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Visibility of Blockchain Technology Application in Zakat Institutions in Lampung Province

Anggoro Sugeng[1], Carmidah[2], Aulia Ranny Priyatna[3]
Universitas Islam Negeri Jurai Siwo, Lampung, Indonesia[1,2,3]

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Corresponding Author:
Anggoro Sugeng
anggorosugeng@metrouniv.ac.id

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Abstract

Objective: This study aims to analyze the visibility of blockchain technology implementation in zakat institutions in Lampung Province by examining transparency, accountability, accessibility, and institutional readiness for blockchain adoption.
Method: This research employs a qualitative descriptive-analytical approach. Data were collected through semi-structured interviews, observations, and document analysis involving zakat institution administrators, *muzakki*, and *mustahiq* from BAZNAS, LazisMU, LazisNU, and Baitul Maal Hidayatullah (BMH) in Bandar Lampung and Metro City. Data analysis was conducted through data reduction, data presentation, and conclusion drawing.
Results: Zakat institutions in Lampung Province have demonstrated progress in improving transparency, accountability, and accessibility through digital platforms, institutional audits, and periodic reporting. However, blockchain technology has not yet been fully implemented, despite strong stakeholder interest and positive perceptions of its potential benefits. The main challenges identified include limited stakeholder understanding, inadequate digital infrastructure, and the absence of integrated implementation policies.
Implications: The findings suggest that accelerating blockchain adoption through stakeholder education, institutional capacity building, and technological integration could significantly enhance public trust, operational efficiency, and the sustainability of Islamic philanthropic institutions.
Originality or Novelty: The novelty of this study lies in the development of a blockchain visibility perspective in zakat management by integrating three dimensions of visibility: information availability, information-sharing consent, and third-party accessibility, within the context of Islamic philanthropic institutions at the regional level in Indonesia. This study also provides empirical evidence regarding the readiness and challenges of blockchain adoption in zakat institutions in Lampung Province.
Keywords: Accessibility; Accountability; Blockchain Technology; Transparency; Visibility; Zakat Institutions.

Introduction

Some parties feel that it is important to use this technology to support a system that is transparent, accountable, professional, and avoids manipulation (Crosby, 2016). However, others feel that the use of this technology still has a lot of work to do, given high implementation costs,

the absence of clear regulations, and the risk of data privacy being easily compromised (Yli-Huumo et al., 2016). This controversy becomes particularly interesting when applied to the management of religious funds and social welfare through zakat, while maintaining trust and sharia compliance in its implementation. In the Indonesian context, professional zakat management has a positive impact on reducing national poverty (Sugeng et al., 2023). However, blockchain has been widely discussed as a technology capable of improving transparency, security, and traceability. In the context of zakat management, however, limited attention has been paid to examining how blockchain can enhance information visibility and strengthen transparency and accountability for stakeholders.

According to the National Zakat Agency of the Republic of Indonesia (Baznas RI), the potential for zakat in 2025 is 327 trillion rupiah, with a target realisation of 50 trillion rupiah. (antaranews.com, 2024). This realisation target of 50 trillion rupiah indicates a significant gap between the potential and actual realisation of zakat in Indonesia. (Outlook Zakat Indonesia, 2023). The fact that the actual realisation of zakat is still far from its potential shows that public awareness and understanding of the obligation to pay zakat need to be improved.

Transparency and accountability issues also affect zakat institutions in Bandar Lampung City and Metro City. Zakat institutions in Bandar Lampung City and Metro City were chosen because these two cities have several active zakat institutions, unlike other districts in Lampung Province. Lazismu, as one of the active zakat institutions, still often experiences delays in monthly reports, which impacts Muzakki trust. (B. Bekti, personal communication, 2 January 2025). Similarly, Lazisnu experiences problems similar to those faced by Lazismu, namely transparency and accountability. (D. Riswanto, personal communication, 2 January 2025). These problems cannot be ignored, as they can undermine the trust of muzakki, thereby reducing the amount of zakat collected and the number of zakat utilisation programmes.

Issues of transparency and accountability also arise from several research findings. Niki Agni Eka Putra Merdeka and Dul Muid researched transparency and accountability in zakat institutions in Indonesia, stating that the average level of accountability and transparency among 25 national-scale Zakat Management Organisations in Indonesia as of September 2021 was low. This was due to low awareness of the need to upload financial reports to the internet, poor-quality uploaded financial reports, and suboptimal website maintenance and updating. Other researchers with similar analysis results have also studied the issues of transparency and accountability. (Fitri et al., 2024; Yusra & Riyaldi, 2020). Previous studies have mainly examined transparency and accountability in zakat institutions or discussed blockchain as a conceptual solution for Islamic financial management. However, empirical evidence regarding the visibility and readiness of blockchain adoption in regional zakat institutions remains limited, particularly in Indonesian Islamic philanthropic organizations. Consequently, little is known about how zakat institutions perceive blockchain as an innovation that can support future improvements in governance.

Zakat institutions should strive to improve their performance so that zakat collection does not decline and does not impede zakat utilisation programmes. In line with the boom in digital zakat management in recent years, a new technology called blockchain has also emerged (Musana, 2023); (Suganda et al., 2024). Blockchain is here to improve the transparent and effective

management of zakat in the distribution of zakat funds. Blockchain is considered effective for zakat management, given zakat's significant contribution to the economy and its sustainability.

Blockchain technology has significant potential for zakat institutions to create a transparent environment, ensure security, and provide real-time reporting. (Blockchain in Zakat Management, 2023); (Suganda et al., 2024). The visibility of blockchain in zakat institutions is very important to discuss to ensure that zakat institutions are adaptive and innovative to technological changes and strive to become better zakat management institutions. Based on the above background, the research question in this study is: How is the visibility of blockchain technology implementation in zakat institutions in Lampung Province?

Therefore, this study seeks to extend the existing literature by providing empirical evidence on blockchain visibility and organizational readiness within zakat institutions in Lampung Province. Unlike previous studies that primarily focus on the technical potential of blockchain or the transparency of zakat management, this study examines how existing digital practices, organizational conditions, and stakeholders' understanding shape the prospects for blockchain adoption in Islamic philanthropic institutions.

Research Methodology

This study employs a qualitative, descriptive-analytical approach. This qualitative study focuses on understanding the processes, patterns, and cause-and-effect relationships within a particular context. This research was conducted in Bandar Lampung City and Metro City, which were selected purposively, as both locations are urban areas that have relatively high economic and social activities, a better level of digital technology adoption, and high community mobility, so that zakat management is required to be more effective, transparent, and easily accessible.

The researcher used semi-structured interviews, direct observation, and document analysis to understand how blockchain can improve transparency, accountability, and accessibility in zakat management in Lampung Province. This study focuses on how this technology can be applied practically to support zakat institutions in Bandar Lampung and Metro in optimally carrying out their functions.

The data sources for this study were obtained from primary data collected in the field using interviews and observation. Semi-structured interviews were conducted with 8 LAZ administrators, 2 mustahik, and 3 muzakki in Bandar Lampung and Metro. The participants were selected through purposive sampling, with informants intentionally recruited based on their relevant knowledge and practical experience in zakat management and the use of digital technology. The characteristics of the research informants are presented in Table 1.

Table 1.
The Research Informants

Informant	Number	Position
LazisMu Metro City	3	Head, Fundraising Manager, Finance Officer
BAZNAS Metro City	2	Vice Chairman for Collection, Administrative Staff
Hidayatullah Bandar Lampung City	1	Head of Representative Office
LazisNU Lampung Province	2	Treasurer, Fundraiser
Mustahik	2	Beneficiaries of zakat distribution

Muzakki	3	Individuals who regularly pay zakat through LAZ

Source: Data processed by the author, 2025

Each interview lasted approximately one hour to explore the participants' perspectives on the transparency, accountability, and accessibility of the zakat management system as well as the potential implementation of blockchain technology. All interviews were audio-recorded with participants' informed consent and supplemented with field notes to ensure the completeness and accuracy of the data collected.

Data were analyzed through the stages of data reduction, data display, and conclusion drawing. Before the analysis, all interview recordings were transcribed verbatim to ensure the completeness and accuracy of the data. The transcripts were then carefully reviewed to identify significant statements relevant to the research objectives. (Creswell, 2014).

During the data reduction stage, relevant information was selected, organized, and refined in line with the study's focus. Subsequently, the data were presented as descriptive narratives, enabling systematic explanation of the relationships among the findings and the themes emerging from the interviews. The final stage involved drawing conclusions based on the identified themes and the relationships among the findings that emerged throughout the analysis process.

The trustworthiness of the data was ensured through source triangulation by comparing information obtained from LAZ administrators, *muzakki*, and *mustahik*. The interview findings were further corroborated through field observations and analysis of relevant documents, thereby enhancing the credibility of the research.

Results and Discussion

Zakat Management Practices at Zakat Institutions in Lampung Province

Based on interviews conducted by the team with several zakat institutions, the following can be outlined:

Transparency Practices

LazisMU Kota Metro still uses records of receipts and distributions through an upgraded Excel-like application. In practice, those who have distributed zakat through transfers or cash payments receive a WhatsApp message of thanks for their donations. In an effort to increase public trust, the distribution process for several programmes is posted on LazisMU Kota Metro's Instagram account. Similarly, annual reports are audited to ensure that this zakat institution is transparent, accountable, and professional in managing community funds. (B. Bowo, personal communication, 19 July 2025; A. Mutakim, personal communication, 19 July 2025).

Baitul Maal Hidayatulloh (BMH) Lampung Province: In the fundraising section, muzakki can pay zakat by transfer or in cash, and BMH responds with a thank-you, either directly or via WhatsApp. All distribution activities are recorded as news published on bmh.or.id to maintain public trust and demonstrate transparency, accountability, and professionalism in the management of public funds (F. Fikri, personal communication, August 2025).

Baznas Metro City is also working to increase zakat collection by using its website, which includes a zakat fundraising section listing virtual accounts for online zakat payments. Zakat management reports are available annually, but certain parties may request them. Meanwhile, the

zakat distribution agenda is reported through activities posted on Baznas Metro City's social media accounts. (M. Hasan, personal communication, Agustus 2025).

LazisNU Lampung Province does not currently use blockchain technology, but relies on the LazisNU Lampung.org website. The website offers three payment options, namely zakat, infaq, and shadaqah, and there are barcodes on all types that collaborate with Bank BSI and BRI. Muzakki who have paid their zakat, infaq, and shadaqah receive digital receipts and expressions of gratitude via SMS, WhatsApp, or email. LazisNU PWNU Lampung's reporting activities are audited directly by LazisNU PBNU Pusat, and financial reports are submitted every three months. (A. Ajo, personal communication, Agustus 2025); (A. Andre, personal communication, Agustus 2025).

Accountability Practices

Zakat distribution at LazisMU Metro is carried out either directly or at the office, if the mustahiq (recipients) come to ask (the mustahiq have been registered). Similarly, annual reports are audited to ensure that this zakat institution is transparent, accountable, and professional in managing community funds. (B. Bowo, personal communication, 19 July 2025; A. Mutakim, personal communication, 19 July 2025).

Zakat fund management is decentralised: BMH Lampung manages it independently but still reports its programmes and activities to BMH Headquarters. Audits are still carried out by the audit team from headquarters to BMH Lampung. All distribution activities are recorded as news published on bmh.or.id to maintain public trust and demonstrate transparency, accountability, and professionalism in the management of public funds. (F. Fikri, personal communication, Agustus 2025).

Zakat management at Baznas Metro City still uses the Simba application, a spreadsheet modified as needed to record zakat fundraising, management, and distribution. Zakat management reports are available annually, but certain parties may request them. Meanwhile, distribution is carried out in accordance with the central Baznas programme and programmes in line with Baznas in each district and city. (M. Hasan, personal communication, Agustus 2025).

Zakat management at LazisNU is directed towards realising NU Care's priority programmes, namely: NU Care Cerdas (Smart), Berdaya (Empowered), Sehat (Healthy), Damai (Peaceful) and NU Care Hijau (Green). LazisNU PWNU Lampung's reporting activities are audited directly by LazisNU PBNU Pusat, and financial reports are submitted every three months. Meanwhile, the distribution pattern is directed towards implementing the five NU Care Priority Programmes, but this is adjusted to the prevailing conditions and circumstances. (A. Ajo, personal communication, Agustus 2025)

Accessibility of Digital Zakat Services

In practice at LazisMu, Mustahiq, who have distributed zakat through transfers or cash payments, receive a WhatsApp message of thanks for their donations. Zakat distribution is carried out either directly or at the office, if the mustahiq (recipients) come to ask (the mustahiq have been registered). Meanwhile, reports remain internal and are uploaded to Instagram unless there are parties who need them (B. Bowo, personal communication, 19 July 2025; A. Mutakim, personal communication, 19 July 2025).

Meanwhile, at BMH Hidayatullah, muzakki can pay zakat by transfer or in cash, and BMH responds with a thank-you, either directly or via WhatsApp. Then the distribution of zakat is directed to support the underprivileged and the education sector, such as SD Menggala, Way Kanan; Yukum Bandar Jaya; and Pondok Hidayatulloh in Metro. (F. Fikri, personal communication, Agustus 2025).

Baznas Metro City also strives to increase zakat collections by utilising the Baznas website, which includes a zakat fundraising section listing virtual accounts for online zakat payments. Meanwhile, distribution is carried out in accordance with the central Baznas programme and programmes in line with Baznas in each district and city. Meanwhile, the zakat distribution agenda is reported as activities posted on Baznas Kota Metro's social media. (M. Hasan, personal communication, Agustus 2025); (I. Imam, personal communication, Agustus 2025).

LazisNU Lampung Province does not currently use blockchain technology, but relies on the LazisNU Lampung.org website. The website offers three payment options, namely zakat, infaq, and shadaqah, and there are barcodes on all types that collaborate with Bank BSI and BRI. Muzakki who have paid their zakat, infaq, and shadaqah receive digital receipts and expressions of gratitude via SMS, WhatsApp, or email. Meanwhile, the distribution pattern is directed towards implementing the five NU Care Priority Programmes, but this is adjusted to the prevailing conditions and circumstances. (A. Ajo, personal communication, Agustus 2025); (A. Andre, personal communication, Agustus 2025).

Blockchain Readiness and Adoption Challenges

LazisMU Kota Metro does not yet use blockchain technology and still relies on records of receipts and distributions through an upgraded Excel-like application. However, upon further investigation, LazisMU Kota Metro is aware of this type of application and has participated in training on using blockchain at zakat institutions. LaizsMU Metro City stakeholders are very interested in this application, which can facilitate their work while increasing transparency, accountability, and professionalism. (B. Bowo, personal communication, 19 July 2025; A. Mutakim, personal communication, 19 July 2025).

BMH does not yet have a regency- or city-level BMH. The blockchain practice has begun to be implemented by BMH Headquarters, as shown on the website berbagi.bmh.or.id. However, the provincial level is still undergoing training to understand and run this blockchain application. BMH currently uses a modified spreadsheet application for recording fundraising, management, and distribution (F. Fikri, personal communication, Agustus 2025).

Baznas Metro City has not yet used applications or technologies such as blockchain. (M. Hasan, personal communication, Agustus 2025). Baznas stakeholders have heard about the advantages of blockchain technology for zakat institutions. However, Baznas Metro City continues to follow the directives of Baznas Headquarters and is ready to adopt blockchain technology if it is implemented.(I. Imam, personal communication, Agustus 2025).

The Nahdlatul Ulama zakat, infaq, and shadaqah institution, abbreviated as LazisNU, collects zakat, infaq, and shadaqah funds from the community and distributes them in accordance with religious law. This was conveyed directly by Mr Andre and Mr Ajo in an interview session about the use of blockchain technology at LazisNU in Lampung Province. In collecting funds from the community, stakeholders welcomed the use of blockchain technology

to enhance transparency, accountability, and professionalism in zakat management. (A. Andre, personal communication, Agustus 2025).

Perspectives of Muzakki and Mustahiq

The majority of mustahiq and muzakki interviewed did not understand blockchain technology. (M. Mansur, personal communication, 11 September 2025; B. Yanto, personal communication, 12 September 2025). However, they feel supported by zakat institutions and believe that professional management improves them. (S. Alawiyah, personal communication, 8 September 2025; K. Kamal, personal communication, 10 September 2025; Y. Yasak, personal communication, 9 September 2025).

Nevertheless, they generally expressed satisfaction with the services provided by zakat institutions and appreciated the transparency demonstrated through digital communication and reporting. Participants emphasized that professional management and clear reporting mechanisms are important factors in strengthening public trust. These findings suggest that although blockchain awareness among service users remains limited, there is broad acceptance of innovations that can further improve transparency and accountability in zakat management.

Analysis of Zakat Management in Zakat Institutions in Lampung Province

Based on interviews with zakat institutions in Lampung Province (LazisMU Kota Metro, Baitul Maal Hidayatulloh/BMH Lampung Province, Baznas Kota Metro, and LazisNU Lampung Province), this analysis examines zakat management practices from an Islamic zakat perspective.

These zakat collection practices align with the theory of valid collection and positive responses from muzakki, as well as digitalisation efforts, with websites that reflect the modern era for efficiency. However, there is no blockchain technology, resulting in a lack of real-time transparency and vulnerability to manual manipulation. Collection is still limited to traditional methods, not fully utilising the potential of technology for wider reach. Accelerating the adoption of blockchain technology will improve zakat institutions by educating muzakki and making the collection more transparent and efficient. (Hafidhuddin, 1998).

A comparison among the four institutions indicates that although all have adopted digital tools to support zakat collection, their digital maturity varies. LazisNU Lampung Province has integrated website-based payment services with digital receipts through SMS, WhatsApp, and email. Baznas Kota Metro provides online payment via virtual accounts on the BAZNAS website. At the same time, BMH Lampung Province and LazisMU Kota Metro continue to rely primarily on modified spreadsheet systems to record transactions. These findings suggest that digitalisation has been initiated, but blockchain-based governance has not yet been institutionalised.

Meanwhile, in zakat management, audits and public reports align with the theory of increasing accountability and building public trust. The decentralised management implemented by the zakat institution in Lampung Province is quite good at streamlining zakat management. However, the reliance on manual spreadsheets is not ideal as it is prone to errors and lacks real-time transparency. (Widiastuti, Herianingrum, et al., 2022)

The distribution carried out by the Zakat Institution in Lampung Province is on target and in accordance with the 8 asnaf, and public reporting has been carried out transparently. Specific programmes (such as NU Care) have shown a positive socio-economic impact in helping the

mustahiq. However, there is no full digital tracking (of distribution), resulting in a lack of real-time transparency and vulnerability to fraud. (Luntajo & Hasan, 2023).

Zakat management practices in Lampung Province are generally in line with zakat collection, management, and distribution theory, but remain conventional and do not utilise technology to support transparency and efficiency. (Priyatna et al., 2024). The strengths of zakat institutions in Lampung Province lie in their audits, public reporting, and specific programmes that build trust. At the same time, their weakness is the lack of blockchain technology in their improvement efforts.

Analysis of Transparency, Accountability, and Accessibility in Zakat Management at Zakat Institutions in Lampung Province

Analysis of Transparency Practices at Zakat Institutions in Lampung Province

Based on interviews with zakat institution managers, such as LazisMU Kota Metro, Baznas Kota Metro, Baitul Maal Hidayatullah, and LazisNU Lampung Province, transparency practices in zakat management in Lampung Province demonstrate a strong commitment to transparency. However, there is still room for improvement. These practices are viewed from three main aspects: financial reports, open reporting, and the use of technology. Overall, these institutions routinely report on the collection and distribution of zakat funds, using social media and websites for publication, but have not yet adopted advanced technologies such as blockchain. This reflects efforts to meet the needs of a community that demands openness, providing satisfaction and assurance that funds are used in accordance with Islamic law. (Adif, 2024).

Analysis of Accountability Practices in Zakat Institutions in Lampung Province

Accountability involves honest reporting, oversight, and targeted management to build trust among donors, the community, and the government. An in-depth analysis shows that practices in the field have shown progress, but still need improvement to meet stricter standards. Comparisons show a basic alignment between theory and practice, but practices often lack intensity in terms of independence and transparency. This has the potential to reduce trust if not corrected.

A deeper analysis reveals that accountability in Lampung Province's zakat institutions is an important foundation for the sustainability of Islamic philanthropy, especially in critical urban communities. The strength of the practice lies in basic implementations such as independent audits in several institutions and reporting via social media, which help build initial trust and ensure that funds are used for social programmes. For example, external oversight at LazisMU and Baznas demonstrates a commitment to efficiency, while targeted management through programme evaluation minimises the risk of irregularities. (Huda, 2015).

However, significant areas for improvement include inconsistent independent audits and uneven external oversight, which could increase the risk of fund misuse. Reporting that is detailed only upon request also falls short of transparency requirements, which require that the public have easy, barrier-free access. This reflects structural challenges within Zakat Institutions that may require government support for capacity building.

The accountability practices of zakat institutions in Lampung Province have shown progress but need to be strengthened to better align with theory, for example, by improving independent

audits and transparency in reporting. Institutions must collaborate with the government for stronger external oversight and adopt technology for real-time reporting so that accountability can more effectively build long-term trust. (Adif, 2024); (Hassan et al., 2024); (Widiastuti, Herianingrum, et al., 2022).

Analysis of Accessibility Practices in Zakat Institutions in Lampung Province

Based on accessibility theory and practice, this analysis discusses the ease with which the community can distribute and receive zakat through digital platforms, pick-up and delivery services, and ease of payment, with a focus on zakat institutions in Lampung Province such as LazisMU Kota Metro, Baznas Kota Metro, Baitul Maal Hidayatullah (BMH), and LazisNU. This accessibility is important to increase the participation of muzakki, especially in busy urban communities. An in-depth analysis shows that practices in the field are already advanced in basic aspects, but technological innovation is still needed for optimisation. (Chakim, 2024).

Comparisons show strong alignment between theory and practice in basic components, but practices lack integration of cutting-edge technologies such as blockchain. Further analysis reveals that accessibility at Lampung Province's zakat institutions is a key driver of community participation, which is often limited by time and mobility constraints. The strength of the practice lies in the adoption of digital platforms and pickup services, which have increased fundraising, allowing muzakki to donate without physical barriers. For example, the ease of payment via digital wallets attracts the younger generation, while pickup services facilitate the monthly zakat routine and build loyalty.

However, significant areas for improvement include the non-adoption of blockchain, which could enhance real-time security and transparency and reduce the risk of misuse. Practices remain conventional, thus failing to realize the theoretical potential for full inclusivity, especially for mustahiq in remote areas. This reflects the challenges of digital infrastructure in Lampung Province, where institutions need greater investment in cutting-edge technology. In addition, expanding shuttle services to mustahiq could strengthen distribution, ensuring two-way accessibility. (Ayuni et al., 2024; Fitri et al., 2024b; Muhammad et al., 2023).

Accessibility practices in Lampung Province have been effective in increasing participation but need to be strengthened through technologies such as blockchain to better align with theory. Zakat institutions must improve digital integration and expand shuttle services to make accessibility more inclusive for the entire Muslim community.

Analysis of the Visibility of Blockchain Technology Use in Zakat Management at Zakat Institutions in Lampung Province

Visibility in the context of zakat management refers to the level of openness, transparency, and ease of access to information that enables stakeholders such as muzakki, mustahiq, and others to monitor, verify, and understand the flow of zakat funds from collection to management to distribution. (Iksanudin, 2019). Conceptually, visibility consists of three empirical attributes: (1) information availability, which is the extent to which data can be displayed and accessed by authorised parties; (2) consent to share information, namely policy mechanisms that allow external access in accordance with authority; and (3) accessibility of information to third parties, namely the ease of understanding and utilisation of data by parties outside the organisation. (Stohl et al., 2016). Blockchain technology has the potential to improve decentralised systems

that enable transparent, accountable, and easily accessible transactions, such as the zakat blockchain concept, which guarantees data authenticity without loopholes. Based on zakat management practices in the Lampung Province zakat institution obtained from interviews, the analysis of the visibility of blockchain technology use can be described as follows:

The availability of information is currently limited to internal access or limited publication, which does not allow real-time monitoring by all stakeholders. With blockchain, the availability of information can be improved through an open ledger, allowing muzakki and mustahiq to view transactions directly, as implemented at BMH Pusat via the website berbagi.bmh.or.id. However, without implementation, this visibility remains low, leaving the risk of non-transparency. (Stohl et al., 2016). Given the current availability of information at zakat institutions in Lampung Province, it is feasible to use blockchain technology, as information and publications already exist. However, they remain limited to certain parties.

The approval to share information is currently limited to internal audit reports or social media publications, without a blockchain mechanism that allows controlled access. With blockchain, institutions can establish approval through smart contracts, enabling data sharing with mustahiq or muzakki without compromising security, thereby increasing trust. (Marselita, 2024). However, the lack of implementation means that this approval is not yet optimal, mainly because stakeholders such as mustahiq and muzakki do not understand this technology. The visibility of blockchain technology implementation, particularly regarding information-sharing approval, is not yet ready for implementation, as zakat institutions have not yet utilised blockchain technology. Therefore, zakat institutions need to understand information-sharing approval so that, when this technology is used, information is available and can enhance transparency, accountability, accessibility, and professionalism in zakat management.

Meanwhile, accessibility currently relies on manual communication, such as WhatsApp or office visits, which is inefficient. The implementation of blockchain can improve accessibility through applications that allow muzakki to track the distribution of funds in real time, such as via an easy-to-use digital platform. (Aghili, 2024). However, the low level of understanding among stakeholders indicates the need for education before adoption, so that this technology can truly improve the professionalism of Islamic philanthropic institutions. (Stohl et al., 2016).

The above description shows that the visibility of blockchain technology use in zakat management is still low because this technology has not been implemented, despite interest and training from zakat institutions. Blockchain technology is believed to improve the transparency, accountability, and accessibility of zakat institutions, thereby making them more professional in their management as Islamic philanthropic institutions. The interview results revealed that institutions such as LazisMU Kota Metro and BMH Lampung Province have taken initial steps through training. Still, the main challenges remain stakeholder understanding and infrastructure readiness. To increase visibility, zakat institutions in Lampung Province should accelerate the adoption of blockchain by focusing on educating mustahiq and muzakki and integrating it with existing systems, such as websites and social media. This will not only build public trust but also improve zakat management, aligning with blockchain's potential as a tool for zakat digitalisation.

Conclusion

This study concludes that zakat institutions in Lampung Province have established a sound foundation for zakat governance through periodic financial reporting, external audits, digital payment facilities, websites, and social media-based information dissemination. These practices reflect the implementation of transparency, accountability, and accessibility in accordance with the principles of Islamic philanthropy. However, analysis using the visibility framework shows that institutional visibility remains partial rather than comprehensive, as information is generally disclosed only periodically and access to financial information remains limited. Transaction verification cannot yet be performed in real time. Therefore, this study argues that current transparency is primarily procedural rather than technology-enabled, as the participating institutions have not yet implemented blockchain technology.

The findings further reveal that the readiness to adopt blockchain varies across institutions. Although organisational stakeholders generally recognise the potential of blockchain to improve transparency, accountability, and professionalism, its implementation is constrained by several practical barriers, including dependence on spreadsheet-based systems and the SIMBA application, limited digital infrastructure, insufficient stakeholder literacy regarding blockchain technology, and organisational dependence on policy directions from central institutions. From the perspective of Islamic financial governance, these conditions indicate that the principles of amanah and efficient management of zakat and infaq funds have been implemented through audits and institutional oversight but have not yet been fully supported by digital systems capable of providing immutable records and continuous verification. Consequently, accountability remains dependent on periodic reporting rather than real-time monitoring.

These findings suggest that blockchain should not be viewed as a technology that has already improved zakat governance in Lampung Province, but rather as a future pathway for strengthening institutional visibility. Successful adoption requires gradual institutional preparation through the development of digital infrastructure, enhancement of stakeholder literacy, integration with existing zakat management systems, and supportive organisational policies. Future research may evaluate blockchain pilot projects in zakat institutions, investigate stakeholder acceptance using technology adoption frameworks, and compare blockchain readiness across different regions or Islamic philanthropic organisations to provide broader empirical evidence for digital transformation in zakat management.

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Author Contributions Statement

AS was responsible for conceptualizing the study, designing the research methodology, conducting data collection and analysis, and preparing the original manuscript draft. CM contributed to data collection, data validation, interpretation of findings, and critical revision of the manuscript. ARP contributed to the development of the conceptual framework, supervision of the research process, data interpretation, and manuscript review and editing. All authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

Conflict of Interest

The authors declare that there are no financial, professional, institutional, or personal conflicts of interest that could have influenced the research process, analysis, interpretation of data, or publication of this manuscript. The authors further confirm that this research was conducted independently and objectively in accordance with academic and ethical standards.

AI Usage Statement

The authors declare that artificial intelligence (AI)- assisted tools were used solely to support language refinement, grammar checking, and manuscript editing during the preparation of this article. All conceptual development, research design, data collection, data analysis, interpretation of findings, and scholarly conclusions were conducted entirely by the authors. The authors assume full responsibility for the accuracy, integrity, and originality of the content presented in this manuscript.

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