COMPARATIVE ANALYSIS OF TRANSPARENCY IN CONVENTIONAL AND BLOCKCHAIN ZAKAT MANAGEMENT

Hurriah Ali Hasan

Universitas Muhammadiyah Makassar, Indonesia

✉ Corresponding Author:
Author: Hurriah Ali Hasan
E-mail: *hurriahalihasan@unismuh.ac.id*

Abstract

Zakat management has an important role in realizing a just and sustainable Islamic economic system. However, the practice of conventional zakat management still faces various problems, especially related to transparency and trust of muzakki. Periodic financial statements, manual recording that is prone to errors, and the absence of an independent verification mechanism, can raise doubts among muzakki about the accountability of zakat institutions. Meanwhile, the development of blockchain technology offers alternative solutions through decentralized, immutable, transparent recording mechanisms, and automation features through smart contracts. This study aims to analyze the difference in transparency and the level of trust between conventional zakat management and zakat management using a blockchain-based system. The research method uses a qualitative-descriptive approach through literature review, comparative analysis, and conceptual analysis. The results of the study show that blockchain is able to provide real-time transparency, permanent trail audits, and open verification that significantly increases muzakki's trust. Thus, the integration of blockchain in zakat management has the potential to strengthen institutional accountability, increase public legitimacy, and create more modern and reliable zakat governance.

Keywords: Zakat, Blockchain, Transparency, Muzakki Trust, Digital Zakat Management

Abstrak

Pengelolaan zakat memiliki peran penting dalam mewujudkan sistem ekonomi Islam yang berkeadilan dan berkelanjutan. Namun, praktik pengelolaan zakat secara konvensional masih menghadapi berbagai permasalahan, terutama terkait transparansi dan kepercayaan muzakki. Laporan keuangan yang bersifat periodik, pencatatan manual yang rentan kesalahan, serta tidak adanya mekanisme verifikasi independen, dapat menimbulkan keraguan di kalangan

muzakki terhadap akuntabilitas lembaga zakat. Sementara itu, perkembangan teknologi blockchain menawarkan solusi alternatif melalui mekanisme pencatatan terdesentralisasi, immutable, transparan, serta fitur otomatisasi melalui smart contract. Penelitian ini bertujuan menganalisis perbedaan transparansi dan tingkat kepercayaan muzakki antara pengelolaan zakat secara konvensional dan pengelolaan zakat menggunakan sistem berbasis blockchain. Metode penelitian menggunakan pendekatan kualitatif-deskriptif melalui kajian literatur, analisis komparatif, dan analisis konseptual. Hasil penelitian menunjukkan bahwa blockchain mampu menyediakan transparansi real-time, audit trail permanen, dan verifikasi terbuka yang meningkatkan kepercayaan muzakki secara signifikan. Dengan demikian, integrasi blockchain dalam pengelolaan zakat berpotensi memperkuat akuntabilitas lembaga, meningkatkan legitimasi publik, serta menciptakan tata kelola zakat yang lebih modern dan terpercaya.

Kata kunci: *Zakat, Blockchain, Transparansi, Kepercayaan Muzakki, Pengelolaan Zakat Digital*

INTRODUCTION

Zakat is one of the important instruments in the Islamic economy that has economic, social, and spiritual functions at the same time. As a pillar of Islam, zakat is not only an obligation of worship, but also an instrument of wealth distribution that aims to create social justice (Aziz & Anim, 2020). The existence of zakat makes the Islamic economy have an internal mechanism that is able to overcome inequality, reduce poverty, and encourage economic growth based on moral and humanitarian values.

Economically, zakat plays a role as a tool for redistributing wealth from those who have excess wealth to those in need. This mechanism ensures that wealth should not accumulate exclusively in a particular group. This is emphasized in QS. Al-Hashr [59]: 7:

مَّآ أَفَآءَ ٱللَّهُ عَلَىٰ رَسُولِهِۦ مِنْ أَهْلِ ٱلْقُرَىٰ فَلِلَّهِ وَلِلرَّسُولِ وَلِذِى ٱلْقُرْبَىٰ وَٱلْيَتَٰمَىٰ وَٱلْمَسَٰكِينِ وَٱبْنِ ٱلسَّبِيلِ كَىْ لَا يَكُونَ دُولَةًۢ بَيْنَ ٱلْأَغْنِيَآءِ مِنكُمْ ۚ وَمَآ ءَاتَىٰكُمُ ٱلرَّسُولُ فَخُذُوهُ وَمَا نَهَىٰكُمْ عَنْهُ فَٱنتَهُواْ ۚ وَٱتَّقُواْ ٱللَّهَ ۖ إِنَّ ٱللَّهَ شَدِيدُ ٱلْعِقَابِ

Translation:
Whatever spoil Allah gives to His Messenger (from the treasures) that comes from the inhabitants of the cities is for Allah, for the Messenger, for relatives, for orphans, for the poor and those who are on their way, so that they do not circulate among the rich among you. What the Messenger gives you, then accept it. And what he forbids you, then leave it. And fear

Allah. Indeed, Allah is very harsh in His punishment.

The distribution of zakat creates a flow of funds that flows to the mustahik group—the poor, the poor, the gharim, the converts, the amil, and others—which in turn allows them to meet basic needs, build economic capacity, and increase productivity (Aziz & Anim, 2020; Zamroni, 2023).

In addition to being an instrument of distribution, zakat is also a mechanism for social stabilization in the Islamic economy (Hidayanti, 2025). Zakat is here to reduce inequality by strengthening vulnerable groups and reducing the economic pressure they experience. The distribution of zakat in the form of consumptive and productive assistance can create social resilience, reduce poverty levels, and reduce the burden on the government in social protection programs.

Zakat also has the function of economic empowerment through the distribution of productive zakat, by developing zakat programs for mustahik MSMEs, sharia micro financing, entrepreneurship training, and business capital support. Thus, zakat becomes an instrument of social mobility and long-term economic development. When mustahik transforms into productive economic actors, the effect of the zakat multiplier on the economy becomes very significant (Hilyatin et all, 2024).

In the spiritual and moral perspective of Islamic economics, zakat forms an economic character based on ethics and social responsibility. By paying zakat, the muzakki cleanses his wealth from destructive traits such as greed and excessive love for the world. At the community level, zakat strengthens solidarity, empathy, and a sense of brotherhood between fellow people. These moral values became the unique strength of the Islamic economy, which pursued not only efficiency and profit, but also justice and collective welfare.

Overall, zakat plays a strategic role in realizing a just, inclusive, and sustainable Islamic economy. It is not only a spiritual solution, but also an effective economic instrument to reduce poverty, encourage economic growth, improve income distribution, and create a more prosperous social order.

To be able to achieve economic justice through zakat, management based on sharia principles is needed while meeting modern professionalism standards in institutional governance (Rahman, 2025). However, zakat is an Islamic economic instrument that aims to uphold social justice and reduce inequality. Zakat management is not only about collecting funds, but also trusting, transparent, effective, and sustainable management. The manager does not only play the role of a collector and distributor of funds, but also as an institution that carries out social transformation through mustahik empowerment programs.

Therefore, zakat must be managed with sharia and institutional accountability. Accountability can strengthen muzakki's trust and ensure that the people's funds are managed responsibly. In addition, zakat managers need to build strong transparency, where muzakki are given access to information on distribution, ongoing programs, and the social impact of the zakat funds they entrust. The more open the zakat institution is to the public, the greater the public's trust and the higher the desire to participate (Hotimah, 2023).

Zakat management also requires operational efficiency and professionalism. Operational efficiency includes the ability of institutions to reduce administrative costs without reducing service quality and still ensure that zakat funds are distributed quickly and on target. In addition, zakat managers must implement an accurate and sustainable mustahik data collection approach. With strong data, institutions can distribute zakat effectively and avoid overlapping aid. To assess the effectiveness of the program, zakat managers must conduct continuous monitoring and evaluation. Evaluation is not only on financial aspects, but also on social aspects such as increasing mustahik income, changes in quality of life, and long-term sustainability of programs (Dandi, 2025).

The demand for transparency in zakat management is currently still faced with conventional management problems. This affects the effectiveness, transparency, and accountability of zakat institutions. This problem arises because the management process still relies on manual governance, separate information systems, and aggregative and periodic reporting models (Khairi et all, 2023). This condition makes it difficult for zakat institutions to achieve the level of professionalism and openness expected by muzakki. This shows that the conventional zakat management model still has limitations in meeting the demands of accountability and efficiency in the modern era (Fadhilah, 2025; Khulataini, 2025).

With the development of digital technology, the problem of transparency in zakat management should be overcome (Mangawing et all, 2023; Judijanto et all, 2024). With the use of blockchain systems and integrated information systems, it is possible to increase transparency, automate processes, and provide more accurate and verified data in the management of zakat funds (Denia et all, 2024).

Therefore, this study examines the comparison between conventional zakat management and blockchain-based zakat management in terms of transparency and muzakki trust (Awan, 2021). The important problems studied in this study are to find the characteristics of transparency in conventional zakat management that are currently applied by zakat institutions, build transparency mechanisms offered by blockchain technology in zakat management, test the level of trust in conventional zakat management

compared to blockchain-based systems (Ikhsan, 2023; Masrukhan, 2024). By deepening these problems, it can be studied the main differences between conventional and blockchain-based zakat management in terms of transparency and trust of muzakki and its potential implementation in increasing the accountability and trust of muzakki in zakat management in Indonesia (Kasri & Sosianti, 2023).

LITERATURE REVIEW
1. Conventional Zakat Management

Conventional zakat management is still highly dependent on traditional administrative mechanisms run by zakat institutions such as BAZNAS, LAZ, and other zakat collection units. In many cases, recording zakat transactions is done through manual forms, ledgers, simple spreadsheets, or internal software that is not integrated (Jayadi, 2024). This reliance on manual administration systems causes the flow of data collection, processing, and reporting to take a relatively long time. In addition, the data input process carried out by various officers separately can cause inconsistencies, duplication, or inaccuracies in documentation.

In addition to recording that has not been fully automated, the process of reporting zakat funds in the conventional system is generally carried out periodically, such as every month, quarter, or year-end. The report information is usually a summary of the amount of funds collected and the funds disbursed without providing details of the transaction flow in real-time. As a result, muzakki do not have direct access to know when, to whom, and in what form their zakat funds are distributed. This information gap can cause a perception of lack of transparency, especially for muzakki who want more open details of the use of funds.

In terms of accountability, the conventional system has limitations because muzakki must put full trust in the institution without being able to carry out independent verification. Internal and external audits are conducted only during certain periods and do not provide direct access for the public to review transactions. This situation opens up opportunities for fraud, misappropriation of funds, or abuse of authority if there is no strong supervision. Thus, although the conventional system has been running for a long time, this model has limitations in increasing transparency and trust of the muzakki.

2. Blockchain Technology in Social Fund Management

Blockchain is a digital data storage technology in the form of a blockchain that is interconnected and secured by cryptography (Ali & Hassan, 2021). The working system of a blockchain is to record transactions in a block

that is verified by many computers (nodes), and then stored permanently without being able to change.

a. Decentralized

With its decentralized nature, blockchain does not rely on a single server or central authority to store, verify, or control data. In a blockchain network, each node keeps a full copy of the entire transaction history (Ismail & Rahman, 2020). Thus, the system does not have a single point of failure that can cause system corruption, data manipulation, or information loss. In the management of social funds, decentralization provides a guarantee that donation or zakat transaction data is not only stored on the server of zakat institutions, but is spread across many parties, so it is safer from technical interference or attempts to delete data (Supriadi, 2024).

In addition to the security aspect, decentralization also creates a stronger model of collective surveillance. Since any changes to the ledger must be approved by a majority of nodes, manipulation attempts by one party become almost impossible. In social institutions such as Baznas and Laz, a distributed structure like this strengthens public trust in the management of zakat, because there is no single entity that holds absolute control over social fund data (Baznas, 2022). If a single node is disrupted or damaged, the network can still run without compromising the transparency and accessibility of information.

b. Immutable

Immutable means that any data or transactions that have already entered the blockchain cannot be deleted or modified (Awan, 2021). This is achieved through cryptographic mechanisms and chained hash structures, where each block contains traces of the previous block. If there is an attempt to change a single transaction, the change will break the entire block chain, and the network will immediately reject that data because it does not conform to the collective consensus. In the zakat or donation management system, this immutable nature allows the creation of a strong and permanent audit trail, so that misuse of funds becomes easier to detect.

Immutability is very important in maintaining the integrity of financial data of social institutions. Many cases of violations or corruption in the management of public funds occur because reports can be manipulated after transactions have taken place. (Samsudin, 2024) Blockchain eliminates this gap technically. Social institutions cannot alter the report data to improve the image or hide errors, as any verified transaction becomes a permanent part of the public record or a distributed private record. This encourages more honest, transparent, and accountable governance.

c. Transparent (Every Transaction Can Be Verified)

Blockchain allows for a higher level of transparency than conventional systems because every transaction can be verified by the public or the party given access (Ali & Hassan, 2021). While the user's identity can be disguised with a cryptographic address, transaction details such as the amount of funds, the time of the transaction, and the flow of funds are still visible. Transparency like this is very relevant for the management of social funds because muzakki or donors want to ensure that their funds really reach the beneficiaries according to the destination. With blockchain, zakat institutions cannot cover up the flow of fund distribution (Butar-Butar, Ningsih apitupulu & Nasution, 2022; Ningsih, 2024).

Additionally, the transparent nature of blockchain can increase donor participation and trust. When each transaction is recorded openly, the muzakki can conduct independent checks without having to wait for periodic reports from zakat institutions (Suselo, 2025). This open access to information creates a healthier relationship between social fund management institutions and the public. For zakat institutions, transparency is not just a feature, but an important factor in increasing credibility, the effectiveness of social da'wah, and compliance with zakat payments (Butar-Butar et. all, 2022).

d. Automated Systematics Through Smart Contracts

Smart contracts are digital programs that run automatically on top of the blockchain to execute certain rules without human intervention. In the management of social funds, smart contracts can regulate zakat calculation, mustahik verification, fund distribution, and automatic reporting (Yusoff & Fauzi, 2021; July, 2025). If zakat funds are collected in a certain amount, the smart contract can directly execute the distribution to the mustahik group that has been verified beforehand. This automation reduces the risk of human error and bias in fund distribution decision-making.

Smart contracts allow zakat institutions to implement sharia policies and regulations more consistently. The rules for the distribution of funds, the maximum limit of distribution, or the order of priority of mustahik can be programmed mathematically so that they cannot be violated by the officers of the zakat institution. Every smart contract execution is automatically recorded in the blockchain, so it can be audited at any time. Thus, smart contracts not only provide operational process efficiency, but also strengthen the integrity and accountability of social institutions in distributing community funds (Ikhwandha et all., 2019).

3. Transparency and Trust of Muzakki

The trust of muzakki is the main foundation in the success of zakat

management, because the participation of the community is highly dependent on the extent to which they feel confident that the funds they disburse are managed in a trustworthy, professional, and targeted manner. One of the important aspects that determines the level of trust is the disclosure of information about the flow of zakat funds, starting from the collection stage to distribution. Muzakki needs access to clear information about how much funds have been raised, how the funds are managed, and what programs are the purpose of distribution. The availability of this information provides a sense of certainty that the zakat institution carries out its duties responsibly.

The validity of the report is also an important element in building muzakki trust. In the conventional system, financial statements are often only available for a certain period and cannot be verified directly by the muzakki (Kuanova et all, 2021). This condition can raise doubts regarding the accuracy of the data, especially when the report is not accompanied by detailed evidence of the receipt and disbursement of funds (Maimuna, 2025).

With the development of technology, a transparent, secure, and verifiable digital system offers a great opportunity to increase muzakki's trust. When transaction data is recorded automatically, cannot be manipulated, and can be re-accessed by the authorities (Makarim, & Hamzah, 2024), muzakki feel more confident that zakat institutions have no room to commit irregularities. Blockchain provides an open and immutable recording mechanism, so that muzakki can monitor the movement of their funds more objectively (Putri, 2025). Thus, the use of digital technology not only increases transparency, but also provides a strong basis for increasing muzakki's trust in the modern zakat management system (Makarim & Hamzah, 2024).

RESEARCH METHODS

This research uses a qualitative-descriptive approach that aims to understand in depth the difference between conventional zakat management and blockchain-based zakat management from the perspective of transparency and muzakki trust. This approach was chosen because the research focuses on the analysis of the concepts, working mechanisms, and implications of the zakat management model, not on quantitative number measurement. The research process begins with the identification of issues and the formulation of the focus of the study, then continues with the systematic collection, organization, and analysis of data until reaching conclusions that can be accounted for academically (Hamdani, 2020).

The initial stage of the research is to conduct a comprehensive literature review, by tracing various scientific sources, as well as case studies of blockchain implementation in social funds in several countries. The

literature review was conducted to understand the objective conditions of conventional zakat management, blockchain working principles, and transparency and trust models in the management of public funds (Nafi' Hasbi, 2024).

The next stage is a comparative analysis between the conventional zakat system and the blockchain-based zakat system. At this stage, a systematic mapping of the characteristics of the two models was carried out, starting from the mechanism of recording funds, reporting, supervision, to the distribution process (Nakamoto, 2020). Comparisons were made by looking at the strengths and weaknesses of each model, especially related to transparency capacity and its impact on muzakki trust. The analysis is carried out in stages by comparing the findings of literature and empirical practices from zakat institutions that have implemented digitalization (Mushdalifah, 2024).

The final stage of research is synthesis and drawing conclusions. All the results of the analysis—ranging from literature review, system comparison, to conceptual analysis—are combined to produce a comprehensive picture of the differences between the two zakat management models.

RESULTS AND DISCUSSION

1. Transparency Comparison

Based on the results of literature review and review of zakat management practices in various institutions, it was found that conventional zakat management systems in general still rely on periodic and aggregate reporting patterns. Information about zakat funds is more often presented in the form of monthly, quarterly, or annual reports that contain the total collection and distribution, without providing details of the journey of funds from muzakki to mustahik. The reports are compiled in narrative and summary table formats, then published through annual reports, websites, or print media. The report only provides an overview, not transactional transparency that allows muzakki to track the specifics of the zakat they pay.

A study of institutional practices also shows that in the conventional system there is still the potential for recording errors and data manipulation gaps. Recording transactions that are carried out manually or through a closed internal information system has the potential to cause a discrepancy between the data in the field and the data in the final report. Data verification is usually done internally by a specific finance department or auditor at a given period, so there is no truly permanent trail audit mechanism that can be traced back at any time by an outside party. This condition makes transparency limited

and highly dependent on the integrity of the institution, not on a system that technically guarantees the openness and accuracy of data.

In contrast, the implementation of blockchain in the management of social funds shows very different characteristics of transparency. In a blockchain-based zakat system, every transaction—both collection and distribution—is automatically recorded in a distributed ledger that can be verified by parties who have access rights. Logging is done in real-time and each transaction is assigned a unique identity that is connected in the blockchain. This allows for the formation of a detailed and continuous transaction trail, so that the flow of funds from muzakki to the institution's account and then to mustahik can be traced step by step.

The immutable nature of blockchain ensures that the data that has been recorded cannot be changed unilaterally by zakat institutions or other parties. If an institution wants to publish financial statements or accountability documents, the document can be hashed and hashed stored inside the blockchain. In this way, the public can verify the authenticity of the documents in circulation by matching the hash, so that any attempt to change the content of the report after publication will be easily detected. This mechanism creates a form of transparency that does not only depend on the goodwill of the institution, but is guarded by its technological design.

Comparatively, the analysis shows that transparency in conventional systems is ex-post and aggregative—muzakki only obtain information after the collection and distribution process is completed, and even that in summary form. Meanwhile, in blockchain-based systems, transparency is more real-time and transactional, because every movement of funds is recorded instantly and can be accessed again according to regulated access rights. This difference has important implications: in conventional systems, the space of uncertainty remains large because muzakki do not have independent means of verification; Meanwhile, in the blockchain system, these uncertainties are minimized through open recording and verification mechanisms.

Table 1. Comparison of Transparency in Zakat Management

Transparency Aspect	Conventional Zakat Management	Blockchain-Based Zakat Management
Availability of Fund Information	Information is only available through periodic reports (monthly/yearly) and is aggregated. Muzakki can't access transaction details.	Information is available in real-time through the digital ledger. Every transaction can be viewed and verified according to access rights
Funds Way Details	Muzakki could not see how and when their funds were channeled. Transparency only on the total level of receipts and distributions.	Muzakki can track the journey of funds from payment, storage, to distribution to mustahik.

Data Accuracy and Reliability	Data Accuracy and ReliabilityRentan terhadap kesalahan pencatatan, manipulasi, dan inkonsistensi data karena masih banyak proses manual.	Data is stored automatically and distributed, so the risk of errors and manipulations is minimal.
Audit Trail	Trail audits are not permanent, relying on manual documentation and internal reports. The public can't review the transaction trail.	Every transaction is permanently recorded in the blockchain. Trail audits can be verified at any time and cannot be changed.
Public Verification	The public can only see summary reports, cannot independently verify the authenticity of the data.	The public or auditor can verify the hash of the report and transaction data to ensure its authenticity and integrity.
Operational Transparency	It depends on the credibility of the zakat institution; The nature of transparency is more declarative.	Transparency is built technically through a system, not just an institutional declaration.
Potential for Cheating	Higher because the data manipulation gap is larger and there is no independent verification mechanism.	Very low because the ledger is immutable and data changes will be rejected by the network.
Reporting Consistency	Reporting can differ between units/each branch because it is not digitally integrated.	Every transaction is recorded in a single source of truth.

When associated with the stages of the research method, these findings are the result of a comparative analysis process that compares the characteristics of the two systems based on the literature, institutional reports, and case studies. The distributed ledger and immutable nature of blockchain are not just technical features, but have normative consequences for transparency and accountability. Conventional systems put muzakki in a position of "must trust" to institutions, while blockchain-based systems give muzakki the opportunity to "check and ensure" independently (Ummah, 2025). Thus, blockchain provides a higher level of transparency qualitatively, as it makes openness and audit traces an inherent character of the system, not just an institution's operational policy.

2. Comparison of Muzakki Beliefs

The results of the literature review show that the trust of muzakki in the zakat institution in the conventional system is highly dependent on the reputation of the institution and the credibility of the reports submitted periodically. Many muzakki give zakat based on belief in the great name of the institution or its religious background, not based on evidence of transparency in the fund management process. Muzakki's trust tends to fluctuate when issues arise related to inaccuracy of distribution targets, delays in distribution, or unclear information on fund flows. Because the information is conveyed in

aggregate and not real-time, muzakki do not have the opportunity to conduct self-checking, so their trust is more assumed than data-based.

In the management of conventional zakat, the trust of muzakki is also affected by the limitations of the verification mechanism that can be carried out by the public. Muzakki can only rely on financial statements or narratives submitted by zakat institutions without being able to see directly how funds move from the collection stage to distribution. When there is a discrepancy in data or a report that is not detailed, muzakki often feel doubtful about the accountability of the institution. This condition shows that the conventional model produces "weak" trust because it is not supported by objective digital evidence and does not provide an independent verification path for zakat givers.

In a blockchain-based zakat system, muzakki can track the journey of their funds directly through a ledger that is automatically recorded in the network. Each transaction shows the payment time, amount of funds, identity of the distribution program, and the transaction address of the beneficiary that has been anonymized to maintain privacy. This openness provides certainty to muzakki that their funds are not only recorded correctly but also distributed in accordance with sharia provisions and institutional policies. In addition, the immutable nature makes the data cannot be modified after the transaction is made, so that muzakki avoids the risk of misappropriation of funds which is often a source of distrust.

Table 2. Comparison of Muzakki Beliefs

Aspects of Muzakki's Faith	Conventional Zakat Management	Blockchain-Based Zakat Management
Basis of Trust	Based on the institution's reputation, track record, and public perception. It is subjective and cannot be verified directly by the muzakki.	Based on objective digital evidence. Every transaction can be checked so that the trust is verification-based.
Access to Information	Muzakki only receives periodic reports that are summarie; No access to detailed transaction data.	Muzakki can access real-time data and view the journey of their funds through the blockchain explorer or the institution's dashboard.
Certainty of Fund Distribution	Muzakki must believe that the institution distributes funds according to the provisions. No tools to independently verify distribution lines.	The distribution of funds is carried out automatically through smart contracts and is permanently recorded, thus providing full certainty and traceability.
Risk of Deviation and Manipulation	High, mainly due to manual recording and the absence of permanent trail audits; Muzakki often doubts the integrity of the report.	It is very low because the data is immutable and any changes are detected by the network.

Perception of Transparency	Transparency is considered low because muzakki does not see the internal processes of the institution and only receives aggregative reports.	Transparency is highly valued because muzakki can monitor transactions from start to finish with cryptographic proof.
The Effect of Distribution Delays	Delays in distribution can reduce trust because the benefits of zakat are not immediately felt mustahik.	The distribution process is diotomized and faster; Muzakki sees the impact of funds more directly.
Muzakki–Institution Relationship	Interpersonal and institutional trust-based relationships; easily influenced by negative issues and perceptions.	Relationships based on systemic and technological trust; more stable and less easily affected by external issues.
Muzakki's Satisfaction and Loyalty	It tends to fluctuate because muzakki depends on the quality of reports and the image of the institution.	It is stronger because the muzakki feel that they have control and access to data, so that loyalty based on certainty emerges.

Smart contracts that run on the blockchain network make a great contribution to increasing muzakki's trust. Because the rules for disbursing funds are carried out automatically by the system, the distribution process becomes more consistent and free from human intervention. This automatic mechanism ensures that funds are distributed only to mustahik that has been verified and according to the specified category. Muzakki does not need to worry about bias, human error, or potential distribution injustice because each distribution step follows the parameters that have been written in the code. Thus, the trust of muzakki no longer solely depends on the integrity of the zakat institution, but also on the technical integrity of the blockchain system that guarantees the suitability and accuracy of distribution.

3. The Impact of Zakat Digital Transformation

Digital transformation in zakat management has a significant impact on the effectiveness, transparency, and accountability of zakat institutions (Fanelli, 2023). Digitalization of the implementation of zakat collection applications, information management systems, and the use of blockchain, has changed the way zakat institutions manage and distribute funds. Digitization allows for faster collection processes, more accurate recording, and more systematic reporting. This change creates a new ecosystem where zakat institutions no longer rely on manual administration, but on digital systems that are integrated with each other and can provide real-time data (Widiastuti, et al., 2022).

From the perspective of muzakki, digital transformation increases the convenience and comfort in paying zakat. Zakat payment applications, digital wallets, and transparency portals provide wider access for the public to

participate. Muzakki can not only calculate zakat automatically, but also monitor ongoing distribution programs. This convenience has an impact on increasing public participation, especially from the younger generation who are very familiar with digital technology. In previous studies, it was stated that the easier the payment process and the higher the transparency of information, the greater the tendency of individuals to distribute zakat through formal institutions.

Blockchain systems and smart contracts have a huge impact on improving the accuracy and effectiveness of fund disbursement. Smart contracts can ensure that zakat funds are distributed to the right mustahik based on previously verified criteria. The distribution process can run automatically when certain conditions are met, such as the validation of mustahik identity or the fulfillment of the allocation of funds for a program. This reduces the risk of delays, misdistribution, and bias in the distribution process. In addition, every step of the distribution of funds is permanently recorded in the blockchain ledger so that auditors and the public can easily trace.

Another impact can be seen in increasing the accountability and governance of zakat institutions. Digital systems produce data that is more detailed, easier to verify, and more difficult to manipulate (Mohamed & Idris, 2024). This encourages zakat institutions to be more transparent and accountable in every aspect of their operations because every activity is recorded digitally and can be reviewed at any time. At the institutional level, digitalization also allows for cross-institutional integration—for example, between BAZNAS, LAZ, Islamic banks, and mustahik empowerment institutions—which was previously difficult to do with manual systems. This kind of integration creates a more efficient and collaborative workflow.

CONCLUSION

1. Conclusion

This study concludes that there is a fundamental difference between conventional zakat management and blockchain-based zakat management in terms of transparency and trust of muzakki. Conventional systems still face limitations in providing detailed and real-time information, are prone to recording errors, lack of permanent audit trails, and provide greater space for data manipulation. This condition makes the muzakki's trust weak because it depends on the reputation of the institution and periodic reports that cannot be independently verified.

In contrast, blockchain-based systems offer a more transparent, secure, and verified record-keeping mechanism. Each transaction is automatically

recorded in a distributed ledger, cannot be changed, and can be accessed according to verification rights. Smart contracts provide a guarantee of consistency in zakat distribution, reduce human intervention, and increase certainty that funds are distributed in accordance with sharia regulations. Thus, blockchain not only improves the technical aspects of zakat management, but also changes the paradigm of trust from trust in institution to trust in system, which is more stable and sustainable.

Digital transformation through blockchain has been proven to have a multidimensional impact, both in terms of operational efficiency, data quality, muzakki behavior, and strengthening the governance of zakat institutions. The technology-based zakat system is an important foundation for the modernization of zakat institutions in Indonesia in facing the challenges of the digital era.

2. Recommendations

Based on the findings of the research, the management of zakat in Indonesia needs to be directed towards a more comprehensive and planned digital transformation. Zakat institutions must start reducing their dependence on manual administration systems and switch to an integrated digital system that is able to provide data quickly, accurately, and easily verifiable. This step is important to improve the quality of recording, minimize the risk of errors, and speed up the reporting process to the public and stakeholders. The implementation of digital technology, including blockchain, can be carried out in stages, starting from the implementation of transparency modules, such as the publication of hash financial statements, to finally integrating the entire flow of zakat collection and distribution transactions into a blockchain-based system.

Zakat institutions need to build a mustahik data collection system that is more valid, up-to-date, and based on real-time data. This approach will reduce the inaccuracy of the distribution targets, avoid duplication of aid, and ensure that zakat funds are distributed to recipients who truly meet sharia criteria. With the support of technology, data updates can be done faster and mustahik verification can be automated so that the distribution process becomes more efficient and measurable.

BIBLIOGRAPHY

Ali, M., & Hassan, R. (2021). Blockchain Technology for Islamic Social Finance: Opportunities and Challenges. Journal of Islamic Finance, 10(2), 45–58.

Awan, U. (2021). Utilizing blockchain for enhanced accountability in zakat distribution. Asian Journal of Accounting Research, 6(1), 55–70.

Aziz, M.R.A.B., & Anim, N.A.H.M. (2020). Trust towards zakat institutions among Muslim business owners. Jurnal Ekonomi & Keuangan Islam, 6(1), 1–9.

BAZNAS. (2022). Laporan Pengelolaan Zakat Nasional 2022. Jakarta: BAZNAS RI.

Butar-Butar, A. A., Napitupulu, R. M., & Nasution, H. F. (2022). The level of public trust analysis in paying zakat at BAZNAS Sibolga City. JISFIM: Journal of Islamic Social Finance Management, 3(2), 183–190.

Dandi, M. (2025). Blockchain and Islamic finance: Innovating within tradition. Journal of Islamic Economic Insights, 1(1), 29–39.

Denia, F. N., Gautama, B., & Huda, N. (2024). Blockchain in Islamic finance: A bibliometric review. At-Tijaroh: Jurnal Ekonomi dan Bisnis Islam, 10(2), 120–138.

Fadhilah, N. (2025). Inclusive zakat governance: Legal-theological perspectives. Proceedings of International Conference on Islamic Economics Studies (ICONIES).

Hamdani, L. (2020). Zakat blockchain: A descriptive qualitative approach. EkBis: Jurnal Ekonomi dan Bisnis, 4(2), 492–507.

Hidayanti, N. F. (2025). Optimizing digital-based zakat management: A systematic literature review. JSEIT: Jurnal Syariah Ekonomi dan Inovasi Teknologi, 5(2), 200–215.

Hilyatin, D.L., Riyadi, S., & Basrowi. (2024). Digital zakat management, transparency in zakat reporting, and zakat payroll system toward zakat management accountability and its implications on zakat growth acceleration. International Journal of Data and Network Science, 8(1), 597–608.

Hotimah, H. (2023). The effects of accountability and transparency on muzakki's trust: A meta-analysis. Review of Islamic Economics and Finance, 4(1), 45–60.

Ikhsan, N. (2023). Blockchain zakat in zakat management organizations, is it necessary? Journal of Enterprise Development, 5(3), 317–330.

Ikhwandha, M.F., Ikhsan, A., & Fadilah, H. (2019). The influence of accountability, transparency, affective and cognitive trust toward the interest in paying zakat. Jurnal Akuntansi & Auditing Indonesia, 23(2), 142–154.

Ismail, M., & Rahman, A. (2020). The future of zakat management: A blockchain perspective. Journal of Islamic Finance, 9(2), 25–40.

Jayadi, A. (2024). Implementation of digital fundraising in zakat management. Proceedings of the International Conference on Zakat (ICONZ BAZNAS).

Judijanto, L., Sudarmanto, E., Bakri, A. A., Jasiah, J., & Irwan, M. (2024). Analysis of effectiveness and challenges of digital zakat management: Case study on Shopee and Tokopedia platform. West Science Islamic Studies, 2(1), 1–7.

Kasri, R. A., & Sosianti, M. W. (2023). Determinants of the intention to pay zakat online: The case of Indonesia. Journal of Islamic Monetary Economics and Finance, 9(2), 275–294.

Khairi, K. F., Laili, N. H., Sabri, H., Ahmad, A., Pham, V. H., & Tran, M. D. (2023). The development and application of the zakat collection blockchain system. Journal of Governance and Regulation, 12(3), 100–112.

Khulataini, L. (2025). Analysis of accountability and transparency of digital zakat. Ekonomipedia, 5(1), 45–56.

Kuanova, L. A., Sagiyeva, R., & Shirazi, N. S. (2021). Islamic social finance: A literature review and future research directions. Journal of Islamic Accounting and Business Research, 12(5), 707–728.

Maimuna, I. (2025). Digitalisasi pembayaran zakat dalam upaya meningkatkan efektivitas penghimpunan dan pengelolaan zakat (Studi kasus BAZNAS Kota Malang). OIKOS: Jurnal Kajian Pendidikan Ekonomi dan Ilmu Ekonomi, 9(1), 45–60.

Makarim, D. F., & Hamzah, M. Z. (2024). Peran dan potensi digitalisasi manajemen zakat: Sebuah systematic literature review. Jurnal Ilmiah Ekonomi Islam, 10(1), 463–471.

Mangawing, A., Hasan, H. A., & Nur, M. (2023). Digitalisasi UMKM dan Transparansi Keuangan. Jurnal Ekonomi dan Bisnis, 7(3), 112–128.

Masrukhan, M. (2024). Penerapan blockchain dalam manajemen wakaf dan zakat. Dinamika Ekonomi, 3(1), 45–58.

Mohamed, S., & Idris, K. (2024). Enhancing Zakat Governance Through Blockchain-Based Systems. International Journal of Islamic Economics, 5(1), 77–95.

Mushdalifah, M. (2024). Legal analysis of digital zakat management: Security, transparency, and sharia compliance. Collaborative Review: Jurnal Hukum Ekonomi Syariah, 4(1), 25–40.

Nafi' Hasbi, M. Z. (2024). Transparency of zakat funds to increase public trust in zakat institutions. JIESBI: Journal of Islamic Economics, Social and Business Insight, 2(1), 15–28.

Nakamoto, S. (2020). Blockchain as Distributed Ledger System. Technology and Society Review, 8(4), 55–63.

Ningsih, F. M. (2024). Peran teknologi blockchain dalam pengelolaan dana sosial Islam. Citizen: Jurnal Ilmiah Multidisiplin Indonesia, 8(1), 70–82.

Putri, N. N. (2025). The potential application of blockchain technology in zakat management in Indonesia. JIBEST: Journal of Islamic Business, Economics and Social Transformation, 4(2), 55–68.

Rahman, A. (2025). How safe are principles and good corporate governance in Islamic financial institutions? JATI: Jurnal Akuntansi dan Keuangan Islam, 7(1), 50–68.

Samsudin, S. (2024). Exploring Islamic social finance practices in Muslim communities. Medag: Journal of Islamic Economic Development, 3(2), 90–105.

Supriadi, I. (2024). Decentralized Islamic finance: Harnessing blockchain and fintech. El Dinar: Jurnal Keuangan dan Perbankan Syariah, 12(2), 145–162.

Suselo, D. (2025). Analysis of factors influencing public trust in the adoption of digital zakat platforms. El Kahfi: Jurnal Ekonomi dan Perbankan Syariah, 4(1), 75–90.

Ummah, S. (2025). Effectiveness and accountability of zakat fund management: Evidence from Yakesma. Golden Ratio of Finance and Management, 5(2), 510–525.

Uula, M. M. (2025). Smart contracts and the Islamic finance industry. Journal of Islamic Economic Law, 4(1), 60–72.

Widiastuti, T., Ningsih, S., Prasetyo, A., Mawardi, I., et al. (2022). Developing an integrated model of Islamic social finance: Toward an effective governance framework. Heliyon, 8(10), e10383.

Yusoff, M., & Fauzi, H. (2021). Smart Contract for Zakat Distribution Management. International Journal of Financial Innovation, 3(2), 84–97.

Zamroni, M. A. (2023). Exploring zakat distribution via blockchain in Indonesia. International Journal of Islamic Social Economics, 4(2), 120–135.