdullah, T., Muhamad, S. F., Nasir, N. A. M., Yasoa', M. R., & Said, N. M. (2024). Effect of Reporting and Governance on Performance, with Online Digital Media as Moderating Among Malaysian Waqf Institutions: A Pilot Study. *Dalam CSR. Sustain. Ethic. Gov.: Vol. Part F3302 (hlm. 3–16)*. Springer Nature; Scopus. [https://doi.org/10.1007/978-3-031-53877-3\\_1](https://doi.org/10.1007/978-3-031-53877-3_1)
- Jannah, M., Sarkawi, A. A., Othman, J., & Ali, K. M. (2024). Management Strategies of a Productive Waqf-Based Forest in Bogor, Indonesia. *Jurnal Sylva Lestari*, 12(3), 741–759. Scopus. <https://doi.org/10.23960/jsl.v12i3.931>
- Kamaruddin, M. I. H., Hanefah, M. M., & Masruki, R. (2024). Challenges and prospects in waqf reporting practices in Malaysia. *Journal of Financial Reporting and Accounting*, 22(3), 752–765. Scopus. <https://doi.org/10.1108/JFRA-01-2022-0018>
- Kassim, S., Muhammad, N. M., Ariffin, K. M., Mahadi, N. F., Yusoff, S. S. M., & Salleh, N. S. (2024). Proposing a Novel Performance Management Framework for Malaysian Non-profit Organisations: Towards Achieving Sustainability. *Dalam Stud. Syst. Decis. Control (Vol. 515, hlm. 427–435)*. Springer Science and Business Media Deutschland GmbH; Scopus. [https://doi.org/10.1007/978-3-031-48479-7\\_36](https://doi.org/10.1007/978-3-031-48479-7_36)
- Laila, N., Sukmana, R., Hadingdyah, D. I., & Rahmawati, I. (2024). Critical assessment on cash waqf-linked sukuk in Indonesia. *Qualitative Research in Financial Markets*. Scopus. <https://doi.org/10.1108/QRFM-11-2023-0291>
- Lateh, A., Thongsuk, J., Machae, D., Masae, A., Lateh, A., Khongpheng, N., & Poteh, R. (2024). Proposed Management Model and Policies Inspired by PMDG Administration for Private Islamic Schools in the Deep South of Thailand. *Pakistan Journal of Life and Social Sciences*, 22(2), 6873–6883. Scopus. <https://doi.org/10.57239/PJLSS-2024-22.2.00519>
- Mahomeda, Z., & Sabab, I. (2024). Sustainable development: Exploring the role of islamic social finance in promoting sustainable development and social welfare. *Dalam The Future of Islamic Financ.: From Shari'ah Law to Fintech (hlm. 103–120)*. Emerald Publishing; Scopus. <https://doi.org/10.1108/978-1-83549-906-120241007>
- Megat, P. A., Al-Shaghdari, F., Bin Ngah, B., & Abdelfattah, S. S. (2024). Assessing the predictive benefits of Waqftech smart contracts on corporate waqf crowdfunding among

- Malaysian enterprises. *Journal of Islamic Marketing*, 15(5), 1303–1325. Scopus. <https://doi.org/10.1108/JIMA-08-2023-0262>
- Mikov, L. (2024). The Grand Vizier Ibrahim Pasha's Mosque in Razgrad (Bulgaria) and Its Waqf Deed from 1533. *Archaeologia Bulgarica*, 28(2), 71–96. Scopus.
- Mu'in, F., Edy, R. N., Indra, G. L., & Santoso, R. (2024). Strengthening the National Waqf Ecosystem through Legal Reform: An Analysis of Waqf Issues in the Provinces of Lampung and South Sumatra. *Al-Istinbath: Jurnal Hukum Islam*, 9(1), 81–100. Scopus. <https://doi.org/10.29240/jhi.v9i1.9320>
- Musoffa, A., Albanna, M. J., Lutfiani, H., Sabaruddin, R., & Wardi, S. (2024). THE DYNAMICS OF ACCEPTANCE AND RESISTANCE TO PRODUCTIVE WAQF: A Case Study of Mathali'ul Anwar and Al-Ishlah in Lamongan. *Miqot: Jurnal Ilmu-Ilmu Keislaman*, 48(2), 188–205. Scopus. <https://doi.org/10.30821/miqot.v48i2.1271>
- Nofianti, L., Mukhlisin, M., & Irfan, A. (2024). Cash waqf innovation in Islamic financial institutions and its governance issues, case studies: Indonesia, Malaysia, Türkiye. *Journal of Islamic Accounting and Business Research*. Scopus. <https://doi.org/10.1108/JIABR-12-2023-0420>
- Pirmani, U., & Kurniawan, E. (2024). From the Debate on the Legality of Waqf al-Ahlī to its Implementation iSoutheast Asia: Indonesia, Malaysia, and Singapore. *International Journal of Law and Society*, 3(2), 59–76. Scopus. <https://doi.org/10.59683/ijls.v3i2.81>
- Purbasari, H., Salim, S. A., Wahab, E. B., & Bawono, A. D. B. (2024). Ensuring Accountability of Waqf Management Systems Using a Systematic Literature Review Method. *Int. Conf. Intell. Cybern. Technol. Appl., ICICYTA*, 1348–1353. Scopus. <https://doi.org/10.1109/ICICYTA64807.2024.10913438>
- Qadri, H. M. D., & Ali, H. (2024). Islamic Microfinance: Landscape, Models and Future Prospects. *Dalam Islamic Microf.: Land., Models and Future Prospects* (hlm. 164). De Gruyter; Scopus. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85191533454&partnerID=40&md5=b3598405e9bc552c80aa84eb9f23f1e5>
- Qadri, R. A., Pratama, R. H., Khabibi, A., & Pratama, R. S. (2024). Refining the Cash-Waqf Blended Finance Model for Infrastructure Development. *Management and Accounting Review*, 23(1), 279–305. Scopus.
- Qosyim, R. A., & Zarkasyi, A. (2024). Management of Islamic Philanthropy-Based Education Financing in Increasing Access to Free Education for Orphans Children. *Munaddhomah*, 5(3), 270–283. Scopus. <https://doi.org/10.31538/munaddhomah.v5i3.1137>
- Ramdani, R., Widiastuti, T., & Mawardi, I. (2024). Implementation of Islamic values in waqf governance: A systematic literature review. *Journal of Islamic Marketing*, 15(8), 1925–1941. Scopus. <https://doi.org/10.1108/JIMA-03-2023-0079>
- Shuhada Ishak Yelkenci, N., & Bulut, M. (2024). Ottoman Cash Waqf Contracts and the Transactions from the Fifteenth to Nineteenth Centuries: A Source for the New Cash Waqf Fintech Contract Model and SDGs. *Dalam Islamic Financial Institutions from the Early Modern Period to the 20th Century Comparative Perspectives on the History and Development of Cash Waqfs* (hlm. 7–19). Springer Nature; Scopus. [https://doi.org/10.1007/978-3-031-51318-3\\_2](https://doi.org/10.1007/978-3-031-51318-3_2)
- Suhadi, S., Muhtada, D., Ramli, A., Baehaqie, I., Isnani, I., Rauf, A. S., Santyoko, L. A., & Ridha, M. (2024). Enhancing nazir capacity through legal literacy of land trust to ensure legal certainty in waqf land management. *Jurnal Pengabdian Hukum Indonesia*, 7(2), 119–134. Scopus. <https://doi.org/10.15294/jphi.v7i2.6693>
- Syarifuddin, F. (2024). Productive WAQF business models through the integration of Islamic social and commercial finance. *Edelweiss Applied Science and Technology*, 8(4), 620–655. Scopus. <https://doi.org/10.55214/25768484.v8i4.1440>
- Umam, K., Fedro, A., Isro'i, M. I., & Ekayani, M. (2024). Striking the balance: Fiqh Bi'ah and Productive Waqf Forests (PWFs) for sustainable forest management in Indonesia. *Journal*

of Islamic Accounting and Business Research. Scopus. <https://doi.org/10.1108/JIABR-03-2024-0090>

Zaenurrosyid, A., Shaharudin, S. A. B., & Sholihah, H. (2024). The Dynamics of Productive Waqf Management of Islamic Kingdom Property in Java. *Al-'Adalah*, 21(1), 149–174. Scopus. <https://doi.org/10.24042/adalah.v21i1.16384>

Zaenurrosyid, A., & Sholihah, H. (2024). The Islamic philanthropy model based on maslahah } ah } principles for developing Islamic campus in Java. *Ijtihad: Jurnal Wacana Hukum Islam Dan Kemanusiaan*, 24(2), 279–304. Scopus. <https://doi.org/10.18326/IJTIHAD.V24I2.279-304>

Zain, N. S., Noor, F. M., & Hassan, R. (2024). Islamic Sustainable Finance: How Does Waqf Matter? Dalam *Islamic Finance and Sustainable Development: A Global Framew. For Achieving Sustainable Impact Finance* (hlm. 120–129). Taylor and Francis; Scopus. <https://doi.org/10.4324/9781003468653-14>

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