

DIGITAL TRANSFORMATION IN ZAKAT COLLECTION AND DISTRIBUTION IN INDONESIA: A LITERATURE REVIEW

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ABSTRACT

This study aims to examine the digital transformation in the collection and distribution of zakat in Indonesia, through a comprehensive literature review of recent studies (within the last five years) indexed in Sinta or Scopus. This is a systematic literature review (SLR) of peer-reviewed journal articles, proceedings and reports published between 2020-2025, using inclusion criteria based on digitalisation of zakat management, collection or distribution in Indonesia. Analytical synthesis is used to identify key themes, gaps, and future research directions. The review finds that digital transformation (including mobile apps, digital payment platforms, blockchain, data analytics) has positively impacted accessibility, efficiency and transparency of zakat collection and distribution in Indonesia. However, significant challenges remain in digital literacy, regulatory frameworks, integration of systems and equitable access across regions. The study is limited to literature published in Indonesia or about Indonesia, and focused on last five years, which may exclude earlier foundational work. Future research could include empirical quantitative studies evaluating the impact of specific digital tools on zakat outcomes. For zakat institutions (Lembaga Amil Zakat/LAZ and the Badan Amil Zakat Nasional (BAZNAS)) and policymakers, insights highlight the need to invest in user-friendly digital platforms, build digital literacy, ensure interoperability and Sharia-compliance, and develop supportive regulation. The digital transformation of zakat systems offers greater inclusion, better targeting of beneficiaries, and enhanced trust and accountability contributing to poverty alleviation and socio-economic empowerment in Muslim communities. This review synthesises recent literature (2020–2025) specifically on Indonesia, identifies emerging digital technologies (e.g., blockchain) in zakat management, and proposes a conceptual agenda for research and practice in the digital era of Islamic social finance.

Keywords: digital zakat, fintech, Islamic social finance, blockchain, zakat governance.

I. INTRODUCTION

Zakat, as one of the five pillars of Islam, plays a pivotal role in Muslim societies to mobilise financial resources for socio-economic welfare, poverty alleviation and inclusive development. In Indonesia the largest Muslim-majority country the potential for zakat collection is substantial, yet the gap between potential and actual realisation remains significant. This gap has increasingly drawn attention in the era of digital economy, where information and communication technologies (ICT) offer new channels and tools for zakat collection and distribution. Recent studies indicate that digital platforms may help overcome traditional barriers such as limited access, administrative inefficiencies, lack of transparency and weak targeting of mustahiq. For example, research mapping digital potential estimated that digital zakat collection in Indonesia in 2019 could reach an annual amount of approximately Rp 63.9 trillion.

The motivation of this review arises from the rapid evolution of digital technologies (mobile applications, fintech, blockchain), the urgency of enhancing zakat management institutions (Amil Zakat

Organisations, both governmental and non-governmental), and the pressing need for evidence-based policy guidance. While several empirical and conceptual studies have emerged in recent years, a consolidated synthesis focusing on digital transformation in both collection and distribution phases of zakat in Indonesia remains scant.

Therefore, this study aims to address the research gap by conducting a literature review of recent studies (2020–2025) on digital transformation in zakat collection and distribution in Indonesia. The objectives are: (1) to identify the key themes, technologies, and drivers in digital zakat management; (2) to examine the impacts and challenges of digitalisation in collection and distribution; and (3) to propose directions for future research and practice.

The remainder of the paper is structured as follows. Section II presents the theoretical foundation and previous literature on digital transformation and zakat management. Section III outlines the methodology for the literature review. Section IV discusses results and critical discussion of the findings. Section V draws conclusions and offers recommendations.

II. LITERATURE REVIEW

2.1 Theoretical foundations: Digital transformation & Islamic social finance

Digital transformation refers to the integration of digital technologies into all areas of business and organisations, fundamentally changing how they operate and deliver value (Egodawe, Sedera & Bui, 2022). Although much of the digital transformation literature is rooted in business and management contexts, the themes of access, efficiency, transparency, data-driven decision-making and stakeholder engagement apply equally to Islamic social finance. In zakat management, digital transformation implies the use of ICT, mobile applications, big data analytics, blockchain, and fintech to enhance the collection, management, and distribution of zakat funds.

From the perspective of Islamic social finance, zakat management institutions (Amil Zakat organisations) must uphold Sharia principles of accountability (*hisbah*), transparency (*islah*), and effective distribution to the eight *asnaf* beneficiaries. Digital tools can support these objectives by facilitating tracking of payments, automating recipient targeting, enabling real-time reporting, and improving stakeholder communication. Yet, digital transformation also raises questions of digital divide, governance, regulatory compliance, cybersecurity, and cultural adoption especially in diverse socio-economic contexts like Indonesia.

2.2 Digital transformation in zakat collection

Several studies in Indonesia have explored the role of digitalisation in enhancing zakat collection. For instance, (Fauzia, Mulatsih, & Alexandi, 2021) mapped the potential of digital zakat collection across Indonesian provinces using K-means clustering and EDA, estimating a digital collection potential of Rp 63.9 trillion annually. The study emphasises that synergy among zakat institutions (OPZ), government and community is needed to optimise digital collection. Similarly, (Mulyo, Taufiqurrohman, Wardani, & Hamzah, 2023) conducted a systematic literature review of articles from Sinta 2/3 and Scopus, finding that only a small portion (16 out of 240) of zakat-related journals discussed digitalisation—highlighting the novelty and emerging nature of this topic. More recently (Suprayitno, Hawariyuni, Pratomo, & Hasibuan, 2025) used time-series data and an ARDL model to empirically confirm that digitalisation has both short-term and long-term positive impacts on zakat collection in Indonesia.

Key drivers identified in the literature include: increased internet penetration and mobile device use; digital payment infrastructure; shifting donor behaviour (especially among younger generations); government regulation and institutional capacity; improved transparency and accountability via digital systems. However, barriers are also noted: digital literacy gap, inequitable access (especially rural and low-income populations), inadequate integration of systems among zakat organisations, and regulatory/legal ambiguity.

2.3 Digital transformation in zakat distribution

While much literature focuses on collection, distribution of zakat funds via digital systems is equally important. Digital platforms enable improved targeting of mustahiq, more efficient disbursement mechanisms (e.g., mobile wallet, e-voucher), real-time monitoring and reporting, and data analytics to evaluate impact. For example, (Hartono, 2022) reports that the digital transformation efforts by BAZNAS improved both collection and distribution performance, with increasing beneficiaries and SIMBA users as part of the digital system. Also, the qualitative study of digital zakat awareness in Palangka Raya found that majority of respondents considered digital zakat more practical, but challenges remain regarding equitable participation (Ariyadi, Sanawiah, Ningsih, Muhammadiyah, & Raya, 2025). Literature also points to emerging technologies such as blockchain for ensuring transparency and traceability in zakat distribution (Putri, Aji, Sayyidina, Muaffa, & Bagus, 2025).

2.4 Challenges and gaps in the literature

The review reveals several recurring challenges in digital transformation of zakat. First, digital inequality: remote areas, older age groups and low-income mustahiq may lack access or capability to use digital platforms. Second, institutional and regulatory issues: many zakat organisations have legacy systems, fragmented data silos, and lack coherent national policy for digital zakat. Third, Sharia compliance and trust: digital platforms must ensure Sharia integrity, data security, and transparency to maintain trust. Fourth, limited empirical quantitative studies measuring impact (most studies are descriptive or qualitative). As (Mulyo et al., 2023) note, research on digitalisation of zakat management remains limited in volume and depth.

2.5 Summary of literature and research agenda

In sum, the literature indicates a growing but nascent field of digital transformation in zakat collection and distribution in Indonesia. While technologies and platforms are evolving, more rigorous empirical studies, cross-regional analyses, impact assessments, and integration of advanced technologies (e.g., AI, blockchain) are needed. A research agenda could include: (1) quantifying causal impact of digital platforms on zakat collection/distribution outcomes; (2) exploring the role of fintech and blockchain in zakat ecosystems; (3) studying digital inclusion and equity in zakat services; (4) investigating regulatory and governance frameworks for digital zakat; and (5) designing integrated digital systems across collection–distribution lifecycle with real-time analytics. Figures and tables should be numbered consecutively in the order in which they appear in the manuscript. Each figure and table must include a sequential label (e.g., Figure 1, Figure 2; Table 1, Table 2, etc.). A sample table format is provided for reference below.

III. METHODOLOGY

This study adopts a systematic literature review (SLR) design, aligned with protocols in the digital zakat literature (e.g., Mulyo et al., 2023). Inclusion criteria: (1) peer-reviewed journal articles or proceedings indexed in Scopus and/or Sinta 2/3; (2) published between 2020 and 2025; (3) focused on digitalisation, digital platforms or technology in the context of zakat collection and/or distribution in Indonesia; (4) full-text accessible. Exclusion criteria: articles outside Indonesia, non-digital/technology focus, or non-peer reviewed reports.

The literature search was conducted across databases (Google Scholar, Scopus indexed journals) using keywords: “digital zakat”, “zakat digital Indonesia”, “zakat collection digital”, “zakat distribution digital Indonesia”. After screening titles and abstracts, relevant articles were selected. Data extraction captured year, authors, technology focus, collection/distribution stage, method, context, key findings. Analytical synthesis was applied to identify themes, gaps and propose future agenda..

IV. RESULTS AND DISCUSSION

4.1 Overview of selected literature

Table 1 summarises (for illustration) key studies reviewed.

Table 1. Summary of key studies on digital transformation in zakat in Indonesia

Author(s) (Year)	Focus	Stage (Collection/Distribution)	Method	Key Findings
Fauzia (2021)	Mapping digital potential for zakat collection	Collection	K-means/EDA	Potential Rp 63.9 trillion/year in digital collection; need synergy OPZ/gov
Mulyo et al. (2023)	Systematic literature review of digitalisation in ZMO	Collection & management	SLR	Only 16 of 240 journals addressed digitalisation; emerging field
Hartono (2022)	Case of BAZNAS digital transformation in collection & distribution	Both	Case/description	Digital efforts increased collection, distribution, users of SIMBA
Suprayitno et al. (2025)	Empirical ARDL on digitalization & macro factors in zakat collection	Collection	Time-series quantitative	Positive long-term impact of digitalisation on zakat collection
Putri et al. (2025)	Blockchain application in zakat management	Both	Literature review	Blockchain offers transparency, traceability, but regulatory & Sharia issues persist

4.2 Discussion of key themes

Accessibility & inclusion

The literature emphasises that digital platforms reduce transactional friction for muzakki (donors), enabling anytime-anywhere payment and easier engagement (Sugeng, Triwibowo, Saputra, Abdul, & Yusof, 2024). Fauzia's mapping shows that provinces with higher digital infrastructure have higher potential for digital zakat collection (Fauzia et al., 2021). However, digital inclusion remains uneven older, rural, low-income populations may be excluded, as reported in the Palangka Raya study (Ariyadi et al., 2025).

Efficiency, transparency and accountability

Digital tools enable enhanced process efficiency (payment automation, data analytics) and improve accountability via traceable workflows. (Hartono, 2022) shows that the digitalisation efforts of BAZNAS improved both collection and disbursement performance. Blockchain-centred studies like (Putri et al., 2025) argue that immutable ledgers bolster transparency and trust. The time-series empirical study confirms digitalisation has significant positive effect on collections (Suprayitno et al., 2025).

Institutional capacity, regulatory & Sharia compliance

Despite technological promise, zakat institutions face institutional and regulatory constraints. (Mulyo et al., 2023) highlight that digitalisation remains scarce in the literature and practice. Sharia compliance, data security, platform interoperability and unified regulation are recurrent gaps. For example, (Putri et al., 2025) mention absence of clear regulatory guidelines for blockchain-based zakat in Indonesia.

4.3 Implications for practice and policy

For zakat institutions, the evidence suggests the following actionable points: develop mobile-friendly, secure, interoperable payment and distribution platforms; ensure user-centric design to accommodate varying digital literacy; invest in data analytics for targeting of mustahiq; integrate systems across collection and distribution; build national regulations and governance frameworks for digital zakat; pilot advanced technologies (e.g., blockchain) with Sharia-compliance and risk management.

At the policy level, government and regulatory bodies should incentivise digital infrastructure for zakat management especially in underserved regions, mandate interoperability and data-sharing among OPZ, provide digital literacy programmes for communities, and establish guidelines for new technologies in Islamic social finance.

4.4 Research gaps and future agenda

While the literature is growing, several gaps persist: (1) empirical quantitative studies measuring the causal impact of digital platforms on zakat collection/distribution outcomes are limited; (2) inter-regional comparative studies (urban vs rural; Java vs outside Java) are scarce; (3) advanced technologies (AI, blockchain, big data) are discussed conceptually but few implementation evidence blocks exist; (4) studies on distribution stage (mustahiq targeting, post-distribution impact) are fewer compared to collection; (5) digital equity and inclusion issues (digital divide, gender, age, income) need deeper investigation. Future research should design robust evaluations, mixed-method studies, and longitudinal tracking of digital initiatives in zakat ecosystem.

V. CONCLUSION AND RECOMMENDATION

This literature review shows that digital transformation in zakat collection and distribution in Indonesia presents significant opportunities: increased accessibility for donors, improved efficiency and transparency for institutions, and stronger social impact for beneficiaries. Key technologies such as mobile applications, digital payment platforms, analytics and blockchain are driving change. However, challenges remain: digital divide, institutional capacity, regulatory frameworks, Sharia-compliance and empirical evidence of impact.

For practitioners, it is recommended to adopt user-centric digital platforms, ensure equitable access, integrate collection-distribution systems, and collaborate with fintech and government. For policymakers, nationwide regulation, digital literacy programmes, infrastructure development outside major urban centres and standards for digital zakat tools are essential. For researchers, future studies should employ rigorous empirical methods, address distribution stage of zakat, examine advanced technologies in context, and explore inclusion and equity issues.

In conclusion, digital transformation is not simply the adoption of technology, but a systemic shift in how zakat is mobilised, managed and distributed. If properly implemented, digitalisation can strengthen the role of zakat as a tool for socio-economic development in Indonesia. Further empirical and applied research is needed to fully harness this potential.

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