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Maqasid al-Sharia and Algorithmic Governance in Digital Waqf Administration in Nigeria: Learning from Indonesia

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ABSTRACT

The use of digital technology in waqf administration offers great possibilities but poses issues of whether algorithmic decision-making is compatible with the *Maqasid al-Sharia* principles. In Nigeria, the lack of a proper regulatory framework regulating algorithmic governance within the context of digital waqf management has resulted in regulatory uncertainties, a lack of public trust, and poor realisation of waqf goals. This study explores the use of *Maqasid al-Sharia* in the regulation of algorithmic governance in the digitalization of waqf management in Nigeria by learning from the experiences of Indonesia in terms of its regulatory and institutional framework. By using a qualitative doctrinal research method, this study evaluates legislation, Islamic juristic literature, policies, and other scholarly materials from both countries. The findings show that Indonesia has been able to develop better regulatory frameworks that combine principles of Sharia with algorithmic governance, while Nigeria lacks any coherent standard of accountability and Sharia compliance in algorithmic decision-making. It is concluded that the use of *Maqasid al-Sharia* in algorithmic governance can increase transparency, equity, and trust in the digital waqf administration.

Keywords: Maqasid al-Sharia, Algorithmic, Digital Waqf, Nigeria, Indonesia

1. INTRODUCTION

However, the administration of waqfs in Nigeria provides a rare opportunity, considering high religiosity levels and socio-economic empowerment potential, but there are some important corporate governance issues to address[1]. The fact is that despite the presence of large amounts of philanthropic potential based on the Islamic

[1] Azwina Wati Abdull Manaf, Wong Hua Siong, and Hafiza Abdul Razak, "Legal Barriers and Opportunities in the Digital Transformation of Waqf Management in Malaysia: A Critical Analysis," *AZKA International Journal of Zakat & Social Finance* 6, no. 1 (2025): 137–57.

tradition in the country, the use of religion-based corporate governance models has not been consistent in the past[2]. First of all, the problem is associated with the lack of administrative capacity in terms of human resources and the lack of appropriate accounting and reporting systems, which can be considered typical for the whole world due to the lack of professional administration in small institutions[3]. Moreover, the absence of special regulations and infrastructure prevents the efficient work of this system, thus preventing its contribution to national welfare objectives. Therefore, the change of the current administrative structure is necessary for the further improvement of waqf administration to enable the efficient contribution of waqf properties to education, healthcare and poverty reduction[4].

For Indonesia, the *Maqasid al-Sharia* is the main normative principle that underlies the transformation of the waqf into a productive social financial institution. In light of the higher objectives of the Sharia, which include *ḥifẓ al-māl* and *maṣlaḥah*, the waqf assets must be managed to guarantee not only the preservation of the principal but also the enhancement of ongoing returns[5]. The above-mentioned framework implies accountability (*amanah*) and transparency (*bayyinah*) of the processes of managing the waqf assets in order to achieve the intentions of the donor throughout generations. Thanks to the inclusion of the *Maqasid* principles in its work, the administration of Indonesian waqf focuses on social justice and equity, making philanthropy an important part of national development[6]. In this way, it guarantees the compliance of the waqf with the law and ethics, while also empowering communities and fighting poverty through professional management of both fixed and movable property, including cash and securities.

Algorithms have come to be seen as a significant structural force that can help improve the credibility and efficiency of digital waqf governance in Indonesia[7]. The utilization of blockchain technology and the application of smart contracts and digital platforms can help overcome ongoing issues of lack of transparency and traceability of fund distribution. Such a technological approach enables decentralized and tamper-proof record-keeping, making sure that there are no risks associated with possible errors and manipulation during transactions[8]. The utilisation of smart contracts makes sure that waqf returns are automatically distributed in accordance with Sharia guidelines and the intentions of donors without any interference from third parties. With the implementation of such digital approaches to governance, Indonesian waqf

[2] Azwina Wati Abdull Manaf, Wong Hua Siong, and Hafiza Abdul Razak, "Modernizing Waqf: Navigating Legal and Digital Frontiers in the 21st Century," *AZKA International Journal of Zakat & Social Finance* (2025): 117–35.

[3] Azzam Al Hanif, Khurun'in Zahro, M. Sallahudin Rifqi Kurnia Aziz, Lathiefa Rusli, and Syahruddin Syahruddin, "Productive Waqf Governance Reform in the Digital Economy: A Comparative Legal Study," *Journal of Islamic Law on Digital Economy and Business* (2025): 101–20.

[4] Wali Saputra, "Digitalization of Waqf Accounting: A Systematic Review of the Role of Technology in Waqf Governance," *PENG: Jurnal Ekonomi dan Manajemen* 2, no. 4 (2025): 4544–60.

[5] Khoirun Nisa Alfina, Amelia Sri Kusuma Dewi, and R. Sjafi'i, "Examining Legal Certainty in Online Cash Waqf: The Role of Witnesses in Indonesian Islamic Philanthropy," *Theoretical and Applied Law* (2025): 9–23.

[6] Muhammad Permadi and Atin Risnawati, "Digital Transformation in Waqf and Hajj Fund Management: Sharia Compliance and Efficiency in 2025," *Al-Awqaf: Jurnal Wakaf dan Ekonomi Islam* 19, no. 1 (2026): 91–104.

[7] Wali Saputra, "Development of Digital Green Waqf for Social Sustainability in Riau, Indonesia," *Jurnal Ilmu Sosial dan Humaniora* 1, no. 3 (2025): 636–70.

[8] Siti Mustagfiroh and Nadya Nafiisah Khoirina, "Legal and Regulatory Challenges in the Implementation of Blockchain-Based Waqf in Indonesia," *WiShEL: Walisongo Journal of Sharia Economic Law* 1, no. 1 (2025).

organisations will be able to offer transparent financial history and auditable reporting dashboards.

In Indonesia, the legal basis for waqf is derived mostly from Law No. 41 of 2004 and Government Regulation No. 42 of 2006 that legally recognizes movable assets such as money and securities as valid waqf objects[9]. But a problematic issue comes up in the form of regulatory gaps in regulating digital platforms and algorithmic systems. Even though the legal basis for cash waqf is quite firm, the current regulations have failed to provide the technical operational standard of investment criteria, risk management, and cybersecurity in digital platforms. This causes overlap of jurisdictions as well as inconsistency in the reports made by Nazhir, the Ministry of Religious Affairs, and the Indonesian *Waqf Board* (BWI)[10]. In addition, there are also many managers who do not have enough financial literacy and technical knowledge to handle digital financial instruments professionally. This situation of the rapidly developing digital world and insufficient regulation poses a risk of procedural and data protection issues.

The innovation of the topic is evident in the way that *Maqasid*-related objectives have been incorporated into the algorithmic governance model to bring about reforms in administrative procedures within diverse jurisdictions[11]. Contrary to other studies that emphasize either the application of technology or jurisprudence principles, the current study has considered digital infrastructure as a tool for governance legitimacy, which bridges the gap between the top-level goals of Sharia law and administrative accountability. The purpose of this study is to examine Indonesia's unified reporting system of digital infrastructure and blockchain technology, in order to establish a minimum standard of reporting that could be applied in Nigeria. Through exploring ways through which algorithmic tools can ensure transparency and funding traceability, this study hopes to provide a framework for waqf administrators in Nigeria to improve the integrity and legitimacy of their organizations. Ultimately, this study hopes to show how lessons learned from Indonesia's experience can lead to the transformation of the Islamic social finance system in Nigeria.

2. METHOD

This research employs doctrinal legal research that conceptualizes law as an integrated set of binding laws, regulations, and institutional guidelines. The Research Approach incorporates functional comparative synthesis based on the common criterion for evaluation: protection of amanah of the waqif through effective governance. Data Collection Instruments for the primary sources of the normative doctrine will encompass the systematic cataloguing and inventory mapping of national statutes, ministerial regulations, and fatwas from Sharia authorities (such as the MUI Fatwa No. 3/2021). The secondary materials will be gathered using library

[9] Ismaul Fitroh, Firdaus Jeka, Samsul Arifin, Fitrahtul Saahira Khairunnisa, and Erniati Erniati, "Revitalizing Waqf Governance Through Digital Innovation: A Sharia Perspective on Transparency and Public Accountability," *Indonesian Journal of Sharia and Islamic Sciences* 1, no. 2 (2026): 46–56.

[10] Siti Maghfiroh and Dwi Puspitasari, "Digitalization and Transparency of Waqf Lands Certification: A Strategy to Enhance Public Trust from an Islamic Ethical Perspective," *Journal of Islamic Economics Perspectives* 8, no. 1 (2026): 72–88.

[11] Sessa Tiara Maretaniandini, Fadilatul Hilmiyah, Syahrir Akbar, and Abdelsalam Adam Hamid, "Implementation of Advanced Technology in Waqf Management: A Systematic Literature Review," *Journal of Islamic Economic Laws* 8, no. 1 (2025): 210–36.

research of peer-reviewed articles, institutional reports, and academic books within the topic areas of fintech and Maqasid. The Data Analysis Tools will comprise a thematic content analysis in order to identify implementation gaps.

3. RESULTS AND DISCUSSION

3.1. Waqf Administration in Nigeria

The management of waqf in Nigeria has grown from being a mere religious arrangement to becoming a developing form of social finance in Islam aimed at promoting poverty alleviation, education, health and development[12]. The term waqf refers to the perpetual dedication of assets or properties for charity purposes in accordance with Islamic law, and it has been practised in northern and southwestern Nigeria after adopting Islam within the eleventh and fifteenth centuries. Management of waqf in contemporary times is done by Islamic institutions, Sharia authorities, individuals, organizations, mosques and persons (mutawalli), depending on their legal and effectiveness levels[13]. Nigeria has the largest Muslim population in Africa, which counts up to 100 million people representing almost half of the Nigerian population; therefore, providing a large opportunity for the growth of waqf. Nevertheless, the mechanism is not well-developed compared to other places such as Indonesia and Malaysia because of bad governance and poor cooperation among institutions[14]. Research has proved that although there is a great potential of waqf in helping the government to finance projects relating to education, health, housing and humanitarian aid, its impact has been small because of lack of legal compatibility and inefficiency.

The system controlling the operations of waqf management in Nigeria is a very decentralized one emanating from the constitution of Nigeria and the pluralistic nature of the laws of the country[15]. Unlike Indonesia, which has central statutory laws regulating the administration of waqf via the Indonesian Waqf Board (BWI), there are no comprehensive laws governing the administration of waqf within Nigeria[16]. This is through the constitutional guarantee of freedom of religion, Islamic personal law, Sharia courts, trusteeship law and general principles of law about charities. Some of the northern states that use Sharia laws allow waqf under Islamic laws, while the private Islamic institutions and waqf programs run by the states manage their waqf properties independently[17]. There is no centralized database of waqf property,

[12] Farid Ahmad Marlion, "Implementation of Cash Waqf Linked Deposit in Islamic Banking in Indonesia: Regulations, Opportunities, Challenges, and Digital Era Prospects," *Al-Bank: Journal of Islamic Banking and Finance* 6, no. 1 (2026): 15–28.

[13] Norlaila Mazura Hj Mohaiyadin, Aini Aman, Mohd Rizal Palil, and Suzana Muhamad Said, "Addressing Accountability and Transparency Challenges in Waqf Management Using Blockchain Technology," *Journal of Islamic Monetary Economics and Finance* 8 (2022): 53–80.

[14] Nova Monaya and Andri Brawijaya, "Regulatory Model of Cash Waqf within the National Legal System and Its Challenges," *Jurnal Legisci* 3, no. 2 (2025): 121–32.

[15] Eric Krisna Sandi, "Shariah Compliance Risk Management in the Digital Era: An Integrative Review of Governance, Regulation, and Digital Transformation in Islamic Financial Institutions," *Journal of Sustainable Economic Harmony* 1, no. 1 (2025).

[16] Wali Saputra, "Digital Transformation and Audit Innovation in Waqf Institutions: A Systematic Literature Review," *Journal of Literature Review* 1, no. 2 (2025): 863–75.

[17] Nor Hafizah Ibrahim, Sharifah Norzehan Syed Yusuf, Amer Shakir Zainol, and Najahudin Lateh, "Strengthening Waqf Management in Malaysian Public University: An Exploratory Analysis of Issues and Challenges," *Journal of Advanced Research in Business and Management Studies* 42, no. 1 (2026): 1–14.

reporting system or an entity managing all the waqf properties in Nigeria. The scholars assert that this fragmentation of the legal regime for regulation has caused difficulties in relation to the registration process, governance structure, accountability process and dispute resolution process[18]. Notwithstanding the weaknesses of the institutions, the management of waqf has great potential to address the socioeconomic challenges facing Nigeria. As reported by the National Bureau of Statistics, about

As much as 63 per cent of the people were considered multidimensionally poor in 2022, implying a critical need to adopt new social financing approaches, different from what has been traditionally offered through the government[19]. Appropriately managed waqf funds are capable of financing various socio-economic institutions such as educational institutions, hospitals, technical training institutions, orphanages, water projects and affordable housing, among others, while also serving vulnerable populations in line with *Maqasid al-Sharia* objectives[20]. Furthermore, empirical research indicates that blending waqf with other Islamic social finance tools such as *zakat* and *sadaqah* may improve financial inclusion in northern Nigeria, where financial inclusion is relatively lower. The researchers have predicted that cash waqf would be able to raise billions of naira per year through developmental projects, provided there is suitable legislation, governance and public participation[21].

Nonetheless, several governance issues have continued to hamper the administration of waqf in Nigeria. Various studies have noted the problems of insufficient transparency, inadequate record-keeping, lack of a proper auditing system, inadequate professional capacity, risks of corruption, low public awareness, and accountability mechanisms[22]. *Waqf* assets in many instances are not documented or are documented through manual procedures and, therefore, it becomes difficult to trace, establish the ownership of waqf property, measure its investment performance, and protect the asset from any form of abuse. The lack of computerized registry and an integrated information management system has greatly affected efficiency and reduced donor confidence in the institutions[23]. Through qualitative studies carried out with the involvement of stakeholders in waqf, it has been found that lack of transparency and inadequate public trust limit the possibility of charitable endowment despite acknowledging the value of the waqf institution for both

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[18] Mohammed Abd-Alkarim Almomani, Mohyi Aldin AbuAlhoul, Mohammad Toma Suleiman Alqudah, and Ibrahim Khalaf Suleiman Al-Khalidi, "Exploring Digital Waqf Management: Opportunities and Challenges," *International Journal of Religion* 5, no. 12 (2024): 20–30.

[19] Umi Khaerah Pati, Pujiyono Pujiyono, and Pranoto Pranoto, "Sharia Fintech as a Sharia Compliance Solution in the Optimization of Electronic-Based Mosque's Ziswaf Management," *Padjadjaran Jurnal Ilmu Hukum (Journal of Law)* 8, no. 1 (2021): 47–70.

[20] Asri Sundari, Dadin Solihin, Mohamad Anton Athoilah, Ahmad Hasan Ridwan, and Muhammad Zaky, "Innovation in Waqf Management in the Digital Era to Promote Community Economy: An Implementation Analysis in West Java," *International Journal of Business, Law, and Education* 6, no. 2 (2025): 1490–1503.

[21] Anila Dani Sakinah, "Digital Transformation of Waqf Institutions and Its Impact on Financial Sustainability," *PAPUA: International Journal of Sharia Business Management* 2, no. 2 (2025): 34–49.

[22] N. M. Nawi, "Islamic Fintech and Digital Transformation: Opportunities and Shariah Governance Challenges," *Georgetown Journal of International Law* 47, no. 4 (2016): 1271–1319.

[23] Wali Saputra, "Standardization of Waqf Accounting: A Systematic Review of Implementation and Its Challenges in Various Nations," *Jejak Digital: Jurnal Ilmiah Multidisiplin* 1, no. 4 (2025): 2384–2400.

development and religion[24]. In the same way, recent research studies have equally shown the need for harmonized national legislation due to overlap in the role of various institutions responsible for regulating waqf activities[25].

From the recent developments, it is evident that there are efforts made by both scholars and policymakers on how to enhance waqf administration through modernization of governance, reforms, and accountability mechanisms using technology[26]. Scholars have continued to recommend the use of a central digital registry system, the use of digital waqf deeds, the use of blockchain to manage assets, the use of automated reporting systems, the use of artificial intelligence to monitor waqfs, and the use of algorithmic governance models, all of which may assist in making operations efficient and transparent[27]. All these proposed reforms are highly in line with *Maqasid al-Sharia* principles of protection of wealth (*hifz al-mal*), promotion of justice (*adl*), guarantee of accountability (*amanah*), and *maslahah*. From comparative studies, Indonesia is a role model due to its legal, institutional, technological and professional supervision. For Nigeria, it can benefit from this innovation to enhance governance, build trust among donors, enable monitoring of waqf assets, and optimize the contribution of waqf towards the development of Nigeria[28].

3.2. Understanding Maqasid al-Sharia and Algorithmic Governance in Digital Waqf Administration in Indonesia

In Indonesia, *Maqasid al-Sharia* is the primary basis for the modernization of the waqf administration system. The modernization process shifts the waqf from consumption to transformation, focusing on *ḥifẓ al-māl* and *taḥqīq al-maṣlaḥah*. The central idea is the protection of the corpus while creating a continuous benefit for educational, health, and social welfare[29]. By applying these higher objectives, the waqf administration in Indonesia will achieve accountability (*amanah*) and transparency (*bayyinah*) in order to protect the intention of the donor through the generations. Scholars need to note that the requirement to report is not a mere procedural issue; it is needed in order to achieve social justice and empowerment[30]. This system makes it

[24] Nuraini Chaniago, Lucky Nugroho, Firdayetti Firdayetti, Wardah Islami, and Volkhonova Mariya Igorevna, “Digital Transformation in the Dynamics of Sharia Accounting Standards: Challenges and Opportunities in the Era of 4.0 and Society 5.0,” *Pelita: Jurnal Penelitian, Terapan dan Aplikatif* 1, no. 3 (2024): 204–20.

[25] Siti Afiqah Zainuddin, Mohd Safian Abdul Rahman, Muhammad Ikram Darus, Simona Mihai Yiannaki, Roslizawati Che Aziz, Fakhitah Ridzuan, Adeneye Yusuf Babatunde, Evi Dwi Kartikasari, and Liyana Ahmad Afip, “The Role of Digital Transformation in Enhancing Financial Accountability and Donor Engagement in Waqf Institutions,” in *Integrating Artificial Intelligence, Security for Environmental and Business Sustainability*, vol. 1 (2025), 295–304.

[26] Izra Berakon, Hendy Mustiko Aji, and Muhammad Riza Hafizi, “Impact of Digital Sharia Banking Systems on Cash-Waqf among Indonesian Muslim Youth,” *Journal of Islamic Marketing* 13, no. 7 (2022): 1551–73.

[27] Sulistyowati, Raditya Sukmana, Ririn Tri Ratnasari, Ascarya, and Tika Widiastuti, “Issues and Challenges of Waqf in Providing Healthcare Resources,” *Islamic Economic Studies* 30, no. 1 (2022): 2–22.

[28] Agung Wijayanto and Basar Dikuraisyin, “Developing an Integrative Fintech Model for Productive Waqf Management: A Case Study of LMI Surabaya,” *Journal of Public Power* 10, no. 1 (2026): 203–18.

[29] Mohd Hisham Johari, Norfadilah Kamaruddin, and Mohd Tarmizi Ibrahim, “Gamifying Waqf Management: A Conceptual Framework for Digital Platforms to Boost Engagement and Transparency,” *Journal Islamic Philanthrophy and Social Finance* 8, no. 1 (2026): 12–18.

[30] Qorri Maftukhah and Latazalina Aisyah Nahdoh, “Digital Cash Waqf and Legal Transformation in Indonesia: Harmonizing Islamic Philanthropy with Positive Law,” *Khuluqiyya: Jurnal Kajian Hukum dan Studi Islam* (2026): 41–58.

possible for waqf to become a sustainable social finance tool that combines the ethical values of Islam with the welfare needs of the current era.

Algorithmic governance in the digital waqf sector of Indonesia can be considered a structural transformation towards technologically based accountability. Such transformation presupposes the use of blockchain technology, smart contracts, and immutability of transaction ledgers to create a decentralized system in which transactions cannot be altered or edited[31]. Unlike in conventional practices, digital governance provides opportunities for immediate auditing and traceability of money transfers, which helps greatly reduce the possibility of errors and the danger of fraud. Smart contracts automate the distribution of waqf profits, which means that beneficiaries, such as students or micro-small medium enterprises, receive money according to pre-established Sharia requirements[32]. By integrating algorithmic methods, Indonesian waqf organizations move from transaction-based to governance-based digital systems. The adoption of technology creates verifiable financial tracks that allow for efficient monitoring by authorities such as the Indonesian Waqf Board (BWI) without interfering in the process of transferring money[33].

The institutional landscape of Indonesian waqf has witnessed notable development, as reflected in the facts and figures derived from official reports. For example, according to the State of the Global Islamic Economy (SGIE) Report 2024/2025, Indonesia currently occupies the third place among the countries making progress towards the Islamic economy[34]. Data collected from the Indonesian Waqf Board (BWI) show a constant increase in cash waqf collection, amounting to IDR 819 billion in 2019 to IDR 2.92 trillion in 2024. The mentioned development is facilitated by the increased number of Lembaga Keuangan Islam yang Memperoleh Dana Wakaf Kas (LKSI PWU) certified institutions[35]. Their number rose from 18 in 2019 to 50 institutions in 2024. At the same time, the existing level of realization constitutes less than 1% of the country's annual potential that amounts to IDR 180 trillion. Such a gap calls for effective mobilization through innovations. Indeed, respected journals prove that the use of digital banking in connection with Islamic social finance has enabled democratic access for people, especially tech-savvy youths who require efficiency and transparency[36].

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[31] Bachrul Ulum and Miftahul Ulum, “Cash Waqf in the Era of the Industrial Revolution 4.0 in Sharia Financial Institutions from a Sharia Economic Perspective,” *LAN TABUR: Jurnal Ekonomi Syariah* 7, no. 2 (2026): 263–71.

[32] Kahtan Abedalrhman, “Islamic FinTech for Syria's Reconstruction Finance: A Risk-Governed Framework for Sukuk, Digital Payments, Waqf, and Sharia-Compliant Investment” (2026).

[33] Siti Mazwin Kamaruddin, Salbiah Mokhtar, Norainah Abdul Rahman, Kamariah Abdullah, Arina Rahmat, Azila Ahmad Sarkawi, and Azra Rahmat, “Waqf Development and Management: A Systematic Literature Review of Best Practices, Challenges, and Strategies,” *Proceeding of International Conference on Science and Technology* 3, no. 1 (2025): 9–15.

[34] Alfia Azzuhra, Sunarsih Sunarsih, Azza Ibraisama Ersyada, and Taufikur Rohman, “Regulatory Challenges and Sharia Compliance in the Operational Management of Takaful Companies,” *Jurnal Ilmiah Al-Tsarwah* 9, no. 1 (2026): 9–23.

[35] Bagas Heradhyaksa, Nur Khoirin, Mustla Sofyan Tasfiq, and Ahmad Wahyudi, “Cross-Jurisdictional Reporting Standards for Cash Waqf: A Comparative Normative Legal Study of Indonesia and Malaysia,” *El-Mashlahah* 16, no. 1 (2026): 155–82.

[36] Ani Faujiah, “Analysis of Waqf Management in the Context of Islamic Finance: A Case Study on Cash Waqf in Indonesia,” *SAUJANA: Jurnal Perbankan Syariah dan Ekonomi Syariah* 7, no. 2 (2025): 135–49.

The legal framework that regulates waqf management in Indonesia is provided in Law No. 41 of 2004 and Government Regulation No. 42 of 2006, legitimising the use of movable property, such as money and stocks, as objects of waqf. To improve financial transparency, the Indonesian Institute of Accountants (IAI) adopted PSAK 112 (Statement of Financial Accounting Standard) as of January 2021[37]. Under this statement, the entities managing waqf have to prepare financial reports, including the statements of activity and cash flow, in order to increase transparency. The governance process in this case is regulated by the Indonesian Waqf Board (BWI), which issues administrative guidelines and ensures report cycle implementation[38]. Nevertheless, there are certain problems with overlap of authorities between the Ministry of Religious Affairs and the OJK, especially in terms of regulating digital platforms and setting cybersecurity standards[39]. Compliance with PSAK 112 is inconsistent in small entities due to the lack of standardised digital reporting formats, which should be introduced throughout the country.

The digital infrastructural setup in Indonesia presents a fertile ground for the future of waqf administration[40]. According to reports, Indonesia was expected to have 221 million internet users in 2024, translating to a penetration rate of 79.5%. Moreover, smartphone adoption is at 75%, with more than 210 million users. Such a high level of digital connectivity would present an opportunity for the scaling of waqf services via mobile platforms[41]. The high level of connectivity in Indonesia would help to make waqf global, allowing the Muslim diaspora to engage using interoperable payment gateways and blockchain technology. However, actualising the IDR 180 trillion potential requires addressing challenges such as low levels of digital literacy and varying technological readiness levels among regional managers[42]. It is important to note that although digitalization of waqf administration is technologically possible, it requires institutional and policy reforms to avoid data and cybersecurity issues. Alliances between the waqf institution and fintech firms will help to establish a user-friendly digital environment[43]. Overall, the Indonesian learning curve gives Nigeria some tips on how to use data-driven governance to increase citizen engagement in Islamic philanthropy.

[37] Alya Shofiana Rizka and Lathif Hanafir Rifqi, "Stock Waqf as an Innovation of Productive Waqf in Strengthening Institutional Regulation and Economic Potential in Indonesia," *Al-Mustashfa: Jurnal Penelitian Hukum Ekonomi Syariah* 11, no. 1 (2026): 103–22.

[38] Erwan Aristyanto, "Digital Transformation of Waqf Management: Innovation Pathways and Policy Directions in Muslim-Majority Developing Countries," *Muslim Heritage* 10, no. 2 (2025): 307–24.

[39] Iyanul Haq, "Cryptocurrency as Waqf Asset: An Islamic Legal Analysis," *Private Law Insight* 1, no. 1 (2025): 1–15.

[40] Tika Kartika Kartika and Ahmad Mulyadi Kosim, "Analysis of Digital-Based Cash Waqf Management Strategies (Sharia-Based Crowdfunding Platforms) as an Instrument for University Management," *JPG: Jurnal Pendidikan Guru* 7, no. 1 (2026): 38–50.

[41] Husnul Hatimah, Eko Ganis Sukoharsono, Ali Djamhuri, and Noval Adib, "Exploring Waqf Management Transformation: Opportunities and Challenges (Case Study in Ismuhu Yahya Foundation Pontianak)," *Journal of Ecohumanism* 3, no. 8 (2024): 58–68.

[42] Musleh Harry, Fakhruddin Fakhruddin, Mahbub Ainur Rofiq, and Meisy Fajarani, "Electronic Registration of Waqf Land under the PTSL Program from a *Maslahah* Perspective: A Study at the Indonesian Waqf Agency Office in East Java," *El-Mashlahah* 15, no. 2 (2025): 393–414.

[43] Izni Nadirah Najmuddin and Amal Hayati Ishak, "Systematic Literature Review on Waqf Issues and Challenges to Sustain Waqf Development Initiatives," in *Finance and Law in the Metaverse World: Regulation and Financial Innovation in the Virtual World* (2024), 1–11.

3.3. What Nigeria can Learn from Indonesia Digital Waqf Administration and Maqasid al-Sharia and Algorithmic Governance

Nigeria can emulate the experience of Indonesia in being a leader in regulation within the global Islamic economy, especially through adopting standardized accounting framework. At present, Indonesia is ranked third in the world in the State of the Global Islamic Economy (SGIE) Report 2024/2025, and pioneered in introducing PSAK 112 (Statement of Financial Accounting Standard) for waqf accounting that became operational since January 1, 2021. Such a framework acts as a consistent framework in managing the waqf assets, where institutions need to provide accurate accounts such as the statement of activities and statement of cash flows[44]. Nigeria, which suffers from similar limitations of lack of professionalism and a fragmented system, can apply this approach in order to bridge the gap between the philanthropic capacity and realization [Text 1, 817]. For instance, while Indonesia's cash waqf potential is estimated at IDR 180 trillion per year, its realization is less than 1%, and thus, even with the standards, building the capacity of nazhir (waqf managers) is needed to succeed[45].

The importance of appreciating the function of *Maqasid al-Sharia* as a fundamental governance anchor is yet another important lesson for Nigeria to learn from the Indonesian experience. Reporting in Indonesia is seen not only as an obligation imposed by bureaucracy, but as a religious duty aimed at upholding the higher goals of Sharia, namely *ḥifẓ al-māl* (safeguarding of the wealth) and *taḥqīq al-maṣlaḥah* (achieving the well-being)[46]. This calls for managing the waqf wealth in a manner characterized by *amanah* (duty) and *bayyinah* (clarity), ensuring that the essence of this wealth remains intact and not wasted through lack of transparency[47]. Nigeria needs to adopt these ethical values in the process of digitization of its administrative system to create an environment that will be much more financially disciplined. This will ensure that waqf becomes an effective social finance tool which can deal with the *DARURIYAT* (essential) needs of the community like education and health care[48].

Nigeria could exploit algorithmic governance with the help of blockchain technology in order to overcome problems relating to trust deficiencies and operational mistakes[49]. The example of Indonesia shows that blockchain will allow

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[44] Wali Saputra, "Comparison of Waqf Accounting Regulations and Practices: Systematic Literature Review of International Perspectives," *CARONG: Jurnal Pendidikan, Sosial dan Humaniora* 2, no. 2 (2025): 940–55.

[45] Mufti Faqih Ali, "Digital Waqf Ecosystems: Governance, Accountability, and Inclusive Development," *Ukanus: Indonesian Journal of Economics and Business* 2, no. 2 (2025): 47–59.

[46] Yagoub Belbachir and Djilali Dellali, "Mechanisms for Enhancing Waqf Governance in the Context of Digital Transformation and the Transition Towards Smart Administration," *Revue Académique de la Recherche Juridique* 16, no. 2 (2025): 718–44.

[47] Yaser Syamlan Taufik and Asnan Purba, "Business-Industry Collaboration in Developing Waqf Deposit Prototypes and SOPs in Islamic Financial Institution," *Tazkia Islamic Finance and Business Review* 19, no. 1 (2025): 213–41.

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overcoming certain structural problems such as human errors while issuing receipts and dishonesty of recipients. Being a distributed and unalterable database, blockchain documents transactions in real-time, so there will be no opportunity to change or delete records, which is important in order to meet the *ta'bid* (permanence) requirement of *waqf*. Nigeria could learn how to apply blockchain as a public ledger to prevent overlapping funds allocation, e.g., when students receive scholarships from various institutions without mentioning it[50]. Also, smart contracts could facilitate the process of waqf returns disbursement in accordance with Sharia rules, so that money will go to education and MSMEs development.

Use of a multi-layered institutional setup is an important administrative tool that Nigeria needs to borrow from Indonesia. Indonesia adopts a "dual accountability track," whereby nazhir are in charge of the programmatic report, and LKS-PWU report the receipt and finances to several regulatory authorities, such as the BWI and OJK. Such an approach prevents information asymmetry and creates a transparent chain of management[51]. In Indonesia, the number of certified LKS-PWU increased from 18 in 2019 to 50 in 2024. This demonstrates the need for participation of the banking system to make the process more democratic. In Nigeria, coordination is needed between the oversight agencies and financial regulators in order to align Sharia laws with financial regulation. Embedding digital waqf platforms into the central governance system will help to ensure that digitalization becomes a means of institutional legitimacy instead of mere operational improvement, thus ensuring protection of the ecosystem from risks[52].

Thirdly, Nigeria can benefit from innovative digital methods of mobilizing modern asset classes such as Stock Waqf and Cryptocurrency. Shares have been accepted as movable waqf assets in Indonesia, whereas cryptocurrency has been categorized under *sil'ah* (commodity)[53]. This would provide more opportunities to the digitally native generation in Indonesia. With the number of internet users being estimated at 221 million (79.5% penetration) and smartphone users accounting for 75%, the base of digital scalability is already large in Indonesia[54]. Nigeria, which has a sizable young tech-literate population, can benefit from crowdfunding methods and mobile service provision, thereby reducing transaction costs and increasing the donor base. Digital platforms such as Kitabisa.com show how technology can help mobilize

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micro-waqf, where individuals can contribute in smaller amounts together[55]. In order to be successful, Nigeria needs to be cognizant of the fact that these innovations need to be accompanied by digital literacy programs and regulatory sandboxes to test different methods without undermining Sharia compliance and trust.

4. CONCLUSION AND RECOMMENDATION

In sum, the findings of this study show that digital waqf management in Nigeria can be drastically revolutionised through an application of the integrated approach to Maqasid-based governance and algorithmic accountability, utilized in Indonesia. While the country has tremendous potential in the field of philanthropy, it still needs a more comprehensive approach as a result of institutional insufficiencies and lack of uniform reporting. Indonesia's achievements as the world leader of the waqf sector based on PSAK 112 and centralization of a national policy through BWI serve as an applicable model for reforms. Still, the paper notes that technology alone does not work as the remedy; its implementation is conditioned by institutional preparedness, competence of employees, and legal consistency. To improve institutional legitimacy, it is suggested that the country develop a centralized waqf institution like BWI to harmonise Sharia and administrative aspects. In addition, the authorities need to introduce a minimal cross-regional standard for reporting and adopt blockchain technologies to facilitate real-time tracking of waqf funds. Through training of nazhir in digital technologies and strategic partnerships with fintech companies, the country can develop a people-centric waqf system.

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