

Fintech And Islamic Social Finance: Digitalizing Waqf And Zakat For Poverty Alleviation In Southeast Asia

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Keywords: Fintech, Islamic Social Finance, Zakat, Waqf, Poverty Alleviation, Southeast Asia.	Abstract: Islamic social finance, particularly zakat and waqf instruments, has significant potential as a catalyst for poverty alleviation in Southeast Asia. However, traditional management is often faced with issues of transparency, distribution inefficiency, and limited reach. This study aims to analyze how the integration of financial technology (fintech) in the Islamic social finance system can optimize the management of zakat and waqf to alleviate poverty in Southeast Asia. Using the Systematic Literature Review (SLR) method analyzing various academic publications from 2021 to 2026, the findings of this study indicate that the adoption of fintech innovations such as crowdfunding platforms, blockchain, and artificial intelligence (AI) has been empirically proven to improve fund collection efficiency, accelerate distribution times, and increase public trust (muzakki and waqif). Although these breakthroughs offer significant impacts on poverty alleviation and the achievement of the Sustainable Development Goals (SDGs), there are still various challenges such as low digital literacy among vulnerable communities, the lack of integrated cross-border regulatory frameworks, and sharia compliance issues in advanced innovations. This article recommends the need for an adaptive and inclusive regulatory model to ensure a sustainable digital Islamic social finance ecosystem in the region.
Kata Kunci: Fintech, Keuangan Sosial Islam, Zakat, Wakaf, Pengentasan Kemiskinan, Asia Tenggara.	Abstrak: Keuangan sosial Islam, khususnya instrumen zakat dan wakaf, memiliki potensi besar sebagai katalisator pengentasan kemiskinan di kawasan Asia Tenggara. Namun, pengelolaan tradisional seringkali dihadapkan pada masalah transparansi, inefisiensi distribusi, dan jangkauan yang terbatas. Penelitian ini bertujuan untuk menganalisis bagaimana integrasi teknologi finansial (fintech) dalam sistem keuangan sosial Islam dapat mengoptimalkan pengelolaan zakat dan wakaf guna meringankan kemiskinan di Asia Tenggara. Menggunakan metode <i>Systematic Literature Review</i> (SLR) yang menganalisis berbagai publikasi akademis dari rentang tahun 2021 hingga 2026, temuan penelitian ini menunjukkan bahwa adopsi inovasi <i>fintech</i> seperti platform <i>crowdfunding</i>, <i>blockchain</i>, dan kecerdasan buatan (AI) telah terbukti secara empiris mampu meningkatkan efisiensi penghimpunan dana, mempercepat waktu distribusi, dan meningkatkan kepercayaan publik (muzakki dan wakif). Meskipun terobosan ini menawarkan dampak signifikan dalam pengentasan kemiskinan dan pencapaian <i>Sustainable Development Goals</i> (SDGs), masih terdapat berbagai tantangan seperti rendahnya literasi digital di kalangan masyarakat rentan, belum terintegrasinya kerangka regulasi antaranegara, serta masalah kepatuhan syariah pada inovasi tingkat lanjut. Artikel ini merekomendasikan perlunya model regulasi yang adaptif

	dan inklusif demi menjamin ekosistem keuangan sosial Islam digital yang berkelanjutan di kawasan ini.
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A. INTRODUCTION

The Southeast Asian region has recorded quite rapid macroeconomic growth over the past decade; however, the issues of poverty and income inequality remain structural challenges that have not been fully resolved. Despite various government social safety net programs rolled out in respective countries, the economic gap between high-income groups and vulnerable communities remains wide. The post-pandemic global economic dynamics and consecutive inflation crises have further exposed the financial vulnerability of grassroots groups in this region, thus demanding alternative funding solutions outside the conventional state budget.

In responding to this multidimensional poverty challenge, the Islamic social finance system offers a robust and equitable alternative instrument. Islamic social finance, which relies on the instruments of Zakat, Infaq, Sadaqah, and Waqf (ZISWAF), operates on the principle of wealth redistribution to prevent the accumulation of wealth in specific segments of society alone. Unlike purely conventional philanthropy systems, ZISWAF has a strong theological foundation as well as a socio-economic function that directly targets the empowerment of the poor and needy.

In Southeast Asia, especially in countries with massive Muslim populations like Indonesia and Malaysia, as well as minority Muslim communities in Thailand and the Philippines, the potential for these Islamic social finance instruments is massive. In Indonesia alone, the potential for zakat is estimated to reach hundreds of trillions of rupiah per year, as well as waqf assets in the form of land and cash that have not been optimally utilized. This great potential, if managed productively, is believed to be the main source of financing for achieving the Sustainable Development Goals (SDGs) related to extreme poverty alleviation at the regional level.

Poverty and economic inequality remain central issues in several Southeast Asian countries even though the region is experiencing relatively stable macroeconomic growth. In overcoming these structural problems, the Islamic social finance system (especially ZISWAF) has long been recognized as a fair wealth redistribution instrument.

Islamic social finance institutions in Muslim-majority countries like Indonesia and Malaysia, as well as countries with Muslim minorities like Thailand, have an urgency to utilize public funds to improve the welfare of the ummah (Abu Bakar & Salaeh, 2026).

Unfortunately, the realization of ZISWAF collection and utilization in Southeast Asia is currently still far from its ideal potential due to various technical and managerial constraints. Traditional management carried out by many *amil* (zakat managers) and *nazhir* (waqf managers) is often faced with the problems of inefficient fund collection, limited demographic reach, and a lack of transparency in reporting. As a result, the level of public trust (*muzakki* and *waqif*) towards institutions managing Islamic social funds often fluctuates, encouraging the public to prefer distributing their funds informally and unorganized.

Along with society's transition towards the Society 5.0 era, financial technology (fintech) innovations have disrupted the global financial industry landscape, including the Islamic finance sector. Fintech brings high-level operational efficiency through automation, transparent digital track records, and expanded inclusivity capable of reaching the unbanked segments of society. Advancements such as mobile banking, e-wallets, artificial intelligence (AI), and decentralized ledger technologies provide new hope for improving the governance of philanthropic institutions.

The utilization of zakat and waqf in the Southeast Asian region is often hampered by fragmented management, lack of reporting transparency, and inefficiency in manual fund collection (Anggraini et al., 2024). In the Society 5.0 era, the adaptation of financial technology (fintech) is present as a solution to revolutionize the Islamic philanthropy ecosystem. The application of technologies such as digital payment portals, blockchain for transaction transparency, and smart contracts in waqf management has opened a new dimension for the accountability of social finance institutions (Susanto et al., 2025).

The intersection between cutting-edge technological innovations and sharia principles then gave birth to the Islamic Fintech ecosystem, which is specifically designed to revolutionize Islamic social finance governance. The use of sharia crowdfunding platforms, integration of contactless digital payment portals, to the discourse on the use of blockchain and smart contracts, enables waqf transaction recording and zakat distribution to be carried out in real-time and free from manipulation risks. This

innovation radically changes the face of ZISWAF institutions to be far more professional, accountable, and easily accessible by millennials and Gen Z.

Empirically, fintech adaptation in ZISWAF management has begun to show measurable positive impacts on the poverty alleviation agenda in Southeast Asia. Digitalization is proven to accelerate institutional responses in distributing disaster relief, cut bureaucratic chains, and reduce operational costs so that the proportion of funds received by mustahiq (beneficiaries) is maximized.

Furthermore, digital platforms are now actively facilitating productive zakat and waqf models designed to provide initial funding (sharia venture capital) for Micro, Small, and Medium Enterprises (MSMEs) of underprivileged families. Recent studies indicate that digitalization not only changes the way funds are collected but also has a direct impact on the distribution effectiveness of disaster relief and productive poverty alleviation programs (Nipa et al., 2025).

Although technology adoption promises remarkable efficiency, various current literature highlights the remaining gap between technological potential and its implementation reality in the field. The low level of digital literacy and financial inclusion among rural communities (including mustahiq), the lack of uniformity in governance and sharia fintech regulatory frameworks among ASEAN countries, and cybersecurity concerns remain serious obstacles. These structural challenges, if not immediately intervened by comprehensive policies, could hinder the holistic optimization of digital ZISWAF utilization.

Based on the conceptual background and empirical reality described, there is an academic urgency to deeply examine the transformation of ZISWAF institutions through technological integration in this region. Therefore, this study aims to analyze how the implementation of fintech innovations in the Islamic social finance ecosystem can optimize the digitalization of zakat and waqf, and identify the extent to which these digital instruments contribute to poverty alleviation in Southeast Asia.

The results of this literature synthesis are expected to provide a strategic recommendation framework for regulators, ZISWAF institutions, and technology developers in formulating an inclusive, secure, and sustainable Islamic social finance order.

B. RESEARCH METHOD

This study uses a qualitative approach with the Systematic Literature Review (SLR) method to comprehensively examine the development and impact of the digitalization of Islamic social finance in Southeast Asia. The SLR method was chosen due to its ability to identify, evaluate, and synthesize various empirical findings from previous studies in a structured, objective, and transparent manner.

The literature review was focused exclusively on academic publications published within the last five years, from 2021 to 2026. This temporal restriction was strictly applied to ensure that the analyzed data truly represents the most current trends in financial technology (fintech) adoption, contemporary regulatory dynamics, and the relevant post-pandemic economic landscape in the Southeast Asian region.

The data collection phase was carried out through systematic searches on international and regional accredited academic databases, such as Scopus, Web of Science, and Google Scholar. The literature search utilized a combination of specific keywords (Boolean operators), including: "Islamic fintech", "digitalization of zakat and waqf", "poverty alleviation", "Islamic social finance", and "Southeast Asia".

To maintain research validity, inclusion criteria were established: (1) articles focusing on zakat and/or waqf instruments, (2) discussing the application of innovative technologies in their management, (3) having a research locus in Southeast Asian countries (such as Indonesia, Malaysia, Thailand, etc.), and (4) being peer-reviewed journal articles. Conversely, documents in the form of popular opinions, non-academic reports, and studies outside these temporal and geographical parameters were automatically excluded.

After going through the literature screening stages, articles that met the eligibility criteria were extracted and reviewed using thematic analysis techniques. This analytical process centered on data codification from each literature to identify patterns, academic debates, and dominant empirical conclusions.

The data extraction results were then synthesized and grouped into three main research themes: (1) the mechanism of ZISWAF institutional transformation through fintech adaptation, (2) the real impact of digitalization on the effectiveness of poverty alleviation programs, and (3) the identification of technical and regulatory barriers in the

field. Through this comprehensive thematic mapping, the study is able to produce evidence-based conclusions and formulate solid recommendations for relevant stakeholders.

C. RESULTS AND DISCUSSION

1. The Role of Fintech in Changing the Islamic Social Finance Landscape

Fintech integration has disrupted the institutional mechanisms of *amil* and *nazhir* (waqf managers) in Southeast Asia, making them more inclusive. In Indonesia and Malaysia, relevant authorities and various Islamic startup platforms have proactively developed online payment channels, mobile-based applications, to retail Cash Waqf Linked Sukuk (CWLS) digitally.

Based on global trend analysis, the use of artificial intelligence (AI) for the beneficiary (*mustahiq*) verification process and the adoption of big data analytics have proven to minimize institutional operational costs while suppressing potential fund misappropriation (Dupi & Baloch, 2025). These innovations directly bridge the information asymmetry gap between donors and fund managers.

2. The Impact of Digitalization on Poverty Alleviation

The utilization of fintech in zakat and waqf provides a measurable impact in improving the welfare of the lower-class society. First, increased financial inclusion: sharia crowdfunding platforms make it easier for people from various strata to distribute zakat on a micro basis (micropayments) without geographical boundaries (Susanto, Putri, & Ramli, 2024).

Second, accelerated economic response: in the case of disaster risk financing and social crisis mitigation, fintech-based zakat and waqf fund collection can shorten distribution time by 30-40% compared to traditional methods (Nipa et al., 2025).

At the village level, the digitalization concept enables the birth of integrated "Zakat Villages" where funds are managed into small-scale sharia venture capital, entrepreneurship training, and health insurance for underprivileged families (Haryono, 2023). This shifts the paradigm from mere cash assistance (charity) to long-term productive empowerment programs.

3. Challenges and Future Prospects

Despite its rapid development, the optimization of digital ZISWAF in Southeast Asia is not free from challenges. In some regions, especially southern Thailand and rural areas in Indonesia, the digital literacy gap among mustahiq causes these programs to be not optimally absorbed (Abu Bakar & Salaeh, 2026).

Furthermore, cybersecurity issues, standardization of sharia compliance certification for cross-border fintech providers, and the unmaximized integration of legal frameworks (regulatory governance) remain structural obstacles to the development of this ecosystem (Anggraini et al., 2024; Susanto et al., 2025).

Therefore, a comprehensive synergy between the government (as regulator), ZISWAF institutions, fintech developers, and fatwa authorities is needed to form a resilient, standardized, and transparent social finance governance model.

Digital transformation has shifted the paradigm of zakat and waqf management in Southeast Asia, moving from conventional approaches to technologically integrated ecosystems. In Muslim-majority countries like Indonesia and Malaysia, the emergence of sharia crowdfunding platforms and mobile-based apps has facilitated easy access for the public to distribute funds instantly.

The integration of contactless digital payment systems like the Quick Response Code Indonesian Standard (QRIS) and e-wallets has been proven to significantly increase the volume of ZISWAF fund collection in recent years (Susanto, Putri, & Ramli, 2024). This convenience breaks down geographical and time barriers, allowing philanthropic transactions to be carried out anytime and anywhere.

Furthermore, the adoption of decentralized ledger technologies such as blockchain has begun to be trialed and applied to overcome the issue of public trust deficit toward managing institutions. The blockchain system enables the tracing of fund footprints from the time they are deposited by muzakki (donors) until received by mustahiq (beneficiaries) transparently, permanently, and in real-time (Susanto et al., 2025).

The use of smart contracts in productive waqf management also ensures that the principal value of waqf assets remains intact and the yields are automatically distributed

according to sharia designations without manual intervention that is vulnerable to manipulation (Anggraini & Rofiq, 2024).

Besides blockchain, the application of Artificial Intelligence (AI) and Big Data Analytics provides a crucial contribution to mitigating the risk of information asymmetry and allocation inefficiency. Modern amil and nazhir institutions can now utilize AI algorithms to verify population data, map poverty demographics, and accurately profile mustahiq eligibility, thereby minimizing inclusion errors (mis-targeting) and exclusion errors (missing data) (Dupi & Baloch, 2025). This data optimization directly impacts the reduction of institutional operational costs, which in turn maximizes the percentage of social funds returned directly to the poor.

In the context of poverty alleviation, the digitalization of Islamic social finance has democratized philanthropy through the phenomenon of micro-donations (micropayments). Middle-class society, freelancers, and students can now actively participate in sharia social funding without being tied to burdensome minimum donation limits. The inclusivity offered by fintech creates a massive aggregation of public funds, which effectively serves as a complementary social safety net supporting the State Revenue and Expenditure Budget (APBN) in the Southeast Asian region (Haryono, 2023).

The speed and effectiveness of distribution facilitated by digital platforms become crucial instruments in financing disaster risks and humanitarian crises, which are often the main triggers of sudden poverty (transient poverty). Empirical studies show that the distribution of emergency zakat and infaq funds through fintech platforms can cut operational distribution time by up to 40% compared to traditional logistical methods (Nipa et al., 2025).

This highly rapid financial response enables crisis-affected families to quickly meet their basic needs and prevent falling into the abyss of extreme poverty. The most substantial transformation is seen in the shifting paradigm of ZISWAF allocation from being merely charitable (consumptive charity) to long-term productive economic empowerment programs.

Through fintech platforms, cash waqf funds can now be integrated with sharia capital market instruments, such as the issuance of retail Cash Waqf Linked Sukuk

(CWLS) online in Indonesia. This advanced scheme capitalizes public waqf funds into infrastructure and working capital financing for MSMEs, while the fixed returns from these sukuk are channeled to fund health insurance programs, educational scholarships, and public facilities for the poor (Anggraini & Rofiq, 2024).

The impact of this digital-based empowerment also manifests in integrated community initiatives such as the "Digital Zakat Village" program or independent sharia villages. In this ecosystem, the integration of fintech applications allows the distribution of interest-free business capital (*qardh al-hasan*) for micro-entrepreneurs with a measurable balance sheet monitoring system.

Entrepreneurial mentoring coupled with digital cash flow reporting by micro-entrepreneurs not only increases family economic resilience but also accelerates the transformation of their status from assistance recipients to zakat payers (Haryono, 2023). Despite highly promising potential and achievements, the optimization process of ZISWAF fintech instruments in Southeast Asia is still hindered by the reality of the digital divide. In various remote areas of Indonesia, outermost archipelagos, and regions in Southern Thailand, uneven telecommunications infrastructure is directly proportional to low digital and financial literacy among *mustahiq* (Abu Bakar & Salaeh, 2026).

Ironically, the most vulnerable community groups, who are the primary targets of poverty alleviation programs, often struggle, or are even left behind, in accessing assistance schemes designed with purely digital mechanisms. Another structural barrier lies in the fragmentation of governance regulations and sharia compliance standards across countries in the ASEAN region.

The absence of harmonized legal frameworks causes a slowdown in the growth of Islamic fintech startups to expand across jurisdictional borders. Furthermore, financial technology developers are often faced with fatwa uncertainties regarding the validity of advanced contemporary instruments, such as the discourse on accepting crypto-asset-based zakat or the commercialization of sharia peer-to-peer lending for social funds, which urgently requires a consensus from the Sharia Board at the regional level (Susanto et al., 2025).

Finally, cybersecurity risks and data privacy protection remain crucial latent threats in the digital philanthropy ecosystem. Personal data leaks, both from donors and

beneficiaries, can be fatal, leading to the collapse of integrity and public trust that has been painstakingly built by fund management institutions.

Therefore, extremely strong synergy is needed between monetary authorities, fatwa boards, relevant ministries, and fintech service providers to formulate layered cybersecurity architectures and pro-innovation regulatory frameworks (Susanto, Putri, & Ramli, 2024). Only with this comprehensive risk mitigation can digital Islamic social finance truly function as the backbone of poverty alleviation in the Southeast Asian region.

D. CONCLUSION

The development of fintech innovations such as blockchain, artificial intelligence (AI), and mobile donation platforms has created a massive leap in the management of Islamic social finance in Southeast Asia. Digitalization strengthens transparency, accountability, and the level of public participation in fulfilling zakat and waqf obligations. In the context of poverty alleviation, this technology facilitates faster, more targeted, and sustainable fund distribution shifting the function of ZISWAF from purely consumptive charity instruments to drivers of real economic empowerment. For this transformation to be realized holistically and alleviate poverty structurally, policymakers in Southeast Asia must formulate an adaptive sharia fintech regulatory umbrella and massively improve digital literacy across all levels of society.

BIBLIOGRAPHY

- Abu Bakar, A., & Salaeh, F. (2026). Optimizing the Role of Zakat, Infaq, Sedekah, and Waqf (ZISWAF) in Poverty Alleviation in Thailand. *Samarinda International Journal of Islamic Studies (SIJIS)*, 3(1), 13–19.
- Anggraini, R. D., & Rofiq, A. (2024). Optimalisasi Potensi Wakaf di Indonesia: Tantangan dan Peran Digitalisasi dalam Penguatan Manfaat Wakaf bagi Masyarakat. *Journal of Islamic Business Management Studies*, 5(1), 60–67.
- Dupi, M., & Baloch, A. (2025). Digital Zakat and Islamic Fintech: A Bibliometric Analysis of Global Research Trends and Collaboration Networks (2012–2025). *Middle East and Islamic Studies Journal*, 12(2), 112–128.
- Haryono, H. (2023). Transformasi Digital Zakat: Analisis Efektivitas Platform Digital Dalam Peningkatan Kepatuhan Muzakki di Era Society 5.0. *Jurnal Akuntansi dan Keuangan Syariah*, 8(2), 185–195.

- Nipa, N. N., Hawariyuni, W., & Widiastuti, T. (2025). Harnessing Islamic FinTech for disaster risk financing: Innovative strategies for economic resilience and sustainable development. *Journal of Islamic Economics Lariba*, 11(1), 260–275.
- Susanto, A. A., Hawariyuni, W., Pratomo, W. A., Hasibuan, W. S., Andrasari, M., Widiastuti, T., & Suprayitno, A. (2025). Critical assessment of blockchain applications in zakat literature: Lessons for government and future directions. *International Journal of Zakat*, 10(1), 80–98.
- Susanto, H., Putri, N., & Ramli, A. (2024). Fintech-based zakat management in Southeast Asia: Toward sustainable development. *Asian Journal of Islamic Finance*, 6(1), 15–34.