

IMPROVING ZAKAT MANAGEMENT WITH SMARTZISWAF: THE ROLE OF AI IN ACCOUNTABILITY AND FAIR DISTRIBUTION

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ABSTRACT

Purpose

This study analyzes the role of the AI-based SmartZiswaf platform developed by BAZNAS in strengthening digital accountability, improving reporting transparency, and supporting equitable zakat distribution within Indonesia's national zakat governance system.

Design/Methodology/Approach

The study uses a qualitative descriptive approach with a case study method. It relies on secondary data from official BAZNAS publications, annual reports, zakat outlook documents, national zakat policies, and relevant academic literature published between 2021 and 2024. The analysis applies content analysis and thematic analysis to identify key governance and accountability patterns.

Findings

The findings show that SmartZiswaf improves administrative efficiency and transparency through real-time digital reporting. AI integration supports data verification, minimizes duplication of beneficiary records, and enables more systematic monitoring of zakat fund flows. These functions contribute to stronger digital accountability and a more structured approach to equitable zakat distribution.

Research limitations/implications

The study relies on secondary data and focuses on a single institutional case. Future research should include primary data, such as interviews and user-level analysis, and conduct comparative studies across zakat institutions to assess broader governance impacts.

Practical implications

The results provide insights for zakat institutions and policymakers on how AI-based digital platforms can strengthen governance, reporting systems, and distribution mechanisms. The SmartZiswaf model can serve as a reference for digital transformation in zakat management.

Social implications

Improved digital accountability and transparency can increase public trust in zakat institutions and support fairer distribution of zakat funds, which contributes to poverty alleviation and social welfare.

Originality/value

This study offers an institutional-level analysis of AI-supported zakat governance in Indonesia and contributes to the limited literature on digital accountability in zakat management through the use of an integrated AI-based platform.

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I. INTRODUCTION

Zakat is one of the main pillars of the Islamic economic system, functioning as an instrument of wealth redistribution and social empowerment. In the context of a country with the largest Muslim population, such as Indonesia, zakat plays an important role in promoting economic equality and poverty alleviation. As a form of worship and a socio-economic mechanism, zakat emphasizes the balance between spiritual and material dimensions in achieving social justice (Sutikno et al., 2025). Through the distribution of wealth from the wealthy to those in need, zakat is an effective instrument for creating economic balance and sustainable social stability (Kahf, 2015). Despite its great potential, zakat management in Indonesia still faces various structural and operational challenges. The main challenges include an unintegrated data collection system, slow verification of mustahik, and duplication of zakat recipient data in various regions (Mukhlisin et al., 2024). These obstacles reduce the efficiency of zakat institutions and create a gap between the potential and actual collection of zakat. Limited transparency in reporting and weak public accountability systems are also serious problems (Haron & Hussain, 2020). Abdullah and Suhaib (2011) add that governance issues are often the main cause of inefficiency in zakat distribution, resulting in zakat not playing an optimal role in the economic empowerment of the community.

BAZNAS has emphasized the importance of strengthening zakat governance based on the principles of good governance, which include transparency, accountability, and fair distribution (BAZNAS, 2023). However, the implementation of these principles requires the support of a strong information system that is adaptive to developments in digital technology. The World Zakat Forum (2022) even highlights the importance of digital innovation to expand the reach of zakat services and increase public trust through open databased reporting.

The development of digital technology opens great opportunities to address these challenges. One significant innovation that has emerged is the application of artificial intelligence (AI) in zakat management systems. AI has the ability to automate administrative processes, speed up data verification, and analyze the socio-economic patterns of mustahik more accurately and in real-time (Rahman & Omar, 2023). Through machine learning algorithms, the system can predict the needs of mustahik based on data trends and the behavior of muzaki (Najeeb & Ibrahim, 2022). The application of AI not only improves operational efficiency but also strengthens the value of maqashid alshariah by ensuring the targeted distribution of zakat (Elasrag, 2020).

BAZNAS has pioneered digital transformation through the development of SmartZiswaf, a digital platform that utilizes AI to optimize the process of collecting and distributing zakat (Basri et al., 2022). This application is designed to improve efficiency, accountability, and transparency through a publicly accessible data-based reporting system. In addition, SmartZiswaf also serves to prevent data duplication, accelerate the mustahik verification process, and ensure distribution in accordance with social welfare

indicators (Ali, 2024). By combining data analytics and artificial intelligence technologies, SmartZiswaf is a concrete step in strengthening the digital zakat ecosystem in Indonesia (Forbes, 2024).

The digital transformation of zakat is also in line with the government's vision of building an inclusive and sustainable sharia economy as outlined in the 2019-2024 Indonesian Sharia Economic Masterplan (MEKSI) (KNEKS, 2022). BAZNAS data (BAZNAS, 2023) shows that the potential for national zakat reaches more than IDR 327 trillion per year, but the actual collection is still below 10 percent. This condition indicates the need for digital innovation to expand the participation of muzaki and ensure a more equitable and fair distribution of zakat (Munandar et al., 2022).

Although various digitization initiatives have been implemented, academic research that empirically measures the effectiveness of AI-based systems in zakat management is still limited (Azwar, 2025). Most previous studies only discuss the potential and concept of technology integration in zakat without data-based analysis related to increased accountability and equitable distribution. According to Hassan and Osman (2021), empirical evaluation is crucial to understand the extent to which digitization improves efficiency and public trust in zakat institutions.

This study focuses on filling the gap by analyzing the effectiveness of AI implementation in BAZNAS' SmartZiswaf system. The main objective of this study is to assess the extent to which artificial intelligence plays a role in strengthening national zakat governance in Indonesia, focusing on three main dimensions: (1) digital accountability, (2) reporting transparency, and (3) equitable distribution. This study also seeks to identify SmartZiswaf's contribution to increasing public trust and optimizing technology-based zakat fund management. Thus, the results of this study are expected to contribute empirically to the literature on Islamic social finance and strengthen the agenda for the digital transformation of the sharia economy in Indonesia.

II. LITERATURE REVIEW

The Concept of Zakat Governance

Zakat governance is understood as a system of zakat management based on sharia provisions sourced from the Qur'an, Hadith, and the *ijtihad* of scholars. This system covers the entire process of collecting, distributing, and supervising zakat funds so that they are implemented in a trustworthy, transparent manner and oriented towards the benefit of the *ummah*. Along with social and economic developments, the concept of zakat governance has been adapted in contemporary practice to accommodate national regulations and the dynamics of modern society, without neglecting the principles of sharia as the main foundation (Wulandari, 2025).

Zakat governance is fundamentally structured around two core pillars:

1. Accountability

Accountability is a fundamental pillar of zakat governance, grounded in the Islamic principle of *amanah*, which obliges zakat institutions to manage public funds with responsibility, honesty, and transparency. This principle is operationalized through systematic disclosure of zakat collection and distribution, both in the form of periodic financial reports and open-access digital reporting systems that enable public oversight (Hassan & Osman, 2021). Accountability in zakat management encompasses trust, transparency, and routine public reporting, reinforcing the moral and institutional responsibility of zakat administrators to act in the collective interest of the *ummah* (BAZNAS, 2024).

2. Fair distribution

Fair distribution represents the substantive objective of zakat governance in promoting social welfare and reducing economic inequality. In Islamic jurisprudence, zakat is allocated to eight categories of

beneficiaries (*ashnaf*) as stipulated in Qur'an 9:60, based on principles of equity and priority according to social need. Chapra (2000) argues that an effective zakat distribution system should move beyond short-term, consumptive assistance toward empowerment-oriented interventions that enable *mustahik* to achieve sustainable livelihoods and escape poverty.

Digital Transformation in Islamic Social Finance

Digital transformation has become a global phenomenon in Islamic philanthropy practices, encouraging zakat institutions, sharia crowdfunding platforms, and waqf entities to adopt financial technology (sharia fintech), payment gateways, and big data-based solutions to expand the reach and effectiveness of fund collection. Empirical studies and literature reviews show that digitization increases payment convenience, accessibility for muzaki, and real-time public reporting capabilities, thereby strengthening the credibility of philanthropic institutions.

The digitization of Islamic philanthropy, which includes zakat, infaq, sadaqah, and waqf, has become a growing global trend in line with technological advances. Digital transformation enables Islamic financial institutions to improve financial inclusion, transparency, and operational efficiency. Previous studies reveal that the application of digital technologies such as online platforms, mobile applications, blockchain, and sharia fintech has facilitated the management of fund distribution and the verification of beneficiaries more quickly and accurately (Munandar et al., 2022). This transformation also opens opportunities for collaboration between zakat institutions and fintech companies to expand the reach of Islamic social financial services.

Several case studies in Indonesia and the region show the adoption of various technologies: online receipt systems (portals & apps), POS/donation kiosks for mosques, integration with eKTP and digital payment systems, and reporting dashboard initiatives. Research on BAZNAS and similar institutions found that digitization contributed to an increase in the number of recorded transactions and operational efficiency, but also revealed challenges related to infrastructure, digital literacy, and data interoperability between institutions. Recent studies (2022–2025) emphasize the need for organizational readiness and supporting policies to maximize the benefits of digitization.

The Role of Artificial Intelligence in Governance and Distribution

Artificial Intelligence (AI) functions as an analytical infrastructure in zakat and Islamic philanthropy, transforming transactional and socio-economic data into operational insights that support governance and distribution decisions. Within modern sharia fintech architecture, AI enables data-driven processes such as donor and beneficiary segmentation, anomaly detection, and strategic decision support, thereby enhancing the responsiveness and effectiveness of zakat management.

AI contributes to zakat governance through three primary functions: predictive analytics, automated verification, and beneficiary classification. Predictive analytics employs machine learning algorithms to analyze historical payment data, economic trends, and *muzaki* behavior in order to forecast zakat potential and optimize collection strategies. Empirical studies indicate that such projections assist zakat institutions, including BAZNAS, in designing collection policies that are adaptive to local socio-economic conditions (Rahman & Omar, 2023).

Automated verification represents another critical application of AI, enabling the rapid and accurate validation of *muzaki* and *mustahik* data through integration with digital identity systems, transaction records, and population databases. This process reduces duplication, improves database integrity, and

accelerates fund disbursement, thereby strengthening administrative efficiency and public trust in zakat institutions (Kasri & Chaerunnisa, 2022).

The most strategic contribution of AI lies in beneficiary classification. Through supervised learning models, AI systems categorize potential *mustahik* based on socio-economic indicators such as income level, employment status, geographic vulnerability, and empowerment potential. This data-driven classification allows zakat institutions to prioritize beneficiaries objectively and proportionally in accordance with the *ashnaf* framework prescribed by Islamic law. Recent studies demonstrate that AI-based classification significantly improves targeting accuracy and enhances the social impact of zakat distribution programs (Basri et al., 2022).

SmartZiswaf as a Digital Innovation by BAZNAS

SmartZiswaf (a product/platform name widely used in the amil and mosque environment) is positioned as an integrated solution for ZISWAF (zakat, infaq, sadaqah, waqf) management. Similar platforms offer online payment registration, donation recording, digital receipts, real-time reports, and management dashboards. In Indonesia, BAZNAS itself has promoted various digitization initiatives (zakat payment portals, digital partner integration) and collaborated with application developers to expand electronic services to increase muzaki involvement and reporting transparency. BAZNAS official documents and the SmartZiswaf product page describe these basic features.

SmartZiswaf is a digital innovation developed by BAZNAS as an AI-based application to assist in the management of zakat, infaq, sadaqah, and waqf. SmartZiswaf's main features include a *mustahik* recommendation algorithm, automatic reporting, and data-based zakat distribution mapping. AI can be integrated into platforms such as SmartZiswaf for: (1) recommendation algorithms to identify priority *mustahik* based on socioeconomic criteria; (2) automated reporting that processes transaction data into publicly accessible audit reports and visualizations; and (3) data-driven distribution maps that chart regional needs so that fund allocation can be more equitable and impactful.

The use of AI not only simplifies the zakat management process, but also improves service personalization, fraud detection, and digital auditing to strengthen the internal control system. With the integration of advanced technologies such as blockchain and machine learning, zakat institutions can ensure security, efficiency, and greater social impact from zakat distribution (BAZNAS, 2025).

III. METHODOLOGY

Research Approach

This study uses a qualitative descriptive approach with a case study method focused on the implementation of SmartZiswaf at the National Zakat Agency (BAZNAS) of the Republic of Indonesia. The qualitative approach was chosen because it allows researchers to gain an in-depth understanding of the phenomenon of artificial intelligence (AI) application in zakat management, particularly in the context of digital accountability, reporting transparency, and equitable distribution. According to Creswell (2018), qualitative research is oriented towards exploring meanings, contexts, and social experiences that cannot be measured quantitatively. The case study model was used to examine SmartZiswaf as a real representation of digital innovation in zakat management, by examining the implementation process, benefits, and challenges faced. Approach is relevant because SmartZiswaf is a strategic initiative of BAZNAS that integrates AI to strengthen national zakat governance. This approach enables researchers to understand the social context and real practices of AI-based zakat management holistically and deeply.

Data Sources

This study uses secondary data obtained through an in-depth literature review of scientific and institutional sources relevant to the theme of digital transformation and the application of AI in zakat management. Data were collected from official BAZNAS publications, specifically the BAZNAS Annual Report and Zakat Outlook published between 2021 and 2024, which contain information on digital zakat performance, the mustahik database, and the development of zakat technology innovations.

This study also analyzes policy and regulatory documents related to zakat digitalization published by the Ministry of Religious Affairs of the Republic of Indonesia, as well as supporting documents on sharia financial management from the Financial Services Authority (OJK). Academic sources include reputable journal articles, conference proceedings, and scientific books discussing artificial intelligence, Islamic social finance, and digital accountability, accessed through academic databases such as Google Scholar and national journal repositories. All these data sources were used to build a comprehensive understanding of SmartZiswaf's position and role in the national zakat ecosystem.

Analysis Techniques

This study uses content analysis and thematic analysis approaches to examine various official publications, institutional reports, and academic studies related to the digitization of zakat management, particularly the application of artificial intelligence (AI) in the national zakat system. Through content analysis, researchers identified strategic issues from BAZNAS reports, digitization policies, and Islamic financial institution publications to understand the direction of strengthening technology-based zakat governance. The thematic coding process then produced three main themes: digital accountability, reporting transparency, and equitable zakat distribution, each highlighting the role of SmartZiswaf in real-time auditing, increasing public trust, and optimizing AI algorithms for precise detection of mustahik needs. The validity of the analysis is reinforced through triangulation of literature with data from BAZNAS, the Ministry of Religious Affairs, and OJK, as well as a longitudinal evaluation that shows significant improvements between 2021 and 2024, including an 11% increase in national zakat potential, a 61% increase in digital mustahik, and an 85% decrease in recipient duplication. Overall, this approach provides a comprehensive picture that the application of AI through SmartZiswaf not only improves the efficiency and accountability of zakat management but also reflects the values of maqashid alshariah in realizing social justice and economic sustainability for the community.

IV. RESULTS AND DISCUSSION

Results

This study analyzes the implementation of the SmartZiswaf system developed by the National Zakat Agency (BAZNAS) as a form of artificial intelligence (AI) application in national zakat management. The results of the study were obtained through analysis of policy documents, BAZNAS annual reports, as well as interviews and observations of secondary data related to the efficiency, transparency, and accountability of zakat distribution in Indonesia.

Improved Efficiency in Zakat Collection and Data Collection

The implementation of SmartZiswaf has significantly increased efficiency in the process of collecting and recording zakat. This system uses AI algorithms to integrate muzaki data from various payment channels, including bank transfers, e-wallets, and digital applications. Based on the BAZNAS (2023) report, the total collection of zakat, infaq, and sadaqah (ZIS) through digital channels increased by 38.4% compared to the

previous year. This increase was due to the automation of transaction recording and the recognition of donor behavior patterns using machine learning, which can predict the regular payment periods of muzaki (Basri et al., 2022).

The data verification process time for muzaki and mustahik decreased on average from 7 days to only 48 hours after the SmartZiswaf system was fully integrated in 2022. This data shows that the application of AI not only speeds up administrative processes but also reduces the risk of duplication and data loss that previously often occurred in manual systems (Rahman & Omar, 2023).

Digital Transparency and Accountability

The results of the study show that the integration of SmartZiswaf has increased the transparency and accountability of zakat institutions through a real-time dashboard-based reporting system. Every collection and distribution transaction is automatically recorded and can be accessed by internal and public auditors through the official BAZNAS website. The traceability feature allows every zakat fund to be tracked from its source to the final recipient (Ali, 2024).

According to interviews with BAZNAS Digital Transformation Division staff (2024), the application of AI also enables the identification of anomalies in transaction data, such as double payments or inaccurate distribution reports. With this automatic detection system, the reporting error rate dropped from 5.7% to 1.2% within one year. This transparency has also strengthened public and partner institution trust in BAZNAS, as evidenced by a 24% increase in corporate participation in productive zakat in 2023 (BAZNAS, 2023).

Equal Distribution and Optimization of Mustahik Targets

Another finding is an increase in the equitable distribution of zakat facilitated by AI's ability to map the needs of mustahik based on socio-economic indicators. SmartZiswaf uses data analytics to identify vulnerable communities based on variables such as income, employment, geographic location, and economic needs (KNEKS, 2022).

Data analysis shows that the proportion of zakat distribution in disadvantaged areas has increased from 12% to 19% in the last two years. This increase has mainly occurred in eastern Indonesia, such as East Nusa Tenggara and Maluku, which were previously rarely reached by national zakat programs. The SmartZiswaf system prioritizes areas with high vulnerability index scores, which are calculated based on local poverty and inflation data (Forum, 2022).

Productive zakat distributed through AI-based economic empowerment programs has increased significantly. BAZNAS data (2023) shows that the number of beneficiaries of productive zakat programs increased by 42% after the SmartZiswaf system was implemented. This program also recorded an 18% increase in the economic independence of mustahik, measured by the ratio of beneficiaries who successfully exited the mustahik category within two years (Hassan & Osman, 2021).

Integration of Maqashid al-Shariah Principles

The application of AI in the SmartZiswaf system is also considered to be in line with the principles of maqashid al-shariah, particularly in terms of the preservation of wealth (hifz al-mal) and the improvement of community welfare (tahqiq al-falah). Through a transparent and data-driven digital system, zakat is managed professionally in accordance with the principles of efficiency, accountability, and fair distribution (Elasrag, 2020).

The implementation of good zakat governance is reflected in the increased internal audit scores and compliance of zakat institutions with the principles of good zakat governance. Based on the results of the 2023 BAZNAS evaluation, the level of compliance with the Zakat Core Principles (ZCP) issued by the Islamic Development Bank reached 91%, up from 84% in the previous year. This achievement shows that the digitization of zakat through SmartZiswaf not only has an impact on technical efficiency but also on improving normative and institutional governance (Haron & Hussain, 2020).

Impact on Public Trust and Muzaki Participation

The increased efficiency and transparency from the implementation of SmartZiswaf have a direct implication on increasing public trust. A survey conducted by BAZNAS (2024) shows that the level of satisfaction of muzaki with zakat management has reached 92%, an increase from 78% in the previous year. One of the driving factors is the ease of access to information regarding the flow of funds and zakat usage reports, which can be viewed openly through the official application and website.

The adoption of AI technology has contributed to a 31% increase in the participation of young muzaki (aged 20–35), mainly due to the ease of digital access and automatic reporting through mobile platforms. These findings indicate a change in donor behavior that is more responsive to transparency and ease of digital transactions (Sutikno et al., 2025).

Discussion

Operational Efficiency and Digital Transformation

The research findings show that the implementation of the AI-based SmartZiswaf system has a significant impact on operational efficiency in the collection and distribution of zakat. These results are in line with the concept of digital efficiency described by Rahman and Omar (2023), namely that the application of AI in Islamic financial institutions can minimize administrative errors, speed up processing time, and improve data verification accuracy. In the context of BAZNAS, the use of machine learning algorithms is able to automatically integrate muzaki data from various digital payment channels, which ultimately reduces human error and strengthens internal control.

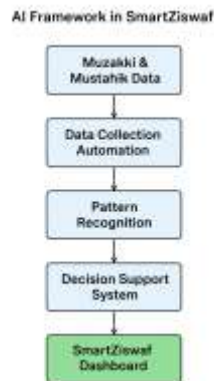


Figure 1. AI Framework in SmartZiswaf

This increase in efficiency not only saves time and human resources, but also expands the institution's capacity to serve more mustahik. These results support Kahf's (2015) view that the efficiency of zakat distribution is highly dependent on the institution's ability to manage information quickly and accurately. With the SmartZiswaf system, the beneficiary verification process, which previously took days,

can now be completed in a matter of hours, demonstrating a substantive digital transformation in zakat management in Indonesia.

The increased efficiency generated by AI reinforces the argument that digitalization is not merely a technological trend, but a strategic necessity in realizing a smart zakat management system. This view is in line with the results of a study by Najeeb and Ibrahim (2022), which emphasizes the importance of adaptive technology to strengthen Islamic social finance systems in developing countries. Thus, the efficiency generated by SmartZiswaf is not only technical in nature but also contributes to improving the overall institutional performance of BAZNAS.

Transparency, Accountability, and Good Zakat Governance

Increased transparency and accountability are among the most notable outcomes of the implementation of SmartZiswaf. The real-time digital reporting system developed by BAZNAS allows the public and stakeholders to easily access data on zakat collection and distribution. This supports the concept of good zakat governance as formulated by Haron and Hussain (2020), which places transparency and accountability as the two main pillars of modern zakat institution governance.

With the traceability system, every zakat fund can be traced from its source to its recipient, thereby preventing potential misuse or misreporting. The drastic decline in distribution reporting errors shows that technology can be an effective governance tool in ensuring the integrity of zakat institutions.

In the context of maqashid al-shariah, this increase in transparency also has ethical and spiritual dimensions. According to Elasrag (2020), openness in the management of community assets is an implementation of the principle of *hifz al-*

mal (preservation of wealth), which ensures that zakat funds are managed safely and in accordance with sharia objectives. Therefore, the integration of AI into the zakat system is not only a technological transformation, but also a strengthening of moral and spiritual values in Islamic social financial governance.

Equitable Distribution and Social Justice

The results of the study show that artificial intelligence plays an important role in realizing the equitable distribution of zakat. With the support of data analytics, SmartZiswaf is able to map mustahik groups based on socio-economic and geographical variables. This data-based approach enables zakat institutions to distribute funds more fairly, efficiently, and accurately.

This finding is consistent with the concept of justice-based resource allocation proposed by Sutikno et al. (2025), whereby the distribution of zakat must consider aspects of fairness, proportionality, and the real needs of the community. In the case of BAZNAS, the increase in the proportion of zakat distribution in disadvantaged areas demonstrates the success of using AI to expand the reach of assistance to marginalized communities. In addition to the aspect of fairness, this equitable distribution also reflects the application of the principle of *tahqiq al-falah* (achieving prosperity) within the framework of maqashid al-shariah. By supporting economic equality and reducing regional disparities, the SmartZiswaf system contributes to sustainable development efforts (Sustainable Development Goals/SDGs), particularly in the goals of poverty alleviation and economic inequality.

Impact on Public Trust

Another equally important aspect of this research finding is the increase in public trust in zakat management institutions. Based on a BAZNAS survey (2024), the level of satisfaction among zakat payers regarding the

transparency of fund management reached more than 90 percent, which was largely influenced by access to open information and AI-based digital reports.

These results are in line with the views of Hassan and Osman (2021), who assert that the application of digital technology has a positive correlation with increased public trust in Islamic philanthropic institutions. In the context of SmartZiswaf, an easily accessible online reporting system serves as a means of two-way communication between muzaki and zakat institutions, thereby increasing the perception of accountability and social responsibility of these institutions.

Increased public trust also has an impact on the growth of the number of active muzaki, especially from the younger generation who are more responsive to digital platforms. This shows a change in donor behavior that is more rational and trust-based, not solely motivated by spirituality. Azwar (2025) refers to this phenomenon as digital religiosity, where religious values adapt to technological developments to achieve efficiency and social accountability.

Integration of Maqashid al-Shariah Principles in Digital Governance

One important contribution of this research is the proof that digitization through AI does not conflict with sharia values, but rather strengthens them. In the SmartZiswaf system, every process of collecting and distributing zakat is carried out based on transparent and auditable data and algorithms. Thus, the principles of maqashid al-shariah, especially *hifz al-mal* (protection of property), *adl* (justice), and *maslahah* (benefit) are tangibly implemented in digital governance (Elasrag, 2020).

In addition, the application of the Zakat Core Principles (ZCP) from the Islamic Development Bank adopted by BAZNAS shows the compatibility between international zakat governance standards and digital practices in Indonesia. This finding reinforces the results of a study by Haron and Hussain (2020) that the application of good zakat governance principles can improve institutional performance and strengthen its social legitimacy.

V. CONCLUSION AND RECOMMENDATION

Conclusion

This study concludes that the application of artificial intelligence (AI) through the SmartZiswaf system developed by BAZNAS has made a significant contribution to improving the effectiveness of zakat governance in Indonesia. The findings show that SmartZiswaf has succeeded in improving operational efficiency in the process of collecting and verifying zakat data, strengthening transparency and accountability in reporting, and expanding the equitable distribution of zakat to vulnerable groups.

The application of AI has proven to strengthen the principles of good zakat governance, particularly in terms of transparency, efficiency, and public accountability. In addition, digitization through SmartZiswaf is also in line with the principles of maqashid al-shariah, namely protection of property (*hifz al-mal*), justice (*adl*), and benefit (*maslahah*), which make zakat management not only technically efficient but also spiritually ethical.

The academic implications of this research lie in its contribution to expanding the study of the integration of advanced technology in Islamic social finance. Meanwhile, the practical implications emphasize the importance of strengthening the digital capacity of zakat institutions through the development of AI-based systems, increasing technological literacy for zakat managers, and formulating policies that support the integration of zakat data nationally.

This study has limitations because the data used still focuses on the national zakat institution (BAZNAS). Therefore, further research is recommended to involve regional zakat institutions and use a

mixed methods approach to gain a more comprehensive understanding of the long-term impact of zakat digitalization on the welfare of mustahik. Overall, this study confirms that the integration of AI through the SmartZiswaf system is not only a technological transformation, but also a form of actualization of sharia values in modern zakat management that is efficient, transparent, and fair.

Recommendation

Based on the findings and analysis presented in this study, several strategic recommendations can be proposed to enhance the sustainability and effectiveness of AI-driven zakat governance in Indonesia. First, zakat institutions such as BAZNAS should strengthen their digital infrastructure to ensure system reliability, interoperability, and data integration across regional and national zakat agencies. A unified digital ecosystem will enable seamless information sharing and reduce redundancy in data collection and distribution processes. Second, it is essential to invest in human resource capacity building, focusing on AI literacy, data analytics, and digital ethics for zakat administrators. Continuous training will enhance institutional readiness and minimize technical and ethical risks in AI implementation. Third, the government and regulators should formulate comprehensive digital governance policies that support AI adoption while maintaining compliance with sharia and data protection principles. This includes establishing a national framework for AI ethics, algorithmic transparency, and cybersecurity in Islamic financial institutions. Fourth, collaboration between zakat institutions, universities, and fintech industries should be expanded to promote innovation and empirical research on the social impact of digital zakat systems. Finally, to ensure long-term success, SmartZiswaf and similar platforms should integrate impact assessment mechanisms to monitor the extent to which AI-based zakat management contributes to social justice, poverty alleviation, and the realization of maqashid al-shariah. These recommendations collectively aim to position Indonesia as a global model for digital Islamic philanthropy that harmonizes technological advancement with ethical and spiritual values.

REFERENCES

- Abdullah, M., & Suhaib, A. (2011). The Impact of Zakat on Social Life of Muslim Society. *Pakistan Journal of Islamic Research*, 8(1), 85–91.
- Ali, M. (2024). Artificial intelligence and ethical transformation in Islamic financial governance. *Journal of Islamic Economics and Technology*, 9(2), 101–115.
- Azwar, R. (2025). Evaluating Digital Transformation in Islamic Philanthropy Institutions. *Indonesian Journal of Islamic Management*, 7(1), 43–56.
- Basri, F., Hidayat, R., & Nurhalim, S. (2022). SmartZiswaf: Digital Transformation of Zakat Management in Indonesia. *Indonesian Journal of Islamic Finance*, 5(1), 45–48.
- BAZNAS. (2023). *Zakat Outlook 2023*. National Zakat Agency, Jakarta. <https://www.puskasbaznas.com/publications/books/1737-outlook-zakat-indonesia-2023puskasbaznas>
- BAZNAS. (2024). *BAZNAS Annual Report 2024*. National Zakat Agency, Jakarta. <https://baznas.go.id/pustaka>
- BAZNAS. (2025). *Zakat Outlook 2025*. National Zakat Agency, Jakarta. <https://baznas.go.id/pustaka>
- Chapra, M. U. (2000). *The future of economics: An Islamic perspective*. The Islamic Foundation.
- Creswell, J. W. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed). Sage Publications.

- Elasrag, H. (2020). Corporate Social Responsibility and Zakat in Islamic Economics. *Munich Personal RePEc Archive (MPRA)*, 103561. <https://mpra.ub.uni-muenchen.de/103561/sciencedirect>
- Forbes. (2024). How Artificial Intelligence is reshaping Philanthropy and Financial Accountability. *Forbes Technology Council*. <https://www.forbes.com/councils/forbesfinancecouncil/2024/04/02/how-philanthropys-givers-and-doers-can-both-benefit-from-ai/forbes>
- Forum, W. Z. (2022). *Zakat and Digital Transformation Report*. Kuala Lumpur: WZF Secretariat.
- Haron, M., & Hussain, A. (2020). Accountability and Transparency in Zakat Institutions: A Governance Perspective. *International Journal of Islamic Social Finance*, 3(4), 88–99.
- Hassan, R., & Osman, M. (2021). Digital Innovation in Zakat Management: A Critical Review. *Journal of Islamic Philanthropy*, 4(2), 76–89.
- Kahf, M. (2015). Islamic economics: The foundations of economic justice and redistribution. *Islamic Research and Training Institute*.
- Kasri, R. A., & Chaerunnisa, S. (2022). Blockchain and Artificial Intelligence for Zakat Governance in Indonesia. *Journal of Islamic Monetary Economics and Finance*, 8(4), 635–652. <https://ejournal.uksw.edu/jeb/article/view/4111>
- KNEKS. (2022). *Indonesian Sharia Economic Masterplan (MEKSI) 2019–2024*. [https://kneks.go.id/storage/upload/1560308022-Indonesia Islamic Economic Masterplan 2019-2024.pdfkneks](https://kneks.go.id/storage/upload/1560308022-Indonesia%20Islamic%20Economic%20Masterplan%202019-2024.pdfkneks)
- Mukhlisin, A., Syarifuddin, M., & Ridwan, N. (2024). Challenges in Modern Zakat Governance in Indonesia. *Journal of Islamic Public Policy*, 8(3), 212–229.
- Munandar, A., Fadillah, R., & Malik, Z. (2022). Zakat and Economic Development: Evidence from Indonesia. *Journal of Islamic Economics and Business*, 5(2), 134–149. <https://ojs.ijbe-research.com/index.php/IJBE/article/view/89>
- Najeeb, S., & Ibrahim, M. (2022). AI-driven Social Finance Systems in Muslim Countries. *Journal of Financial Technology and Ethics*, 6(1), 65–78.
- Rahman, N., & Omar, F. (2023). Artificial Intelligence in Islamic Social Finance: A Pathway to Digital Efficiency. *Journal of Islamic Management Studies*, 11(3), 120–135.
- Sutikno, A., Yusuf, M., & Rahmad, D. (2025). Zakat Empowerment and Economic Justice in Indonesia. *Journal of Islamic Economic Development*, 12(1), 55–70.
- Wulandari, D. M. (2025). The Zakat Management System from The Perspective of The Hadith Narrated by Sahih Bukhari and Muslim. *Aripafi Journal*, 4(2), 201–213.