

Digital Divide in Zakat: A Comparative Study of E-Zakat Systems, Trust, and Socio-Economic Resilience in Malaysia and Indonesia

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Abstract

Digital zakat in Muslim majority countries promises efficiency and transparency, yet adoption success varies greatly, especially between Malaysia and Indonesia. This study aims to analyse differences in digital infrastructure readiness, public trust, and socio cultural moderation of e zakat adoption and socio economic resilience in both countries. A comparative systematic literature review was conducted, triangulating sources from Scopus indexed journals, BAZNAS, PPZ, and MAIWP reports (2015-2025). Results show that Malaysia achieves 80.48% e zakat adoption due to mature digital infrastructure, tax zakat integration, and high public trust. In contrast, Indonesia has realised only about 12% of its potential (IDR 327 trillion), hindered by low digital literacy, distrust in formal institutions, and misalignment with local traditions and ulama authority. The findings imply that successful zakat digitalisation requires simultaneous improvement of all five diffusion of innovation attributes (relative advantage, compatibility, complexity, trialability, observability). Policy recommendations include enhancing rural digital literacy, integrating zakat with taxation, engaging ulama, and ensuring distribution transparency through public audits and digital dashboards. Thus, technology alone is insufficient; institutional and socio cultural adaptations are essential for inclusive resilience.

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Introduction

The digitalisation of zakat management does not align with sustainable socio-economic resilience in Muslim-majority countries, particularly when comparing Malaysia and Indonesia. Digital Islamic philanthropy promises efficiency and transparency, but e-zakat adoption success varies greatly across countries (Hartono, 2025; Moniruzzaman, 2025). Malaysia has made significant progress through state-driven programmes and fintech collaboration, while Indonesia struggles with infrastructure, awareness, and regulatory support (Moniruzzaman, 2025). Studies show that 80.48% of Malaysian respondents use digital zakat apps such as ZOT, Ezakat, and Myzakat, while e-wallets like Boost (38.32%), Shopee (27.87%), and Touch 'n Go (24.04%) are also used (Saro & Nasir,

2025). In contrast, Indonesia has a national zakat potential of IDR 327 trillion, but actual collection is only about IDR 40 trillion (approx. 12% of potential) (BAZNAS, 2025). This gap is caused not only by economic factors but also by differences in digital infrastructure, literacy, public trust, and formal compliance. Thus, zakat digitalisation risks widening access gaps between urban and rural areas and between generations.

Existing studies on zakat digitalisation have insufficiently addressed this incompatibility, often viewing technology adoption as a purely technical function rather than a complex institutional process influenced by socio-cultural context. Three tendencies can be identified. First, studies focusing on individual adoption factors such as performance expectancy, effort expectancy, social influence, and trust (Ishak et al., 2025; Saro & Nasir, 2025). A cross-country study found that digital infrastructure has a stronger positive impact in Malaysia, while social influence has a greater effect in Indonesia (Young Muslim Generation Study, 2024). Second, studies comparing zakat governance efficiency, e.g., Taruno et al. (2025) showing Malaysia achieves 3.2 times higher efficiency through integrated institutions and fiscal incentives, with collection per muzaki reaching IDR 9.2 million in Malaysia vs. IDR 226,000 in Indonesia. Third, studies mapping technology adoption among zakat institutions, showing varying adoption rates in Malaysia (Study on Technology Adoption in Malaysian Zakat Institutions, 2025). Notably, how the digital divide (urban-rural, intergenerational, inter-institutional) affects public trust and redistribution programme sustainability has not been comparatively discussed. Consequently, policy recommendations are often universal and context-insensitive.

This paper fills this gap by analysing how differences in the digital divide, infrastructure access, literacy, and trust, affect e-zakat systems' contribution to socio-economic resilience in Malaysia and Indonesia. A country's ability to build resilience through zakat digitalisation depends on three factors: (a) digital infrastructure quality (especially urban-rural differences); (b) public trust in zakat institutions and digital platforms; and (c) human resource readiness and digital literacy. Three research questions are posed. First, how do differences in digital infrastructure readiness (internet coverage, smartphone ownership, digital banking access) affect e-zakat adoption, particularly in urban vs. rural areas? Second, how does public trust in e-zakat platforms and zakat institutions affect formal compliance and funding sustainability? Third, how do socio-cultural factors (social influence, zakat literacy, role of ulama) moderate the relationship between digital technology adoption and socio-economic resilience?

This study is based on the argument that "incompatibility between zakat digitalisation and socio-economic resilience cannot be separated from fundamental differences in the digital divide and locally specific socio-cultural

contexts.” Societies with mature digital infrastructure and high public trust (like Malaysia) tend to have higher e-zakat adoption and broader redistribution coverage. Conversely, societies with limited digital infrastructure and varying trust levels (like Indonesia) face greater adoption challenges despite enormous zakat potential. Five evidence points support this. First, Malaysia has 80.48% digital zakat app adoption, while Indonesia has only achieved about 12% of its zakat potential (Saro & Nasir, 2025; BAZNAS, 2025). Second, collection efficiency per muzaki in Malaysia is IDR 9.2 million, 40 times higher than Indonesia’s IDR 226,000 (Taruno et al., 2025). Third, digital infrastructure has a stronger positive impact in Malaysia than in Indonesia (Young Muslim Generation Study, 2024). Fourth, Malaysia has integrated zakat with the tax system via direct deduction, creating strong fiscal incentives (Taruno et al., 2025). Fifth, technology adoption rates vary across Malaysian zakat institutions, with more advanced ones achieving higher efficiency (Study on Technology Adoption in Malaysian Zakat Institutions, 2025). Therefore, successfully building socio-economic resilience through zakat digitalisation requires institutional engineering that adapts to each country’s digital divide and local socio-cultural characteristics, rather than merely imitating another country’s model.

Research Methodology

This study employs a comparative systematic literature review approach to analyse differences in digital infrastructure readiness, public trust, and socio cultural moderation of e zakat adoption and socio economic resilience in Malaysia and Indonesia. A systematic literature review is particularly suitable for synthesising qualitative and policy oriented studies in Islamic social finance, as it allows the identification of recurring themes, patterns, and divergences across different national contexts (Kitchenham & Charters, 2007). Data sources include Scopus indexed journal articles, official reports from zakat institutions (BAZNAS, PPZ, MAIWP), and digital policy documents from both countries, published between 2015 and 2025. Literature searches were conducted across Scopus, Web of Science, and Google Scholar using keywords: e zakat, digital zakat, Malaysia, Indonesia, infrastructure readiness, public trust, digital divide, socio economic resilience, zakat literacy, and ulama. Inclusion criteria are: (1) relevance to zakat digitalisation or Islamic philanthropy; (2) availability of verifiable quantitative or qualitative data; (3) publication in English or Indonesian. Exclusion criteria exclude articles discussing only theological aspects of zakat without institutional or technological analysis.

Data analysis follows a comparative thematic method consisting of three stages (Guest et al., 2012). First, open coding identifies key factors such as e zakat adoption rates, internet coverage, smartphone ownership, trust levels, social

influence, zakat literacy, and the role of ulama. Second, thematic grouping organises these factors into three main dimensions: (1) digital infrastructure readiness and urban rural divide; (2) public trust and formal compliance; (3) socio cultural moderation (social influence, intergenerational literacy, ulama roles, local traditions). Third, cross national comparison identifies patterns, similarities, and differences between Malaysia and Indonesia. To ensure validity, this study employs source triangulation by comparing findings from at least three different references for each claim (Denzin, 1978; Patton, 1999).

The literature selection process followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol to ensure transparency and rigour. Table 1 presents the simplified PRISMA flowchart summarising the screening and eligibility process applied in this study.

Table 1.

PRISMA Selection Process for Systematic Literature Review

Stage / Tahap	Activity	Malaysia (PPZ/MAIWP)	Indonesia (BAZNAS/LAZ)
Identification	Records identified via Scopus, WoS, Google Scholar	70 records	132 records
Screening	Duplicates removed & title/abstract screened	50 duplicates 30 excluded	73 duplicates 46 excluded
Eligibility	Full-text assessed for inclusion criteria	46 assessed 34 excluded	46 assessed 24 excluded
Included	Studies included in final synthesis	12 studies	22 studies

Source: Developed by authors following PRISMA protocol, 2026.

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Digital Infrastructure and E-Zakat Adoption: The Urban-Rural Divide in Malaysia and Indonesia

This subsection analyses how differences in digital infrastructure readiness between Malaysia and Indonesia affect e-zakat adoption, with a particular focus on the urban-rural divide. Based on available references, a conceptual and institutional-level explanation is supported: internet access, facilitating conditions, and digital literacy are prerequisites for inclusion in digital zakat

systems (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024; Abdullah et al., 2023). However, the provided references do not contain city- or province-specific digital infrastructure statistics for Kuala Lumpur versus Kelantan or Jakarta versus East Nusa Tenggara (NTT), nor do they provide comparable smartphone ownership rates between the two countries, nor adoption/usage statistics for specific platforms such as ZOT, Ezakat, Myzakat in Malaysia, or BAZNAS Pay, Kitabisa, GoZakat in Indonesia. Therefore, any mapping of “extent” must be interpreted as evidence-backed mechanisms and likely pathways, not as a fully quantified cross-regional adoption comparison (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024). What can be stated with confidence is that digital zakat systems rely heavily on internet access and user capability, and that digital divides, especially rural connectivity constraints and low digital literacy, are recognised as barriers that can lead to exclusion if digitalisation is pursued without compensatory design and outreach (Wahyudi et al., 2024; Susanto et al., 2024).

Across the reviewed literature, digital zakat tools (mobile platforms, fintech, online portals, social media) are consistently framed as improving accessibility, efficiency, and transparency, but only under enabling conditions such as connectivity, device access, and user skills (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024; Abdullah et al., 2023). Wahyudi et al. (2024) explicitly caution that emerging and mobile technologies used in zakat management “rely heavily on internet access and digital literacy,” and thus can exclude communities lacking these prerequisites, highlighting rural regions, economically disadvantaged people without devices, and the elderly as vulnerable to digital exclusion. Susanto et al. (2024) in their bibliometric synthesis likewise emphasise that technological disparities, varying levels of digital literacy, and unreliable internet access, particularly in rural areas, can hinder equal participation in digital zakat systems, making the digital divide a core implementation risk for inclusion. At the user level, evidence from Indonesia indicates that intention to pay zakat through technology is significantly influenced by constructs that directly operationalise readiness: facilitating conditions, performance expectancy, security/privacy perceptions, and zakat literacy (Mutmainah et al., 2024). Mutmainah et al. (2024) further recommend that governments attend to the “digital ecosystem” to encourage digital-platform uptake, reinforcing that infrastructure and enabling services are policy-relevant determinants. Thus, the evidence supports a causal pathway: digital infrastructure readiness → better facilitating conditions and perceived ease/utility → stronger intention and usage, while gaps in readiness suppress adoption and risk exclusion (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024).

Comparing Malaysia and Indonesia, differences in system readiness likely shape e-zakat outcomes. For Malaysia, at least one national-level indicator is available: internet penetration reached 81.4% (June 2019), suggesting a connectivity environment conducive to scaling online zakat payment channels (Arsad et al., 2023). Malaysia is also described in comparative zakat governance literature as having more structured, top-down zakat administration and supportive policy instruments (e.g., tax incentives), which complement digital rollouts by increasing formal uptake and institutional capacity (Siswantoro et al., 2021; Wiranatakusuma & Habibullah, 2024). At the organisational level, Malaysian zakat institutions' adoption of social media is driven by perceived benefits, ease of use, accessibility, and training, indicating that institutions treat accessibility and staff capability as concrete determinants (Abdullah et al., 2023). During the COVID-19 pandemic, institutional support, perceived usefulness, and ease of use also drove e-wallet adoption for zakat payment among a sample of polytechnic lecturers (Bakar, 2022). Nevertheless, Malaysia still faces issues in digital communication quality and data availability across state zakat websites, implying that readiness is not only infrastructure but also the quality and usability of public digital interfaces (Nazeri et al., 2023). In synthesis, Malaysia's comparatively supportive baseline suggests stronger conditions for e-zakat scaling, but inclusivity still depends on whether institutions address usability, communication, and capacity-building (Nazeri et al., 2023; Abdullah et al., 2023;

Arsad et al., 2023; Wiranatakusuma & Habibullah, 2024). For Indonesia, the references do not provide direct national connectivity statistics. What is evidenced is that the "digital ecosystem" and facilitating conditions are salient determinants of intention to pay zakat through fintech, and that literacy (including zakat literacy) plays a significant role (Mutmainah et al., 2024). Institutionally, Indonesia is characterised as more bottom-up/grassroots in zakat collection, involving flexible private zakat institutions, in contrast to Malaysia's centralised approach (Siswantoro et al., 2021; Wiranatakusuma & Habibullah, 2024). Flexibility can accelerate local innovation but may also produce uneven digital service levels across regions if infrastructure and skills differ. Thus, even if major cities like Jakarta may have robust fintech ecosystems, e-zakat inclusion challenges in Indonesia are likely more binding in areas where facilitating conditions and user literacy are weaker, precisely the rural exclusion risk highlighted in the literature (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024; Siswantoro et al., 2021; Wiranatakusuma & Habibullah, 2024).

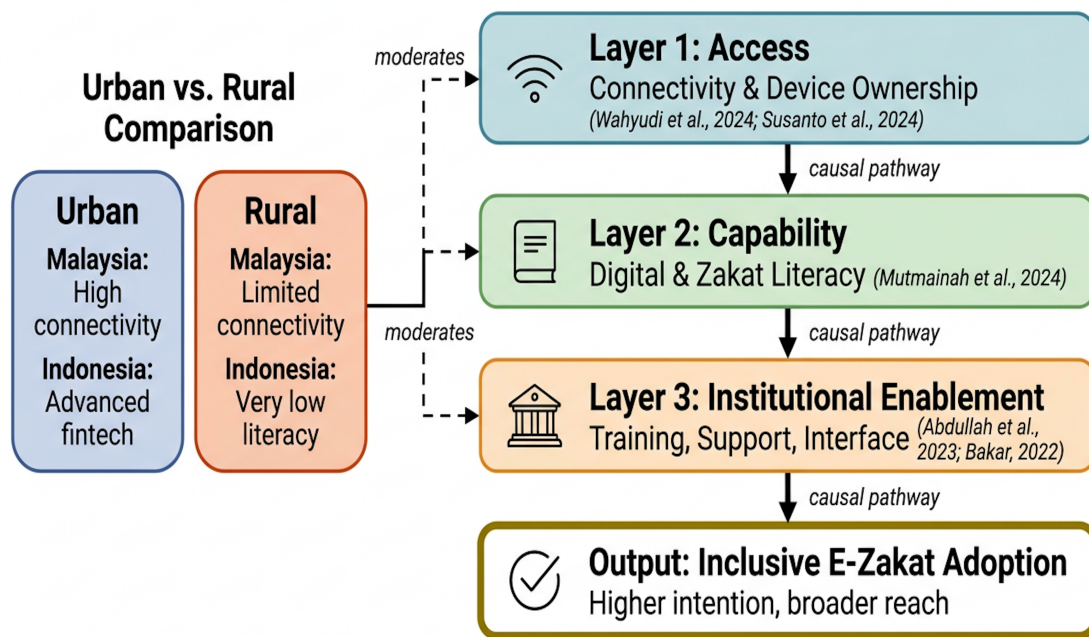
Regarding the urban-rural gap, although the references do not provide direct data for Kuala Lumpur vs. Kelantan or Jakarta vs. NTT, a general mechanism is supported: urban areas typically have stronger facilitating

conditions, and differences in these conditions translate into different adoption patterns. Mutmainah et al. (2024) empirically compare urban and suburban groups and show that technology-adoption determinants (facilitating conditions, literacy) significantly shape intention to use fintech for zakat, with group differences indicating that location matters. Wahyudi et al. (2024) and Susanto et al. (2024) generalise the same issue to rural exclusion risk, explicitly identifying limited rural connectivity and low digital literacy as barriers that can marginalise communities. Therefore, mapping the urban-rural gap is best evidenced as a readiness-constraint model: where connectivity and digital literacy are lower (a condition commonly associated with rurality), e-zakat uptake will be structurally limited (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024). Specific inhibiting factors in rural areas supported by evidence include: (a) limited or unreliable internet access, (b) low digital literacy, and (c) weak facilitating conditions (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024). The references do not explicitly document “preference for cash payments” as a rural inhibitor, nor provide direct evidence about Kelantan or NTT, so those claims would require additional data.

The success or failure of digital zakat platforms in achieving inclusive community reach depends on three interconnected layers. Layer A, Access: Without reliable connectivity, digital platforms cannot be used; rural connectivity gaps directly suppress adoption and exacerbate exclusion (Wahyudi et al., 2024; Susanto et al., 2024). Layer B, Capability: Even if access exists, low digital literacy (and zakat literacy) constrains adoption; literacy is empirically linked to intention and flagged as a key inclusion risk (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024). Layer C, Institutional enablement: Institutions must provide usable, accessible, well-supported channels (including training and management push). Malaysian evidence shows training, accessibility, and management push shape adoption, while deficits in digital interface quality can weaken benefits (Abdullah et al., 2023; Bakar, 2022; Nazeri et al., 2023). Under this model, large cities like Kuala Lumpur and Jakarta are expected to enjoy better enabling conditions for e-zakat uptake than rural regions like Kelantan or NTT. However, without cross-regional quantitative data, the strongest evidence-based conclusion is that digitalisation strategies that do not explicitly address rural infrastructure and literacy constraints risk improving efficiency for already-connected groups while reducing inclusivity, a concern repeatedly raised in the literature (Wahyudi et al., 2024; Susanto et al., 2024). Rigorous mapping would require regional internet availability data, digital and zakat literacy measurements, and geographically disaggregated platform transaction statistics (Wahyudi et al., 2024; Susanto et al., 2024; Mutmainah et al., 2024).

To help readers better understand the causal relationships among the key variables, Figure 1 presents a visual representation of the three-layer model identified in the literature. The bottom layer (Access) emphasises that without reliable internet connectivity and device ownership, digital platforms cannot function, particularly disadvantaging rural communities. The middle layer (Capability) highlights that even when access exists, low digital and zakat literacy remain binding constraints on adoption. The top layer (Institutional Enablement) shows that training, transparency, and user-friendly interfaces are essential for translating access and capability into actual e-zakat usage. The model also contrasts the differing conditions between Malaysia (higher readiness) and Indonesia (lower readiness), as well as the persistent urban-rural divide. This visualisation helps readers grasp why e-zakat adoption succeeds in some contexts but fails in others.

Figure 1
Three-Layer Model of Determinants for Inclusive E-Zakat Adoption



Source: Develop by authors, 2026.

Figure 1 clarifies that successful digitalisation of zakat depends not on a single factor but on the layered interplay of access, capability, and institutional empowerment. Urban areas in both countries generally enjoy better enabling conditions, while rural regions such as Kelantan and East Nusa Tenggara face barriers at the access and capability layers. This finding underscores the need for context-specific strategies rather than one-size-fits-all approaches.

Public Trust, Formal Compliance, and the Sustainability of Digital Zakat Funding

Public trust is a behavioural precondition for channelling zakat through formal institutions (state or authorised private bodies) rather than through informal or direct giving. The choice of channel directly affects the reliability and scale of funds available for redistribution. Several Indonesian studies explicitly link low trust to a preference for direct distribution to *mustahiq* and weaker institutional collection, implying that trust is upstream of formal compliance even though zakat is religiously obligatory (Qutaiba et al., 2024; Nasution et al., 2023; “Factors Affecting the Implementation of Zakat Accounting in Indonesia”, 2023). The trust-compliance relationship is mediated by transparency, accountability, and governance quality, including financial reporting quality, audited reporting, and public disclosure (Qutaiba et al., 2024; Nasution et al., 2023; Tenriwaru et al., 2022; Syaifuddin, 2021).

Because redistribution programmes depend on sustained inflows, any trust-driven shift away from formal payment reduces predictable funding and limits empowerment-oriented distribution (Herianingrum et al., 2022; Amrullah et al., 2024). Sustainability is therefore not only a programme design issue but also a compliance and fundraising capacity issue. Zakat institutions must maintain payer trust through credible governance, verified reporting, and effective distribution (Putri, 2022; Nasution et al., 2023). In Indonesia, lack of public trust is a recurring explanation for why many Muslims pay zakat directly rather than through BAZNAS or LAZ, depressing formal collection (Qutaiba et al., 2024; Nasution et al., 2023). This gap is linked to perceived weaknesses in transparency, accountability, socialisation, and reporting quality, areas repeatedly identified as needing improvement (Amrullah et al., 2024; Syaifuddin, 2021). Zakat bodies are “public trust institutions”; their legitimacy depends on reporting standards and public accountability, and trust must be continuously maintained (“Factors Affecting the Implementation of Zakat Accounting in Indonesia”, 2023; Tenriwaru et al., 2022). Qualitative evidence from Madura shows that trust is uneven: community-based LAZ and individual religious figures can be more trusted than BAZNAS in local contexts, and this differential trust shapes compliance channels (Dikuraisyin & Najah, 2024).

For Malaysia, evidence is more limited but still indicates that stakeholders evaluate PPZ and MAIWP based on reporting quality and responsiveness. In a PPZ-linked *wakalah* context, respondents expressed dissatisfaction with disbursement reporting and requested more timely information, showing that even formalised systems require transparency to sustain trust (Paizin & Aziz, 2021). Thus, while Indonesia’s trust problem is well-documented, Malaysia’s evidence centres on maintaining trust through good reporting and digital

services. Indonesian discourse recognises that technology can facilitate collection and monitoring, but also notes barriers (e.g., internet instability, low digital literacy) and explicitly flags “lack of public trust” as an obstacle to e-zakat (Herianingrum et al., 2022). Trust-building is consistently associated with transparency, accountability, and visible reporting (Qutaiba et al., 2024; Nasution et al., 2023). When digital platforms make allocation and performance information observable, they send positive signals to payers (Riani et al., 2024). Conversely, weak reporting reduces trust and harms both online and offline compliance (Amrullah et al., 2024). Accounting standards such as PSAK 109 are presented as benchmarks that support trust and legitimacy (Tenriwaru et al., 2022; Syaifuddin, 2021), and good corporate governance (GCG) improves reputation, transparency, and collection outcomes (Nasution et al., 2023).

Low trust drives direct giving, bypassing formal institutions and reducing collection capacity (Qutaiba et al., 2024; Nasution et al., 2023). While no direct quantitative comparison of online vs. offline trust-compliance elasticities is available, the evidence supports that trust and perceived accountability influence willingness to use formal channels, and technology can either strengthen or weaken this depending on transparency (Herianingrum et al., 2022; Amrullah et al., 2024). In Malaysia, payer dissatisfaction with reporting implies that compliance depends on timely, clear information (Paizin & Aziz, 2021). For sustainability, improved management, including transparency and accountability, is linked to public trust and then to higher collection productivity (Putri, 2022). Despite growth, Indonesia’s zakat potential remains under-realised, and trust/transparency deficits limit funds for poverty alleviation (Qutaiba et al., 2024). Cross-country DEA analysis shows that efficient management signals trustworthiness and supports long-term funding (Riani et al., 2024).

Certification and audits are essential pillars of e-zakat legitimacy. In Indonesia, LAZ are required to submit audited reports to BAZNAS, and PSAK 109 compliance is seen as essential for accountability (Qutaiba et al., 2024; Tenriwaru et al., 2022). In Malaysia, *wakalah* participants demand better disbursement reporting and timely guidance; blockchain-based platforms are proposed to improve traceability (Paizin & Aziz, 2021). Overall, sustainability-oriented reforms should treat digital legitimacy as a governance-and-assurance project, including audits, standardised reporting, public dashboards, and stakeholder communication, not merely a technology deployment (Qutaiba et al., 2024; Paizin & Aziz, 2021; Nasution et al., 2023).

To facilitate a structured comparison of the key determinants linking public trust, formal compliance, and sustainability of digital zakat funding between Indonesia and Malaysia, Table 1 summarises the main findings from the reviewed literature. The table contrasts the two countries across nine critical

dimensions: trust levels, trust deficits, consequences of low trust, role of digital transparency, impact on formal compliance, sustainability of funding, role of certification and audits, governance factors, and policy recommendations. This comparative overview helps to identify both common challenges and context-specific pathways for strengthening e-zakat legitimacy and long-term programme viability.

Table 2.

Summary of Key Findings: Public Trust, Formal Compliance, and Sustainability of Digital Zakat Funding

Aspect	Indonesia (BAZNAS/LAZ)	Malaysia (PPZ/MAIWP)	Key References
Trust level	Low public trust; preference for direct giving to <i>mustahiq</i> rather than formal institutions	Trust not directly quantified, but stakeholders demand transparency and timely reporting	Qutaiba et al. (2024); Nasution et al. (2023); Paizin & Aziz (2021)
Main trust deficits	Lack of transparency, weak accountability, poor dissemination/socialisation, and low reporting quality	Dissatisfaction with disbursement reporting; need for clearer and faster information	Amrullah et al. (2024); Syaifuddin (2021); Paizin & Aziz (2021)
Consequences of low trust	Reduced formal collection; limited funding for empowerment programmes in economic, social, health, and education sectors	Potential decline in formal compliance if transparency is not improved	Herianingrum et al. (2022); Tenriwaru et al. (2022); Ma'ruf et al. (2022)
Role of digital transparency	E-zakat platforms can strengthen trust through visible allocation data, performance reports, and accessible information	Technology, including blockchain-based systems, is proposed to improve traceability and institutional credibility	Riani et al. (2024); Paizin & Aziz (2021); Herianingrum et al. (2022)
Impact on formal compliance	Low trust encourages direct giving practices that bypass BAZNAS/LAZ, weakening institutional zakat collection	Even within a highly formalised system, compliance still depends on transparent and timely communication	Qutaiba et al. (2024); Nasution et al. (2023); Factors (2023)
Sustainability of funding	Long-term sustainability depends on credible governance, verified reporting, and effective distribution mechanisms	Institutional efficiency and financial stability strengthen public confidence and support sustainable funding	Putri (2022); Riani et al. (2024); Syaifuddin (2021)
Role of certification and audits	LAZ institutions are required to submit audited reports to BAZNAS; PSAK 109 standards reinforce accountability	Stakeholders expect improved reporting quality and timely guidance; blockchain is proposed to enhance transparency	Tenriwaru et al. (2022); Qutaiba et al. (2024); Paizin & Aziz (2021)

Governance factors	Good corporate governance (GCG), sharia compliance, and professional amil competence increase trust and zakat collection	Centralised administration under MAIWP/PPZ provides institutional control, but responsive communication remains essential	Nasution et al. (2023); Marshall & Herianingrum (2022)
Main policy recommendation	Strengthen digital legitimacy through audited dashboards, PSAK-109 compliance, and active public socialisation	Improve reporting clarity and timeliness while integrating traceability technologies such as blockchain	Qutaiba et al. (2024); Paizin & Aziz (2021); Factors (2023)

Source: Developed by authors from sintesis literatur, 2026

Table 2 reveals several important patterns. First, Indonesia exhibits a well-documented trust deficit, with payers frequently preferring direct distribution to mustahiq over formal channels through BAZNAS or LAZ. This behaviour is consistently attributed to perceived shortcomings in transparency, accountability, and reporting quality (Qutaiba et al., 2024; Nasution et al., 2023). In contrast, Malaysia's evidence does not show a similarly explicit trust gap; instead, stakeholders express dissatisfaction with the clarity and timeliness of disbursement reporting, implying that even a formalised system must continuously earn trust through responsive communication (Paizin & Aziz, 2021).

Second, digital transparency emerges as a double-edged sword in both countries. When e-zakat platforms make allocation and performance data visible, they can send positive signals that reinforce trust (Riani et al., 2024). Conversely, weak reporting and poor digital interfaces risk alienating payers and driving them back to informal giving (Amrullah et al., 2024; Herianingrum et al., 2022). Third, formal compliance is directly linked to sustainable funding: low trust reduces institutional collection, thereby constraining the resources available for empowerment-oriented programmes (Putri, 2022; Tenriwaru et al., 2022). Finally, the table underscores the importance of governance mechanisms—such as audited financial statements, adherence to accounting standards (PSAK 109 in Indonesia), and proactive stakeholder communication—as essential pillars for building and maintaining digital legitimacy (Nasution et al., 2023; Syaifuddin, 2021). These insights suggest that sustainability-oriented reforms should treat digital trust not as a by-product of technology deployment but as a governance outcome that requires continuous assurance and engagement.

Moderation of Socio-Cultural Factors: Social Influence, Zakat Literacy, and the Role of Ulama

Intergenerational digital literacy, the role of ulama (religious scholars), and the adaptation of local traditions, moderate the relationship between e-zakat adoption and the socio-economic resilience of zakat recipients (mustahiq) in Malaysia and Indonesia. Conceptually, e-zakat adoption (paying zakat through digital channels such as online banking, e-wallets, and online platforms) can be understood as part of the broader digitalisation of Islamic social finance, which aims to improve the professionalism, monitoring, and administrative control of collection and distribution, including digital registration that can streamline access for eligible beneficiaries (Kasri & Sosianti, 2023). Although most of the available evidence is Indonesia-centric, the same mechanism, digital collection and distribution improving programme reach and responsiveness, is repeatedly emphasised in Indonesian zakat and waqf digitalisation discussions, suggesting a plausible pathway linking e-zakat adoption to welfare outcomes if institutions translate digital inflows into effective programmes (Adinugraha et al., 2024; Kasri & Sosianti, 2023).

Socio-economic resilience of zakat recipients in the cited literature is most directly connected to the idea of productive zakat: zakat distributed not only for consumption but also as business capital accompanied by training and assistance, thereby strengthening recipients' financial resilience, especially during systemic shocks such as the COVID-19 pandemic (Prianto et al., 2023). In addition, resilience can be indirectly supported through zakat-financed education programmes (e.g., scholarships), which are argued to reduce school dropout rates and improve long-term socio-economic prospects; notably, an explicit Malaysia-linked claim is that zakat allocated for education scholarships can decrease dropout rates in Malaysia (Munadi et al., 2021). Thus, e-zakat adoption potentially increases the capacity and continuity of productive and educational zakat interventions, the mechanisms most clearly tied to resilience, while the strength of this link depends on socio-cultural moderators that shape trust, literacy, and compliance (Azzah & Santosa, 2022; Dikuraisyin & Najah, 2024; Kasri & Sosianti, 2023).

Social influence, encouragement or expectations from family, peers, and salient community actors, is consistently identified as a significant determinant of intention to use digital Islamic philanthropy channels, including online zakat payment and digital waqf, across multiple quantitative technology-adoption studies in Indonesia (Bonang et al., 2024; Kasri & Sosianti, 2023). Beyond zakat and waqf specifically, social influence is also found to be among the most significant demand-side determinants of Islamic financial inclusion in Indonesia, implying that network effects and perceived norms shape participation in Islamic

financial services more broadly (Ali et al., 2021). These convergent findings support treating social influence as a moderator: where social influence is strong, e-zakat adoption can expand and stabilise, making it more likely that institutions can fund sustained productive and educational programmes associated with resilience (Prianto et al., 2023; Munadi et al., 2021).

However, the evidence also implies important nuance: social influence does not operate in a vacuum but interacts with trust and literacy. In online zakat intention, trust in zakat institutions and zakat literacy are significant alongside social influence (Kasri & Sosianti, 2023). Similarly, in digital waqf, social influence significantly shapes intention, while trust also affects intention and behaviour (Bonang et al., 2024). Therefore, in communities where social influence is present but trust in formal zakat management organisations (OPZ) is weak, social influence may channel giving toward informal intermediaries (e.g., individual collectors), potentially weakening the institutional capacity needed for scalable productive programmes linked to resilience (Dikuraisyin & Najah, 2024). This is consistent with qualitative evidence from Madura showing a negotiated “authority construction” in which BAZNAS, LAZ, and individual collectors (kiai/ulama/ustad) compromise roles, reflecting how social structures route zakat practices through trusted local authorities (Dikuraisyin & Najah, 2024).

Digital literacy functions as another important moderator, especially in its intergenerational dimension. The literature emphasises that limitations in digital literacy (particularly outside urban contexts) remain a barrier to participating in digital governance and services in Indonesia, indicating that low digital literacy can hinder engagement with digitised systems (Indriana et al., 2023). A systematic literature review on religious digital literacy of urban Muslim society in Indonesia further argues that religious digital literacy is needed not only to access religious content but also to validate information sources, reflecting a shift toward digitally mediated religious learning and practice (Athoillah et al., 2023). These points support modelling digital literacy as a moderator: when literacy is low among zakat payers and/or recipients, the benefits of e-zakat systems (speed, convenience, traceability) may not translate into broad-based adoption or effective beneficiary onboarding (Athoillah et al., 2023; Indriana et al., 2023). The intergenerational dimension is also salient.

Evidence from the Malay-Muslim context in Singapore indicates that the impact of the digital world is not confined to the young; elderly populations are also exposed to online religious content, and religious debates increasingly involve “the masses,” sometimes bypassing traditional authority guidance (Saat, 2022). Although this is not direct Malaysia/Indonesia evidence, it supports a plausible regional dynamic in Malay-speaking societies: older cohorts’ digital

participation can grow but may be accompanied by higher vulnerability to misinformation or confusion, which can indirectly affect trust in digital religious-financial channels (Athoillah et al., 2023; Saat, 2022). Survey-based work in Indonesia links weaker digital literacy skills to vulnerability to unsubstantiated claims and conspiratorial beliefs, highlighting how low digital literacy can increase susceptibility to problematic information diffusion (Vergani et al., 2021). In the e-zakat context, digital literacy gaps can reduce the resilience impact of e-zakat by (i) suppressing adoption among payers/recipients, and/or (ii) undermining trust through misinformation about legitimacy, permissibility, or misuse of funds (Kasri & Sosianti, 2023; Vergani et al., 2021).

The role of ulama as moderators is also highly significant. Zakat literacy research in Kudus Regency, Central Java, finds that trust in scholars and peer influence affect zakat understanding and behaviour, and it documents institutional strategies relying on recitations by Muslim scholars to raise awareness, even while noting operational constraints when such engagement requires physical presence (hence the potential value of online media) (Azzah & Santosa, 2022). In Madura, there is a culturally embedded obedience to religious figures, and ulama/kiai are positioned as crucial societal authorities whose role extends beyond spiritual matters into broader social domains; the study explicitly places ulama as zakat collectors to build trust and awareness and to contextualise zakat implementation through locally legitimate authority (Dikuraisyin & Najah, 2024).

In customary governance in Kerinci, fatwas and Islamic legal decisions are issued and legitimised through adat deliberation involving ulama alongside customary stakeholders, including decisions that have at times touched on zakat as an ushul issue, indicating ulama's embeddedness within local decision architectures (Asa'ari et al., 2022). These findings support a moderation thesis: where ulama endorse and participate in e-zakat systems, they can strengthen perceived legitimacy and thereby increase adoption and continuity of funding streams needed for productive/educational programmes tied to resilience (Azzah & Santosa, 2022; Dikuraisyin & Najah, 2024). Conversely, the evidence also warns against assuming uniform ulama effects: the zakat literacy study notes prior findings that religious leaders may be insignificant for intention in some contexts, implying heterogeneity in how religious authority translates into behavioural intention (Azzah & Santosa, 2022). Moreover, digitalisation of Islamic social finance has historically been linked to formal religious rulings (e.g., MUI fatwa on cash waqf), illustrating that scholarly/legal endorsement can be foundational for acceptance of new instruments, though this reference concerns waqf rather than zakat (Adinugraha et al., 2024). Overall, ulama function as "legitimacy brokers" whose influence can amplify or dampen the

adoption-resilience link depending on local trust structures, institutional design, and the channelling of authority into digital interfaces (Adinugraha et al., 2024; Dikuraisyin & Najah, 2024).

Local traditions ('urf/adat) also moderate this relationship. The sources indicate that local tradition remains a durable normative system and can be central to how Islamic norms are interpreted and operationalised. In Donggo society, customary law institutions (LASDO) and customary sanctions continue to be used, illustrating the persistence of adat as a justice framework even when outcomes differ from state criminal codes (Untitled, 2022). In Kerinci, Islamic legal establishment is explicitly practised through adat processes, deliberation and consensus among traditional elements including ulama, showing a hybrid governance form where legitimacy is co-produced by custom and religious authority (Asa'ari et al., 2022). For e-zakat adoption, these dynamics imply a strong moderation effect: digital systems that are perceived as misaligned with local practices of giving, authority, or distribution may face friction, while systems designed to embed or partner with local actors may achieve higher uptake and more effective targeting, improving resilience outcomes (Dikuraisyin & Najah, 2024). The Madura case provides a concrete organisational analogue: institutional relations are reconstructed so that BAZNAS acts as regulator/formulator while LAZ and individual collectors operate collection-to-distribution functions, effectively aligning formal structures with culturally salient authority networks (Dikuraisyin & Najah, 2024). Therefore, the adoption-resilience relationship should be expected to be stronger where e-zakat platforms can operationalise such hybrid arrangements, for example, by enabling trusted local intermediaries to interface with formal digital tracking and productive-program pipelines, rather than attempting to replace them (Asa'ari et al., 2022; Dikuraisyin & Najah, 2024). In conclusion, the success of e-zakat digitalisation in building socio-economic resilience depends critically on understanding and integrating local socio-cultural factors, including social influence, intergenerational digital literacy, ulama authority, and adaptation to local traditions, not merely on the technical aspects of digital platforms themselves.

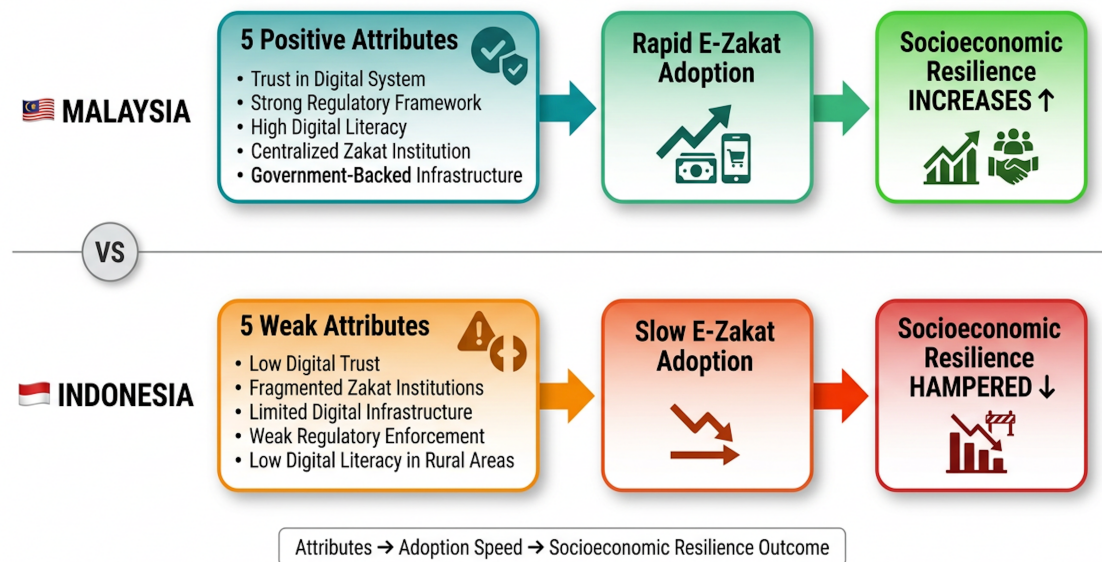
Diffusion of Innovation in Zakat Digitalisation

To explain the differing levels of e-zakat adoption between Malaysia and Indonesia, this study applies the Diffusion of Innovation Theory developed by Everett Rogers (1995). To visualise the relationships among the key variables in this study, Figure 1 presents the conceptual framework that integrates digital infrastructure readiness, e-zakat adoption, socio-cultural moderation, and the socio-economic resilience of mustahiq (zakat recipients). This framework is

constructed based on a synthesis of the literature and Rogers' (1995) Diffusion of Innovation Theory, as well as a contextual comparison between Malaysia and Indonesia.

Figure 2.

Application of Rogers' Diffusion of Innovation Theory to E-Zakat Adoption in Malaysia and Indonesia



Source: Develop by authors, 2026.

Figure 2 reinforces that Malaysia's success in e-zakat adoption is inseparable from its strengths across all attributes of innovation diffusion, particularly relative advantage (tax integration) and low complexity (mature digital infrastructure and literacy). In contrast, Indonesia still lags in complexity and compatibility with local traditions, despite its enormous zakat potential. These findings confirm that policy interventions in Indonesia must focus on improving digital literacy, adapting platforms to the authority of religious scholars (ulama), and intensifying socialisation to enhance observability. In other words, e-zakat adoption will not happen automatically simply by providing digital platforms; systematic efforts are required to improve all five diffusion attributes simultaneously.

This theory explains how, why, and at what rate an innovation (in this case, e-zakat platforms) spreads through a social system. Rogers identifies five attributes of innovations that influence adoption speed: *relative advantage*, *compatibility*, *complexity*, *trialability*, and *observability*. These five attributes are highly relevant for analysing the findings from the three previous sub-sections: digital infrastructure readiness, public trust, and socio-cultural moderation. First, in terms of relative advantage, e-zakat offers greater efficiency,

transparency, and reach compared to direct cash zakat payments. Malaysia has demonstrated a high relative advantage by integrating zakat with the tax system, creating strong fiscal incentives and increasing collection efficiency 40 times that of Indonesia, with collection per *muzaki* reaching IDR 9.2 million in Malaysia compared to only IDR 226,000 in Indonesia (Taruno et al., 2025). This relative advantage is a key driver of Malaysia's high e-zakat adoption rate (80.48%), while Indonesia has achieved only about 12% of its zakat potential (Saro & Nasir, 2025; BAZNAS, 2025).

Second, compatibility with local values, traditions, and religious authority is critical for successful diffusion. In Madura, e-zakat adoption succeeds only when digital platforms adapt to the authority of *ulama* and local collector networks, reflected in a hybrid governance model where BAZNAS acts as regulator while LAZ and individual collectors perform operational functions (Dikuraisyin & Najah, 2024). Conversely, systems misaligned with local traditions face resistance, as shown by studies of customary practices in Kerinci and Donggo (Asa'ari et al., 2022; Untitled, 2022). Third, complexity is a major barrier in Indonesia. Low digital literacy, especially among rural populations and older generations, makes e-zakat platforms seem difficult to use. Research shows that limited digital literacy outside urban areas remains a serious obstacle to participation in digital services (Indriana et al., 2023; Athoillah et al., 2023). In contrast, Malaysia, with internet penetration of 81.4% (Arsad et al., 2023) and higher digital literacy levels, can reduce perceived complexity, leading to faster e-zakat adoption.

Fourth, trialability and observability also play important roles. E-zakat platforms that offer free trials (e.g., via e-wallets) and transparent distribution (observability) tend to be adopted more quickly. In Indonesia, the accounting standard PSAK 109 serves as a transparency benchmark supporting public trust (Tenriwaru et al., 2022; Syaifuddin, 2021). In Malaysia, *wakalah* zakat participants' demand for clearer disbursement reporting shows that observability is a prerequisite for sustained adoption (Paizin & Aziz, 2021). Overall, Rogers' Diffusion of Innovation Theory comprehensively explains why e-zakat has developed rapidly in Malaysia while Indonesia still faces structural challenges. Malaysia's diffusion success is driven by high relative advantage, compatibility with state policies, and mature digital infrastructure. Indonesia, by contrast, struggles with complexity (low literacy), incompatibility with local traditions in some regions, and suboptimal observability. The policy implication is that institutional engineering must adapt diffusion strategies to local characteristics, not merely imitate the Malaysian model.

Conclusion

This study concludes that the success of zakat digitalisation in building socio-economic resilience in Muslim-majority countries is determined by the interplay between digital infrastructure readiness, public trust, and socio-cultural moderation. A systematic comparison between Malaysia and Indonesia reveals striking differences. Malaysia has achieved high e-zakat adoption (80.48%) due to mature digital infrastructure (81.4% internet penetration), integration of zakat with the tax system, strong institutional support, and high public trust. In contrast, Indonesia, despite having an enormous zakat potential (IDR 327 trillion), has only realised about 12% of this potential. Low adoption is driven by limited digital infrastructure in rural areas, low digital literacy, public distrust of formal zakat institutions, and misalignment of digital platforms with local traditions and the authority of religious scholars (ulama) in regions such as Madura and Kerinci.

Applying Rogers' Diffusion of Innovation Theory, the analysis shows that all five innovation attributes, relative advantage, compatibility, complexity, trialability, and observability, must be improved simultaneously for successful diffusion. Malaysia outperforms Indonesia across all five attributes, particularly in relative advantage (tax integration) and low complexity (high literacy and connectivity). Indonesia lags in compatibility and complexity, requiring targeted interventions. Therefore, policy recommendations for Indonesia include: enhancing digital literacy in rural and peri-urban areas, integrating zakat payments with national tax systems to create fiscal incentives, actively engaging ulama as legitimisers and promoters of e-zakat, and mandating transparent distribution through public audits and real-time digital dashboards. Without such holistic reforms, zakat digitalisation risks widening existing urban-rural and intergenerational access gaps, rather than fostering inclusive and sustainable socio-economic resilience.

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No potential conflict of interest was reported by the author(s).

Ethical Approval

This study is a systematic literature review based exclusively on secondary data from published academic journals, official reports, and policy documents. It does not involve primary data collection from human subjects, animals, or any form of direct intervention. Therefore, ethical approval was not required for this research.

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References

1. Abdullah, Z., Sharif, M. H. M., Saad, R. A. J., Ariff, A. H. M., Hussain, M. H. M., & Nasir, M. (2023). Zakat institutions' adoption of social media. *Journal of Islamic Accounting and Business Research*, 14(8), 1261–1280. <https://doi.org/10.1108/jiabr-01-2022-0013>
2. Adinugraha, H. H., Shulthoni, M., & Sain, Z. H. (2024). Transformation of cash waqf management in Indonesia: Insights into the development of digitalization. *Review of Islamic Social Finance and Entrepreneurship*, 3(1), 50–66. <https://doi.org/10.20885/risfe.vol3.iss1.art4>
3. Ali, M. M., Devi, A., Bustomi, H., Sakti, M. R. P., & Furqani, H. (2021). Factors influencing Islamic financial inclusion in Indonesia: A structural equation modelling approach. *ICR Journal*, 12(2), 249–274. <https://doi.org/10.52282/icr.v12i2.866>
4. Amrullah, M. T., Nisa, C., & Debora, C. (2024). IKOPZ: Measuring the accountability of zakat, infaq, and sadaqah fund management in BAZNAS Jakarta Province. *Perbanas Journal of Islamic Economics and Business*, 4(2), 165–178. <https://doi.org/10.56174/pjieb.v4i2.258>
5. Arsad, S., Haji-Othman, Y., Yusuff, M. S. S., & Ahmad, R. (2023). Zakat: A bibliometric analysis. *International Journal of Academic Research in Business and Social Sciences*, 13(11), 2133–2145. <https://doi.org/10.6007/ijarbss/v13-i11/19521>
6. Asa'ari, A., Nurdiansyah, R., & Hainadri, H. (2022). The practice of establishing Islamic law by indigenous people: A study of five villages in

- Kedepatian Semerap, Kerinci Regency. *Khatulistiwa*, 12(2), 146–162. <https://doi.org/10.24260/khatulistiwa.v12i2.2379>
7. Athoillah, S., Ashari, M. K., & Alauddin, M. B. (2023). Religious digital literacy of urban Muslim society in Indonesia: A systematic literature review. *Akademika: Jurnal Pemikiran Islam*, 28(2), 141–156. <https://doi.org/10.32332/akademika.v28i2.7088>
 8. Awang Abu Bakar, N. S., Yahya, N., Abdullah, L. M., S. Abd. Aziz, M., Baharuden, A. F., Rosli, R., & Jumaan, I. A. (2025). *Assessments of the data management practices in zakat institutions in Malaysia: A concept paper* [Paper presentation]. 10th International Conference on Computing, Engineering and Design (ICCED), Jeddah, Saudi Arabia. <http://irep.iium.edu.my/121590/>
 9. Azzah, F. N., & Santosa, P. B. (2022). Analysis of zakat literacy in Kudus Regency, Central Java Province: A mixed-method approach. *Ziswaf: Jurnal Zakat dan Wakaf*, 9(2), 116–130. <https://doi.org/10.21043/ziswaf.v9i2.15227>
 10. Bakar, F. M. A. (2022). E-wallet usage to pay zakat during COVID-19 pandemic among Malaysian's polytechnic lecturers. *International Journal of Islamic Economics and Finance Research*, 5(2), 57–79. <https://doi.org/10.53840/ijiefer91>
 11. BAZNAS. (2026). *Laporan dampak zakat program ekonomi BAZNAS RI terhadap pengentasan kemiskinan tahun 2025*. Puskas BAZNAS. <https://www.puskas.baznas.go.id>
 12. 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. <https://doi.org/10.55188/ijif.v16is1.586>
 13. Denzin, N. K. (1978). *Sociological methods: A sourcebook* (2nd ed.). McGraw-Hill.
 14. Dikuraisyin, B., & Najah, A. (2024). Reconstructing zakat management through political culture: Insights from Madura. *Ulul Albab: Jurnal Studi dan Penelitian Hukum Islam*, 7(2), 151–168. <https://doi.org/10.30659/jua.v7i2.33734>
 15. Factors affecting the implementation of zakat accounting in Indonesia. (2023). *Asia-Pacific Management Accounting Journal*, 18(3), 85–104. <https://doi.org/10.24191/apmaj.v18i3-15>
 16. Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. SAGE Publications.
 17. Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. SAGE Publications.
 18. Hartono, H. S. (2025, November). *Digital zakat and waqf: Mapping innovation and transparency across Muslim countries* [Paper presentation]. 2025 Cilis Islamic Studies Postgraduate Conference, University of Melbourne, Australia.
 19. Herianingrum, S., Widiastuti, T., Hapsari, M. I., Ratnasari, R. T., Firmansyah, F., Hassan, S. A., Febriyanti, A. R., Amalia, R. C., & Muzakki,

- L. A. (2022). Muzakki and mustahik's collaboration model for strengthening the fundraising capacity of Islamic social finance institutions during COVID-19. *International Journal of Ethics and Systems*, 40(1), 175–188. <https://doi.org/10.1108/ijoes-05-2022-0091>
20. Indriana, I., Arman, A., Yussof, I., & Maasi, J. W. (2023). Interaction of Islamic economics and government transformation technology in Indonesian Muslim society. *Jurnal Ilmiah Al-Syir'ah*, 21(2), 261–278. <https://doi.org/10.30984/jis.v21i2.2660>
21. Ishak, N. A., Abdul Rahman, R., Meor Zawawi, M., Alwi, F., Abd Wahab, R., & Zakaria, N. B. (2025). Enhancing adoption of online zakat payment systems: A study on technology readiness, perceived risk, and transparency in Malaysia. *Asia-Pacific Management Accounting Journal (APMAJ)*, 20(2), 325–346. <https://ir.uitm.edu.my/id/eprint/122503/>
22. Kasri, R. A., & Sosianti, M. W. (2023). Determinants of the intention to pay zakat online: The case of Indonesia. *Journal of Islamic Monetary Economics and Finance*, 9(2), 275–294. <https://doi.org/10.21043/jimf.v9i2.1664>
23. Kitchenham, B., & Charters, S. (2007). *Guidelines for performing systematic literature reviews in software engineering*(Version 2.3) [EBSE Technical Report]. Keele University.
24. Kitchenham, B., & Charters, S. (2007). *Guidelines for performing systematic literature reviews in software engineering*(Version 2.3) [EBSE Technical Report EBSE-2007-01]. Keele University and Durham University.
25. Ma'ruf, A., Chalifatunnisa, C. M., Hasanah, S. M., & Puspitasari, C. (2022). Zakat development towards sustainable economic growth. *Eksyar: Jurnal Ekonomi Syari'ah & Bisnis Islam*, 9(2), 158–172. <https://doi.org/10.54956/eksyar.v9i2.389>
26. Marshall, I. G., & Herianingrum, S. (2022). Zakat management: Update-to-down zakat governance in the amil zakat agencies in Indonesia, Malaysia and Brunei Darussalam. *Afebi Islamic Finance and Economic Review*, 6(1), 15–28. <https://doi.org/10.47312/aifer.v5i01.370>
27. Moniruzzaman. (2025). Digital zakat management in Muslim countries: A comparative analysis through a literature-based lens. *AZKA International Journal of Zakat & Social Finance*, 6(2), 183–206. <https://doi.org/10.51377/azjaf.vol6no2.213>
28. Munadi, M., Umar, A. U. A. A., & Anggraini, N. (2021). Education and concern of zakat agencies. *Jurnal Penelitian*, 15(1), 51–66. <https://doi.org/10.21043/jp.v15i1.9208>
29. Mutmainah, L., Berakon, I., & Yusfiarto, R. (2024). Does financial technology improve intention to pay zakat during national economic recovery? A multi-group analysis. *Journal of Islamic Marketing*, 15(6), 1583–1607. <https://doi.org/10.1108/jima-09-2022-0268>
30. Nasution, A., Siregar, T. R. S., Rahman, H., & Putra, H. K. (2023). The role of sharia compliance, good corporate governance, competence on SUMUT zakat management. *Jurnal Ekonomi Syariah*, 8(2), 126–136. <https://doi.org/10.37058/jes.v8i2.8451>

31. Nazeri, A. N. N. A., Nor, S. M., Abdul-Rahman, A., Abdul-Majid, M., & Hamid, S. N. A. (2023). Exploration of a new zakat management system empowered by blockchain technology in Malaysia. *ISRA International Journal of Islamic Finance*, 15(4), 127–147. <https://doi.org/10.55188/ijif.v15i4.568>
32. Paizin, M. N., & Aziz, A. R. A. (2021). Concepts and views of individuals on wakalah zakat implementation. *International Journal of Islamic Economics and Finance Research*, 4(2), 25–38. <https://doi.org/10.53840/ijiefer57>
33. Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, 34(5 Pt 2), 1189–1208.
34. Prianto, A. L., Usman, S., Amri, A., Nurmandi, A., Qodir, Z., Jubba, H., & Ilik, G. (2023). Faith-based organizations' humanitarian work from the disaster risk governance perspective: Lessons from COVID-19 pandemic in Indonesia. *Mazahib*, 22(1), 129–174. <https://doi.org/10.21093/mj.v22i1.6317>
35. Putri, F. I. (2022). Productivity of zakat institutions in Indonesia. *Islamic Social Finance*, 2(2), 89–102. <https://doi.org/10.58968/isf.v2i2.156>
36. Qutaiba, M., Owais, M., & Muharam, A. S. (2024). The current issue of reporting zakat in Indonesia: A critical analysis. *Journal of Islamic Economic and Business Research*, 4(1), 1–23. <https://doi.org/10.18196/jiebr.v4i1.227>
37. Riani, D., Meutia, M., Taqi, M., & Ismawati, I. (2024). Efficiency and stability of zakat institutions in Malaysia and Indonesia: DEA window analysis. *TEM Journal*, 13(1), 303–314. <https://doi.org/10.18421/tem131-32>
38. Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). Free Press.
39. Saat, N. (2022). Managing Islam in Singapore: A strong and resilient state. *Studia Islamika*, 29(2), 213–239. <https://doi.org/10.36712/sdi.v29i2.25215>
40. Saro, N., & Nasir, R. (2025). Exploring the role of convenience and technology in the adoption of digital zakat platforms. *Journal of Syariah*, 33(2), 145–162. <https://doi.org/10.22452/syariah.vol33no2.2>
41. Siswantoro, D., Nurzaman, M. S., Nurhayati, S., Munandar, A., & Ismail, A. G. (2021). Incentive zakat agency mechanism, a comparison between Indonesia and Malaysia. *International Journal of Islamic Business and Economics (IJIBEC)*, 5(1), 1–15. <https://doi.org/10.28918/ijibec.v5i1.3067>
42. Susanto, A. A., Choris, L. H. I. P., Bani, N. A., Rizal, C. F., & Oktari, M. (2024). Digital transformation in zakat management: A bibliometric review on the application of blockchain technology. *EPiBAF*, 11(1), 768–790. <https://doi.org/10.33102/7qjfd415>
43. Syaifuddin, T. (2021). Society's perceptions toward zakat distribution in micro-economic empowerment. *Jurnal Penelitian*, 18(1), 67–76. <https://doi.org/10.28918/jupe.v18i1.3951>
44. Taruno, A., Said, M., Aji, R. H. S., & Rini, R. (2025). Integrated zakat governance model in Malaysia: Lessons for zakat management reform in Indonesia based on efficiency analysis and mixed-methods. *International*

- Journal of Social Science and Business*, 9(4), 778–794. <https://doi.org/10.23887/ijssb.v9i4.107374>
45. Tenriwaru, T., Said, M. A., & Budiandriani, B. (2022). Management accountability of zakat and its role to empower creative economy. *International Journal of Religious and Cultural Studies (IJRACS)*, 4(2), 115–128. <https://doi.org/10.34199/ijracs.2022.10.07>
 46. Untitled [Fatwa and legal dynamics in Indonesia]. (2022). *Al-Ihkam: Jurnal Hukum & Pranata Sosial*, 17(1), 1–25. <https://doi.org/10.19105/al-ihkam.v17i1>
 47. Vergani, M., Barton, G., & Wahid, Y. (2021). Understanding violent extremism in Indonesia. In *Countering violent extremism in Indonesia* (pp. 29–62). Springer. https://doi.org/10.1007/978-981-16-2032-4_2
 48. Wahyudi, I., Amalia, E., & Rini, R. (2024). Revamping tradition with tech: Guiding innovation in zakat for social good. *Al-Risalah*, 15(1), 18–40. <https://doi.org/10.34005/alrisalah.v15i1.3497>
 49. Wiranatakusuma, D. B., & Habibullah, H. (2024). Analyses of relationship between economic growth and zakat distribution: Some comparative studies between Indonesia and Malaysia. *Ekuilibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi*, 19(1), 18–41. <https://doi.org/10.24269/ekuilibrium.v19i1.2024.pp18-41>
 50. Young Muslim generation's preferences for using digital platforms for zakat payments: A cross-country study of Indonesia and Malaysia. (2024). *Journal of Infrastructure, Policy and Development*, 8(13), Article 5924. <https://doi.org/10.24294/jipd.v8i13.5924>