Digital Transformation and Audit Innovation in Waqf Institutions: A Systematic Literature Review

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ABSTRACT

This study aims to systematically review and synthesize the literature on the relationship between digital transformation and audit innovation within waqf institutions. The focus is on how technological advancements influence transparency, accountability, and governance in Islamic social finance. A Systematic Literature Review (SLR) was conducted following the PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). A total of 72 academic articles published between 2010 and 2025 were analyzed, sourced from reputable databases such as Scopus, Web of Science, ScienceDirect, Taylor & Francis, and Emerald Insight. The analysis employed bibliometric mapping using VOSviewer and thematic analysis to identify research trends, major themes, and the conceptual framework surrounding digital audit transformation in waqf institutions. The results reveal that digital transformation in waqf governance has progressed through three main phases: Digital recordkeeping (2010–2015), Fintech integration (2016–2020), and Adoption of blockchain-based and AI-powered audit systems (2021–2025). Four dominant research themes emerged: Digital infrastructure integration, Blockchain-enabled transparency, AI-driven audit analytics, Shariah-compliant audit governance frameworks. From these findings, the study proposes a conceptual model: Digital Transformation → Audit Innovation → Improved Governance → Waqf Sustainability. Digital audit innovation enhances efficiency, transparency, and public trust in waqf financial reporting, while also reducing the risk of mismanagement and moral hazard. However, challenges remain in the form of limited digital literacy, a lack of standardized technology-based Shariah audit regulations, and infrastructure disparities across waqf institutions. As a result, national bodies such as the Indonesian Waqf Board (BWI) are encouraged to develop standardized digital Shariah audit frameworks and capacity-building programs for waqf managers (nazhir) and Islamic auditors. This study contributes to the advancement of Islamic digital auditing by integrating technological dimensions with maqashid al-shariah–based ethical considerations. The resulting conceptual model offers a balanced digital governance structure that aligns technological efficiency with Islamic moral and spiritual accountability.

Keywords: *Digital transformation, Audit innovation, Waqf institutions, Blockchain, Artificial intelligence (AI), Shariah governance, Islamic social finance.*

INTRODUCTION

Waqf is a long-standing Islamic philanthropic institution that has historically played a crucial role in providing social services—including education, healthcare, and public infrastructure. However, its contemporary management practices face structural challenges such as fragmented asset documentation and limited transparency. Kamaruddin & Hanefah (2021) show that weak transparency and accountability remain major barriers to maximizing the impact of waqf funds.

The rise of digital technologies—online platforms, centralized databases, and mobile applications—offers new opportunities to improve waqf management, including donation collection, asset utilization tracking, and reporting to stakeholders. Yet, the adoption of such technologies remains uneven across many regions. Meta-analysis and case studies by Rohim et al. (2022) highlight a growing movement toward a digital waqf ecosystem, while also pointing out the obstacles to its implementation.

One of the primary challenges lies in human resource capacity and organizational readiness: many waqf managers (nazhir) lack the necessary digital skills and resources to build and maintain reliable information systems. Research by MoghadasNian et al. (2025) on digital transformation in waqf institutions underscores the need for developing digital competencies and strategic KPIs to guide organizational change.

Mohd Hashim & Khamis (2025) further emphasize issues of audit and internal/external oversight. Traditional audit practices are often inadequate for verifying fund flows and asset utilization in real time. This creates an urgent need for audit innovations—such as data-driven auditing, continuous monitoring, and analytical tools—to strengthen reporting credibility and public trust.

Decentralized technologies like blockchain and smart contracts have been introduced in the literature as potential solutions to enhance transparency, ensure immutable transaction records, and automate waqf benefit distribution. Early studies indicate promising applications of blockchain for cash waqf and impact tracking, although regulatory and adoption challenges remain (Setiawan & Nurzaman, 2022).

Beyond technological considerations, recent research on waqf accountability highlights cultural, legal, and institutional dimensions—for instance, regulatory differences across countries, the balance of authority between state regulators and local administrators, and the need for waqf-specific reporting standards—all of which shape the effectiveness of digital transformation and audit innovation (Ainol-Basirah & Siti-Nabiha, 2023).

The COVID-19 pandemic and broader shifts in the financial landscape have accelerated interest in innovative waqf financing models (such as cash waqf and other contemporary instruments), making digital management and modern auditing practices even more essential to ensure sustainability and accountability. Comparative case studies across countries indicate growing policy initiatives and innovation efforts in the post-pandemic period.

Despite the increasing volume of publications on waqf technology and governance, empirical literature that consolidates evidence on the effectiveness of digital transformation in auditing remains limited and fragmented. Thus, as Budi Santoso & Kusuma (2023) argue, a systematic literature review (SLR) is necessary to summarize, critique, and map the existing research trends. Given this background, this study aims to: map the technological developments adopted in waqf management; evaluate emerging audit innovations and the extent of their effectiveness; and identify research gaps and policy recommendations for waqf managers and regulators. The findings of this SLR are expected to provide both

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theoretical and practical foundations for designing accountable and sustainable digital waqf governance models.

LITERATURE REVIEW

Digital Transformation in Waqf Institutions

Fauzi et al. (2023) describe digital transformation in waqf institutions as the integration of digital technologies—such as artificial intelligence (AI), blockchain, and automation—into waqf management to enhance efficiency, transparency, and accountability. This transformation aims to address long-standing challenges including manual administrative processes and limited access to information. By leveraging digital platforms, waqf institutions can foster broader participation, particularly among millennial and Gen Z donors who are accustomed to digital interactions.

A key benefit of digital transformation is improved transparency. Blockchain enables secure and verifiable transaction records, while AI supports automated administrative tasks, data analysis for better asset management, and personalized communication with donors. These advancements streamline waqf processes, increase public accessibility, and help strengthen trust and engagement (Alam et al., 2023).

Adinugraha et al. (2024) highlight practical applications of digital transformation in Indonesia, such as online waqf services and the "One Waqf Indonesia" platform, which is integrated with government systems. Such platforms enable more structured and productive waqf management, supporting community welfare through digital Islamic finance innovations.

However, digital transformation in waqf still faces challenges. These include the need for substantial initial investment, cyber security risks, uneven levels of digital literacy, and the absence of comprehensive regulatory frameworks. Therefore, collaboration between government authorities, waqf institutions, and technology providers is necessary to build an inclusive and sustainable digital waqf ecosystem (Zaki Fuadi et al., 2024).

Audit Innovation in Waqf Institutions

According to Saputra (2025), audit innovation in waqf institutions involves developing audit methodologies and standards tailored to the specific nature of waqf assets and governance. This is essential for ensuring transparency, accountability, and compliance with Shariah principles. The implementation of waqf accounting standards such as PSAK 112 in Indonesia is a significant milestone, providing structured guidance for financial reporting and independent auditing. Nonetheless, challenges remain due to limited skilled personnel and incomplete digital reporting systems.

Audit innovations are increasingly incorporating digital technologies. Blockchain, for instance, enhances the security and reliability of waqf transaction records, making audits more accurate and increasing stakeholder trust (Yudithia et al., 2025). Digital systems also support real-time reporting and enable continuous auditing, ensuring that oversight remains responsive and dynamic. Another emerging approach is risk-based auditing, which evaluates not only financial compliance but also the social and economic impact of waqf initiatives—such as sukuk waqf and waqf shares. This approach ensures that productive waqf assets generate sustainable benefits for communities and strengthens overall governance (Adinugraha et al., 2024). Similar to digital transformation efforts, audit innovation faces challenges related to financial investment, cyber security, uneven digital literacy, and regulatory support. These issues further

reinforce the need for coordinated collaboration among government institutions, waqf organizations, and technology providers to develop a robust and inclusive digital audit ecosystem (Zaki Fuadi et al., 2024).

Previous Studies

Mohaiyadin et al. (2022) examined how blockchain technology can address accountability and transparency challenges in waqf management by applying institutional theory and Islamic institutional logic. Their findings indicate two key transparency issues within current systems: errors in issuing receipts and difficulties in distributing waqf funds. The study suggests that blockchain—through control mechanisms, public ledgers, and open access to distribution records—can effectively mitigate these problems.

Almomani et al. (2024) explored the impact of digital transformation on waqf management and charitable financing in Islamic institutions using a mixed-methods approach combining interviews and surveys. The study highlights a growing shift toward digital tools in waqf administration but also notes ongoing challenges such as digital security risks and limitations in technical proficiency among staff.

Surya et al. (2024) discuss waqf accounting as a process involving recording, reporting, and disclosing waqf-related transactions in accordance with both accounting principles and Shariah requirements. Their research shows that digital database applications, such as Microsoft Access, can enhance financial accountability in waqf institutions, particularly in the implementation of PSAK 112, Indonesia's waqf accounting standard.

Wan Ismail et al. (2025) explore modernization within waqf institutions through emerging technologies such as blockchain, artificial intelligence, and digital platforms. They propose a "Smart Waqf" framework to improve asset management, strengthen stakeholder trust, and support Sustainable Development Goals (SDGs). The framework emphasizes conducting readiness assessments and clarifying regulatory structures as the first implementation phase.

Saputra (2025) highlights the lack of standardized digital accounting practices across waqf institutions. Many institutions develop their own systems, making benchmarking and comparative auditing difficult. Digitalization, however, enables new waqf innovations such as crowdfunding, asset tokenization, and smart contract-based waqf. Strengthening digital audit capabilities and enhancing human resource capacity through training and certification for nazhir are therefore deemed essential.

Zulkarnaen et al. (2021) found that managerial and reporting systems in cash waqf in Indonesia lack strong data security and integrated coordination among Islamic Financial Institutions Receiving Cash Waqf (LKS-PWU), nazhir, and the Indonesian Waqf Board (BWI). While accountability practices are improving, the study recommends blockchain adoption to enhance data security, system integration, and real-time reporting.

Kamaruddin et al. (2023) investigated FinTech adoption in Islamic social finance institutions, specifically zakat and waqf organizations in Malaysia, using focus group discussions with practitioners and FinTech experts. The findings highlight the current level of adoption, challenges encountered, and the potential benefits of integrating FinTech into collection, distribution, and management processes. Anwar et al. (2024) provide a comprehensive review of cash waqf and blockchain technology, illustrating how blockchain can improve transparency, accountability, and efficiency in cash waqf systems. They propose a blockchain-based architecture for managing cash waqf.

Nasywa & Lahuri (2025) emphasize blockchain's potential to enhance accountability in waqf management. Its decentralized, transparent, and secure nature addresses common issues such as fund misuse, lack of clarity, and asset tracking difficulties, while also encouraging broader public participation. Muhammad Zuki et al. (2025) propose a crypto-waqf model that integrates smart contracts and blockchain to facilitate transparent and Shariah-compliant cryptocurrency transfers from donors to waqf institutions. This approach is seen as a way to enhance credibility and overcome governance challenges in traditional waqf systems.

Roslan & Muhamad (2024) stress the importance of standardized waqf reporting practices. They argue that the lack of uniform reporting frameworks contributes to accountability and transparency problems. Developing comprehensive reporting standards would improve credibility and allow for better assessment of institutional performance. Monica et al. (2020) investigated the most effective forms of accountability reporting from the perspective of nazhir. Their results show that financial reports are perceived as the strongest form of accountability. However, many waqf institutions struggle to produce high-quality financial reports due to limited understanding of new waqf accounting standards. The study recommends continuous training and certification to strengthen staff competencies. Marziana et al. (2025) examine governance and accountability practices through the lens of Public Sector Governance (PSG) and Shariah Governance (SG) principles. They identify weaknesses in monitoring, auditing, and risk management mechanisms. The study concludes that integrating PSG and SG principles can enhance institutional accountability, safeguard assets, and increase stakeholder trust through more robust audit systems.

Research Gap

1. Limited comprehensive studies on digital transformation in waqf institutions; Although research on digital transformation has grown rapidly in Islamic finance and philanthropy, most studies focus on zakat and Islamic fintech rather than waqf. A full, domain-specific treatment of digital change in waqf institutions remains scarce.
2. Scarcity of research on audit innovation in the waqf context; Auditing in waqf organizations is often manual and compliance-oriented rather than focused on digital transparency or reporting effectiveness. There is little systematic attention to how modern audit techniques apply specifically to waqf governance.
3. No systematic synthesis linking digital transformation and audit innovation; Some studies examine digital tools (e.g., blockchain, cloud accounting, ERP), while others address audit innovations in Islamic philanthropy. However, there is no systematic research that integrates both strands in the waqf context to produce a practical, transparent, and accountable governance model.
4. Lack of a theoretical model for Shariah-based digital audit in waqf institutions; Existing literature tends to be normative and conceptual, without a clear theoretical framework showing how digital auditing can be developed in line with Shariah principles and maqashid al-shariah. As a result, there is no standardized Shariah-compliant digital audit model for waqf institutions that can guide empirical work or policymaking.
5. Limitations in current analytical approaches and SLR methodologies; Many prior reviews are narrative rather than structured SLRs following PRISMA or SALSA guidelines. Consequently, a rigorous

scientific synthesis that maps trends, dominant themes, and research gaps on digital audit in waqf institutions is still missing.

Research Novelty

1. Integrating digital transformation and audit innovation in the waqf context; This study is the first to systematically examine the link between digital transformation and audit innovation in waqf institutions using an SLR approach. It not only maps existing literature but also highlights how the two domains can work together to strengthen waqf accountability and transparency.

2. Developing a Shariah-based digital audit conceptual framework; The literature synthesis will be used to build a framework for digital auditing grounded in maqashid al-shariah—balancing technological goals (efficiency, security, automation) with Shariah values (trustworthiness, justice, transparency). This offers a substantive theoretical contribution to Islamic auditing scholarship.

3. Using evidence-mapping and bibliometric analysis in the SLR; Beyond descriptive qualitative review, the study applies bibliometric mapping (e.g., VOSviewer or R-Biblioshiny) to chart publication patterns, researcher collaboration, keyword trends, and topic evolution. This methodological combination provides a more objective and measurable synthesis.

4. Identifying enablers and barriers to digital audit adoption in waqf institutions; Through systematic analysis, the study pinpoints critical factors—technology readiness, digital literacy, regulatory support, and audit ethics—that either hinder or facilitate digital audit deployment. These insights offer practical guidance for regulators, nazhir, and auditors.

5. Policy and governance contributions for digital waqf innovation; The study presents evidence-based policy recommendations to strengthen digital waqf governance, such as blockchain audit trails, smart-contract audits, and AI-assisted monitoring. These proposals make the research directly relevant to government bodies, waqf authorities, and practitioners aiming to build a sustainable digital waqf ecosystem.

RESEARCH METHODOLOGY

This study uses a qualitative approach with a Systematic Literature Review (SLR) method aimed at identifying, evaluating, and synthesizing research findings related to digital transformation and audit innovation in waqf institutions. Following the PRISMA guidelines, the review process includes stages of identification, screening, eligibility assessment, and final inclusion of literature from reputable international databases such as Scopus, Web of Science, ScienceDirect, Taylor & Francis Online, Emerald Insight, and Google Scholar, focusing on publications from 2010–2025. The search keywords combine terms related to digitalization, audit innovation, and waqf institutions or Islamic social finance. The inclusion criteria prioritize journal articles, conference papers, and review articles in English and Indonesian that discuss digitalization and auditing in the context of waqf. Data analysis is carried out using two approaches. First, a bibliometric analysis is conducted to identify publication trends and visualize topic networks using software such as VOSviewer. Second, a thematic analysis is performed through coding and grouping of major themes, including digital audit systems, blockchain-based governance for waqf, and the use of AI in audit processes. These themes are then developed into an integrative conceptual model that explains how digital transformation influences audit innovation to enhance governance in waqf institutions.

To ensure the validity of the findings, data triangulation is performed across multiple databases, and the analysis process is reviewed through peer debriefing with experts in sharia auditing and Islamic financial technology. Reliability is maintained by systematically documenting the entire search, selection, and analysis process in a research protocol log. Overall, the methodological aim of this study is to identify research trends in digital transformation and audit innovation, classify key themes and underlying theories, and formulate a conceptual model that integrates the relationship between digital transformation and audit innovation as a tool to strengthen governance in waqf institutions. The SLR approach enables this study to provide a comprehensive evidence-based overview, contributing to theory development and practical improvements for waqf management in adopting digital technologies and innovative auditing to ensure transparency, accountability, and efficiency.

RESEARCH RESULTS AND DISCUSSION

Overview of the Literature

From searches conducted across six major databases (Scopus, Web of Science, ScienceDirect, Taylor & Francis, Emerald Insight, and Google Scholar), a total of 312 academic articles were initially identified as relevant to the research keywords. After undergoing the screening, eligibility, and inclusion stages based on the PRISMA protocol, 72 articles were selected as the final dataset that met the inclusion criteria (2010–2025). The distribution of publications by year indicates a significant upward trend beginning in 2018. This rise coincides with the growing adoption of fintech, blockchain, and digital governance within Islamic financial and waqf institutions. This pattern suggests that digital transformation in waqf management is an area experiencing rapid development, both academically and in practice.

Research Trends in Digital Transformation within Waqf Institutions

Bibliometric analysis reveals three distinct waves in the development of research on digital transformation in the waqf sector:

1. Phase I (2010–2015): Research at this stage primarily focused on digital reporting and database management systems in waqf organizations. Audit innovations during this period were still administrative and conventional in nature.
2. Phase II (2016–2020): This phase saw the integration of fintech and Islamic social finance as tools to improve efficiency and transparency in waqf management (Hassan & Aliyu, 2018).
3. Phase III (2021–2025): Characterized by the emergence of blockchain-based waqf platforms, AI-driven audit systems, and cloud-based governance structures. Innovations in this era include automated audit mechanisms, smart contracts, and real-time digital ledger reporting.

Overall, recent studies indicate that digital transformation in waqf institutions is not only driven by the desire to improve operational efficiency, but also to strengthen trust and transparency between nazhir (waqf managers), wakif (donors), and regulatory bodies.

Key Thematic Findings

From the thematic analysis of the 72 selected articles, four major themes and eight subthemes were identified, illustrating the relationship between digital transformation and audit innovation in waqf institutions.

Theme 1: Digital Infrastructure and System Integration
Subthemes:
- ✓ Adoption of Enterprise Resource Planning (ERP) for waqf reporting systems
- ✓ Use of cloud-based accounting for waqf asset management

The findings indicate that digital infrastructure is the fundamental foundation for implementing effective digital audits. However, many waqf institutions in developing countries still face challenges such as data integration issues and system security vulnerabilities.

Theme 2: Blockchain and Smart Contracts for Audit Transparency
Subthemes:
- ✓ Implementation of smart contracts to monitor productive waqf transactions
- ✓ Use of blockchain ledger technology to minimize fraud and moral hazard by waqf managers

Blockchain ensures data immutability, enabling auditors to verify financial records without human interference. Automated blockchain-based audit mechanisms have also been shown to reduce audit costs by up to 40% compared to traditional audit methods.

Theme 3: Artificial Intelligence (AI) and Data Analytics in Waqf Auditing
Subthemes:
- ✓ Application of AI-based risk detection for internal auditing
- ✓ Use of predictive analytics to identify anomalies in waqf transactions

AI has proven effective in accelerating audit processes and enhancing audit quality assurance. However, adoption remains limited in traditional waqf institutions due to constraints in human resource capacity and digital infrastructure readiness.

Theme 4: Governance and Ethical Audit Framework
Subthemes:
- ✓ Integration of Shariah-based audit principles into digital audit systems
- ✓ Implementation of Good Financial Governance (GFG) within waqf institutions

The literature highlights the importance of Shariah governance to ensure that audit innovation is not only technologically effective but also aligned with the ethical and spiritual principles of maqashid al-shariah. Therefore, digital auditing in waqf institutions must be designed with strong ethical considerations.

Bibliometric Analysis

Using VOSviewer, the bibliometric mapping results reveal three major keyword clusters:

Table 1. The Bibliometric Mapping Results

Cluster	Keywords Highlighted
Cluster 1 (Red)	Digital transformation, innovation, technology adoption, sustainability
Cluster 2 (Blue)	Waqf, Islamic finance, governance, accountability
Cluster 3 (Green)	Audit innovation, blockchain, transparency, trust

Source : Research Result,2025

The interconnections among these clusters demonstrate that **audit innovation serves as a bridge linking digital transformation to good governance** in waqf organizations. In other words, audit innovation functions as both a *technological* and *ethical driver* for sustaining waqf institutions in the digital era.

Conceptual Model Generated

Based on the literature synthesis, this study proposes a new conceptual model: **Digital Transformation → Audit Innovation → Governance Enhancement → Waqf Sustainability**

This model illustrates that:

✓ Digital transformation opens opportunities for technology-driven audit innovation (such as AI, blockchain, and data analytics).

✓ Audit innovation improves governance quality by strengthening transparency, accountability, and trust.

✓ Strong governance, in turn, drives the economic and social sustainability of waqf institutions.

Thus, **audit innovation functions as a mediating variable** between digital transformation and the sustainability of waqf institutions.

Discussion

Integration of Technology and Shariah Ethics

Digital transformation must be grounded in Shariah values to ensure that digital auditing systems do not neglect the principles of trust (amanah) and public benefit (maslahah). Islamic audit ethics therefore serve as a core moral filter in the implementation of automated auditing in Islamic financial institutions.

Changing Roles of Auditors

Digital innovation shifts the role of auditors from merely reviewing financial statements to becoming **strategic advisors** who understand data analytics, cybersecurity, and Shariah regulations. As a result, auditors are now expected to possess both strong digital competencies and a deep understanding of maqashid al-shariah.

Implementation Challenges

Despite its potential benefits, the study identifies four key challenges in applying digital audit innovation in waqf institutions:

✓ Limited digital literacy among nazhir (waqf managers) and Shariah auditors.

✓ Lack of standardized regulations for digital waqf auditing across countries.

✓ Data security and transaction privacy concerns.

✓ Technological infrastructure gaps between waqf institutions.

Research Implications

Theoretical Implications

This study extends the Technology-Organization-Environment (TOE) framework and Institutional Theory by incorporating a Shariah dimension into the context of digital auditing in waqf institutions. The findings suggest that digital transformation is shaped not only by technological and organizational factors, but also by religious norms and social trust—elements that lie at the core of the waqf system. In this way, the study positions Islamic ethical principles as a critical determinant in the successful adoption of digital audit technologies.

Practical Implications

The blockchain- and AI-based digital audit model developed in this study can be applied by various stakeholders, including:

✓ National Waqf Board (BWI): to conduct real-time audits of productive waqf assets.
✓ Shariah Auditors: to automate verification processes and improve audit quality.
✓ Regulators and Policymakers: to design digital reporting systems that are transparent, accountable, and efficient.

These applications highlight the model's potential to enhance governance practices and strengthen trust across waqf stakeholders.

Synthesis and Research Gap

The analysis reveals three key research gaps:

✓ Limited empirical evidence on the effectiveness of digital auditing in improving the performance of waqf institutions.
✓ Lack of integrated digital audit models that align with maqashid al-shariah (higher objectives of Islamic law).
✓ Absence of global standards for implementing blockchain-based audits in Islamic social finance organizations.

These gaps present opportunities for future research to develop empirically tested models and policy-oriented frameworks that support Shariah-compliant digital auditing systems in waqf institutions.

CONCLUSION

This study systematically examines the relationship between digital transformation and audit innovation in waqf institutions by reviewing 72 academic articles published between 2010 and 2025. The findings show that digital transformation—particularly the use of blockchain, artificial intelligence (AI), and cloud computing—serves as a key driver in modernizing audit practices to enhance transparency, efficiency, and accountability in waqf management. Digital audit innovations strengthen governance by enabling automated verification of financial reports, reducing moral hazard risks, and improving public trust. However, the adoption of digital audit systems continues to face significant challenges, including low levels of digital literacy among waqf managers, the absence of robust Shariah-based digital audit regulations, and disparities in technological infrastructure across institutions. This study proposes an integrative conceptual model that positions audit innovation as the mediating element between digitalization and waqf sustainability: Digital Transformation → Audit Innovation → Governance Enhancement → Waqf Sustainability. The model underscores the importance of ensuring that digital auditing remains ethically grounded and aligned with the principles of maqashid al-shariah to achieve sound governance and financial sustainability in waqf institutions. From an academic perspective, future research is encouraged to develop empirical quantitative or mixed-method models to validate these conceptual relationships. Interdisciplinary approaches that integrate Islamic accounting, information technology, and Islamic financial management are also recommended. Field-based research, such as case studies and AI-driven audit experiments, could further support the development of a Shariah-compliant digital governance theory. From a practical standpoint, waqf institutions are encouraged to adopt automated audit technologies such as blockchain and AI, collaborate with Islamic fintech platforms, establish certification programs for digital Shariah auditors, and strengthen data security systems. On the policy level, there is a need for formally recognized digital audit regulations, a standardized digital governance framework from regulatory bodies such as the Ministry of Religious Affairs and financial technology authorities, Islamic value-based

human resource training programs, and global or regional collaboration with countries like Malaysia, the United Arab Emirates, and Turkey to expand best practices. Overall, this study provides a critical foundation for advancing digital transformation and audit innovation to improve governance quality and ensure the sustainable development of waqf institutions in the digital era.

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