JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

The Concept of Al-Hisbah in Indonesia's Modern Islamic Economy: Sharia Supervision in the Era of Blockchain and AI

Ahmada Khoirul Umam
Universitas Kadiri
ahmada@uniska-kediri.ac.id

Abstrak This article examines how Al-Hisbah, as an economic supervisory institution, intersects with various modern digital advancements. The study employs a descriptive-normative literature review methodology. The findings indicate that Al-Hisbah remains highly relevant and has strong potential to be integrated into unified systems with modern innovations such as blockchain and artificial intelligence. Nevertheless, several important considerations must be emphasized to ensure the system operates optimally while remaining aligned with Islamic principles. In the result, this study explain a unified conceptual framework that can be derived from *al-hisbah*, a classical economic instrument, in relation to modern concepts, namely blockchain and artificial intelligence (AI). Furthermore, the discussion is structured into four main points, covering the urgency of each concept, the process of their integration, and the challenges that may hinder such integration

Kata Kunci Al-Hisbah, Islamic Economics, Blockchain, Artificial Intelligence, Digital Supervision

INTRODUCTION

Today, the rapid development of digital technology is profoundly impacting society. New concepts such as *blockchain* and *artificial intelligence* (AI) have fundamentally reshaped global socioeconomic paradigms, including economic governance. Consequently, all institutional components within the system, including Al-Hisbah as a moral and market supervisory institution in Islam, must adapt to remain relevant in the digital era. Increasing financial accountability and strengthening public trust are among the many recurring issues that demand updated solutions during each era of disruption and modernization. Islamic history documents Al-Hisbah as a public supervisory institution that ensures all socioeconomic activities operate fairly, transparently, and in accordance with Sharia principles. This institution not only oversees market transactions but also maintains the moral integrity of individuals as economic actors. Over the past two decades, Umam (2021) explains that Al-Hisbah is an institution that has continuously adapted both during the early classical Islamic period and when later adopted in the Western world, eventually evolving into what is known today as the ombudsman. Many Islamic scholars argue that while the institutional form of Hisbah may change, its core essence and fundamental values must remain preserved.

On August 24, 2025, as reported by Politico, the Prime Minister of Albania; Edi Rama, initiated discourse suggesting that artificial intelligence could potentially be integrated into his government, even in roles replacing ministers. This reflects how traditional supervision is increasingly insufficient to manage the complexities of decentralized, automated, and globally interconnected modern systems, particularly in economic contexts.

Indonesia, by contrast, recorded external debt of US$431.5 billion as of April 2025 and, according to the Jakarta Globe, holds the unfortunate distinction of being the sixth most corrupt country in ASEAN (Umam, 2025). Given these conditions, the presence of Al-Hisbah as a national supervisory framework is

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

crucial not only as a moral imperative but also as a practical institutional solution to address various socioeconomic challenges.

Despite the growing body of literature on *al-hisbah* as a classical institution of moral and market supervision in Islamic economics, most existing studies remain largely historical and normative in orientation. Scholarly discussions tend to focus on its juristic foundations, the role of the *muhtasib*, and its relevance in pre-modern market settings, without sufficiently engaging with the structural transformations brought about by digital economic systems. As a result, *al-hisbah* is often treated as an ethical ideal rather than as an institutional framework capable of operating within contemporary technological infrastructures.

On the other hand, recent research on blockchain and artificial intelligence within Islamic economics has predominantly emphasized their applications in Islamic finance, such as smart contracts, Sharia-compliant fintech, and AI-assisted Sharia auditing. While these studies demonstrate the technical feasibility of digital tools in ensuring compliance and efficiency, they largely operate in isolation from classical Islamic supervisory institutions. Blockchain and AI are frequently discussed as neutral instruments of governance, with limited exploration of how their epistemological foundations might be aligned with Islamic moral philosophy and institutional heritage.

This fragmentation reveals a critical gap in the literature: the absence of an integrated conceptual framework that systematically connects *al-hisbah* with modern digital technologies. Existing works rarely attempt to theorize how the normative principles of *amar ma'ruf nahi munkar*, justice (*'adl*), and public interest (*maslahah*) embedded in *al-hisbah* can be operationalized through decentralized and algorithmic systems. Consequently, the discourse remains divided between classical Islamic governance on one side and contemporary digital supervision on the other, with minimal conceptual dialogue between them.

Furthermore, studies that do address digital governance from an Islamic perspective often overlook the institutional challenges and ethical tensions arising from delegating supervisory functions to machines. Questions concerning moral judgment, human accountability, algorithmic bias, and Sharia authority remain underexplored. The literature lacks a critical examination of whether and to what extent artificial intelligence can assume roles traditionally entrusted to morally responsible human agents, such as the *muhtasib*, without undermining the theological and ethical foundations of Islamic economics.

In response to these gaps, this paper seeks to contribute by proposing a unified conceptual framework that repositions *al-hisbah* within the context of blockchain and artificial intelligence. Rather than merely digitalizing supervision, the study aims to reconceptualize Sharia oversight as a layered system in which classical Islamic values guide the design, function, and limitations of modern technologies. By doing so, this research addresses not only the question of technological integration, but also the deeper epistemological and institutional implications of supervising morality and justice in the digital economy.

THEORETHICAL FRAMEWORK

The concept of Al-Hisbah derives from the Arabic word "*hasaba*" meaning to calculate, supervise, and evaluate. In its early period, this institution was known as "*Wilayatul Hisbah*". In an economic context, Al-Hisbah is an institution that ensures all economic activities comply with Sharia regulations and principles of social justice. Classical scholars such as Al-Mawardi and Ibn Taymiyyah emphasized the role of the "*muhtasib*" as a market supervisor, guardian of business ethics, and protector of public rights. In the modern economy, however, there is a growing need to adapt this concept within the context of financial and trade system digitalization. Blockchain and AI technologies can serve as supporting instruments in establishing an automated supervisory system grounded in Hisbah's values.

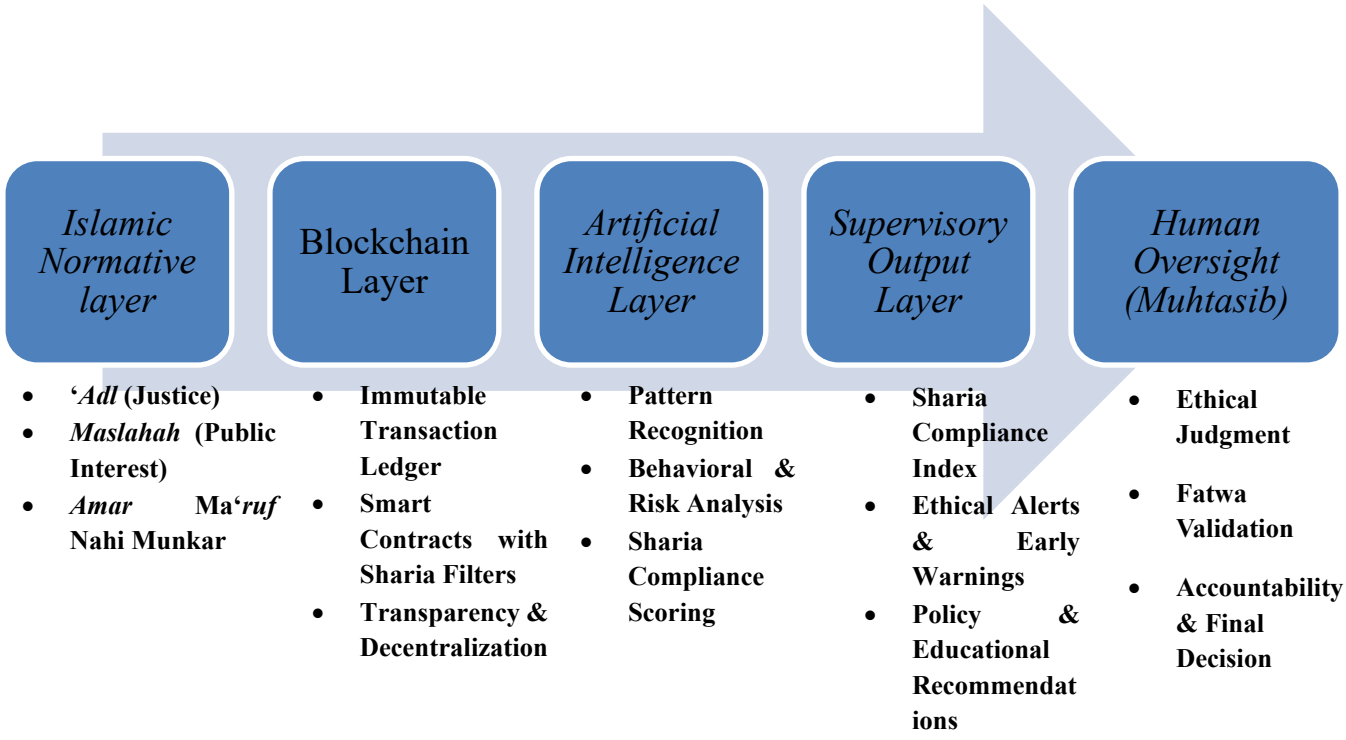
Blockchain is a data-recording system that operates in a decentralized manner, meaning data is not stored in a single location or server but is instead distributed across multiple nodes within a network. This architecture makes blockchain inherently difficult to modify or falsify. The technology functions as a distributed digital ledger that efficiently, transparently, and permanently records transactions between

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

parties. In practice, blockchain typically operates through a peer-to-peer network in which participants collectively follow specific protocols to communicate and validate each new block. Once data is recorded within a block, it cannot be altered unilaterally without approval from the majority of nodes in the network (Parkins, 2015). In simple terms, blockchain can be understood as a decentralized storage mechanism in which any attempt to modify existing data requires validation from all nodes within the system.

According to Karsenti (2019), Artificial Intelligence (AI) is a branch of computer science that creates intelligent machines capable of working and reacting like the human brain by utilizing data processing, patterns, and models to understand, reason, plan, solve problems, make predictions, and manipulate objects. In other words, AI is not merely an automated system but rather a form of "simulated human intelligence" that enables computers to learn from experience, adapt to new inputs, and perform tasks requiring human-level cognitive abilities. To reach its maximum potential, AI requires intensive interaction with users and data resources to generate comprehensive insights and human-like responses.

The emergence of technologies such as blockchain and AI presents opportunities to revitalize the application of Al-Hisbah into a more sophisticated form capable of operating within modern system hereafter referred to as Digital Al-Hisbah, as proposed in this paper.



The Digital Al-Hisbah Integrated Supervision Model (Digital Hisbah) conceptualizes Sharia economic supervision as a multi-layered system that integrates classical Islamic normative principles with modern digital technologies. The model positions maqasid al-Shariah and Hisbah values as the foundational normative layer guiding all subsequent technological processes.

Within *Digital Hisbah*, blockchain functions as the structural backbone of supervision, ensuring transparency, immutability, and *decentralized* trust in economic transactions. Smart contracts embedded with Sharia parameters serve as an initial filtering mechanism that prevents prohibited activities before further analysis.

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

Artificial intelligence operates as an adaptive analytical layer within the model, enabling continuous monitoring, pattern recognition, and predictive assessment of economic behavior. Rather than replacing moral authority, AI enhances supervisory capacity by generating compliance indicators and early ethical warnings.

Crucially, *Digital Hisbah* retains human oversight as its final layer, reaffirming the role of the muhtasib as a morally accountable agent. This ensures that ethical judgment, contextual interpretation, and responsibility remain human-centered, thereby preserving the theological and epistemological integrity of Islamic economic supervision.

Since its origin in early Islamic governance as a mechanism for enforcing amar maʿrūf nahī munkar, al-Hisbah has long been recognized as the institutional backbone of economic and moral supervision in Muslim societies. Classical scholarship situates the muḥtasib as a public official overseeing market transparency and ethical conduct, yet contemporary studies show that this role has been substantially reinterpreted in modern economic structures. Fanani and Takayasa (2022) note that although the formal functions of Hisbah have diminished over time, its core supervisory principles have been embedded within various contemporary regulatory bodies, particularly within emerging Islamic states such as Indonesia (e.g., historical market regulation and moral oversight).

In the context of contemporary financial systems, the evolution of al-Hisbah reflects an adaptive response to institutional complexity and stakeholder demands. Sholikah et al. (2024) demonstrate that in the Indonesian Islamic capital market, al-Hisbah operates as an investor protection institution by supervising risk and compliance in financial transactions, effectively bridging classical ethics with modern market regulation. This reframing positions al-Hisbah not only as a moral regulator but also as a guardian of economic justice and systemic accountability in sectors replete with asymmetric information and risk exposure.

The role of Hisbah within contemporary governance has also been analyzed through comparative institutional studies, revealing distinct evolutionary pathways across nations. Febrina and Abdulah (2024) argue that Hisbah under Shariah governance frameworks in Indonesia and Malaysia expresses divergent regulatory emphases, with centralized compliance mechanisms in Malaysian Islamic finance contrasting with more decentralized frameworks in Indonesia. This comparative perspective underscores a broader gap in the literature: the absence of integrative models that align traditional Hisbah supervision with modern governance architectures shaped by technological innovation.

Beyond finance, studies on Hisbah in market supervision emphasize that Islamic regulatory concepts remain pertinent across domains of economic activity. Research by Oktaviandi and Yogi (2024) highlights that al-Hisbah-based institutions significantly contribute to economic justice by ensuring fair pricing, transparency, and sustainable market interactions, implying that foundational Islamic supervision principles can inform the ethical design of modern regulatory systems. These insights support the conceptual necessity of theorizing al-Hisbah's normative foundation as a precondition for engaging with new digital modalities of governance.

Despite these advances, the literature rarely extends discussions of Hisbah into contemporary technological spheres such as blockchain or artificial intelligence (AI). While normative frameworks for digital transaction security using blockchain have been developed (e.g., applying maqāṣid al-Sharīʿah to distributed ledger technologies), there remains a conceptual void linking these developments with al-Hisbah's supervisory ethos. Addressing this gap is critical to avoid treating modern tools as neutral instruments divorced from the ethical imperatives of Hisbah principles.

Finally, recent explorations of Hisbah as a mechanism promoting Sharia compliance in modern business reflect a broader, albeit nascent, attempt to reconcile tradition with contemporary economic practices. Mutmainnah et al. (2025) find that employing internal Hisbah strategies such as muraqaba and muhasabah can nurture a culture of adherence to Sharia norms in today's business environments, yet the

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

operationalization of such mechanisms within algorithmic systems remains underdeveloped. This observation reinforces the need for integrated conceptual models; such as the *Digital Al-Hisbah Integrated Supervision Model* (DAHISM), that systematically articulate how classic values can cohere with emerging digital governance technologies.

RESEARCH METHODOLOGY

This study employs library based on descriptive-analytical approach. According to Sukmadinata (2009), data in this method is obtained from classical and contemporary literature related to the core topics: Al-Hisbah, Islamic economics, and digital technology. The analysis interprets the relevance of Sharia supervisory values to digital technological dynamics and identifies opportunities for implementing Digital Al-Hisbah in contemporary economic systems. A narrative literature review is employed as the primary method; although considered traditional, this approach is appropriate because the final output is normative conceptualization derived from synthesizing scholarly references.

The sources of this research, were gathered using Harzing's Publish or Perish (pop) over the past ten years to ensure recency. When older references are included, it is because they remain relevant and are widely cited in academic discussions. The keywords employed include: Hisbah, Blockchain, Artificial Intelligence, Islam, and Islamic Economics. The papers collected in this article include papers from academics from 2010, however, they still include several classic studies which are still used as an effort to define terminology.

Data sources from pop were obtained through Google Scholar, based on the consideration that it is currently the most widely used academic search engine globally. Works with high H-Index naturally appear due to their impact and frequent citation. All sources were compiled to develop the conceptual framework and derive research findings.

The transformation of Al-Hisbah into a modern framework begins with applying the principle of "*amar ma'ruf nahi munkar*" in the economic sector through technological approaches. Blockchain provides a trustless environment ensuring transparency and immutable audit trails, while AI enables adaptive analysis of economic behavior. This allows Sharia supervisory institutions to detect potential ethical violations and non-halal transactions in real time (Rahman et al., 2022).

The proposed conceptual mechanism operates as follows:

- Input → Digital economic transaction data
- Process → Automated sharia analysis using algorithms and machine learning
- Output → Sharia compliance assessment (Shariah Compliance Index)
- Feedback Loop → Policy recommendations or educational guidance for digital economic actors

This structure forms a "circular supervision system" based on blockchain and AI, in which each transaction is examined according to Hisbah principles and "*maqasid al-Shariah*" values.

RESULT & DISCUSSION

The narrative data extraction based on the writing criteria as outlined in the research methodology chapter resulted in the following tabulated result.

No.	Author(s) & Year	Main Focus	Method / Approach	Key Findings	Contribution to Paper
1.	Al-Mawardi (1996)	Classical Hisbah Institution	Normative–Fiqh Analysis	Hisbah is a state-based supervisory	Provides **theoretical and historical**

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

				mechanism ensuring market fairness, moral order, and public welfare	**foundation** of hisbah as institutional governance
2.	Ibn Taymiyyah (1999)	Hisbah in Islamic Society	Normative–Ethical Framework	Hisbah functions as moral, economic, and social control beyond formal authority	Strengthens **ethical–maqasidic grounding** of hisbah
3.	Umam (2021)	Evolution of Hisbah in Economic Systems	Conceptual–Historical Analysis	Hisbah evolves from classical market control to modern economic supervision	Serves as **bridge between classical theory and modern application**
4.	Fanani & Takayasa (2022)	Hisbah in Public Morality & Markets	Qualitative Contextual Study	Hisbah principles remain relevant for Indonesian socio-economic governance	Contextualizes hisbah within **Indonesian institutional reality**
5.	Rahman et al. (2022)	Digital Governance & Hisbah	Normative–Technological Reconstruction	Digital governance requires redefinition of hisbah's supervisory role	Supports **reconstruction of hisbah in digital governance era**
6.	Febrina & Abdulah (2024)	Hisbah & Social Change	Cultural and Social Analysis	Hisbah adapts to cultural dynamics and social transformation	Reinforces **adaptive nature of hisbah**
7.	Oktaviandi & Yogi (2024)	Economic Justice via Hisbah	Institutional Performance Review	Market supervision rooted in hisbah promotes distributive justice	Supports **justice-oriented narrative of Islamic economics**

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

8.	Sholikah et al. (2024)	Hisbah in Islamic Capital Market	Legal–Institutional Analysis	Hisbah principles protect investors in Islamic capital markets	Expands hisbah into **modern financial markets**
9.	Abu-Alhaj et al. (2026)	Hisbah & Islamic Banking	Maqasidic Qur'anic Study	Hisbah aligns governance, risk control, and ethical banking	Forms **core argument on maqasid-based governance**
10.	Mutmainnah et al. (2025)	Hisbah in Modern Business	Conceptual–Applied Study	Hisbah enhances sharia compliance in contemporary business	Links hisbah to **corporate governance and compliance**
11.	Andika et al. (2025)	OJK Regulation & Digital Banking	Regulatory–Empirical Analysis	Digital Islamic banking faces regulatory and operational challenges	Anchors **regulatory dimension** of the paper
12.	Hammi & Nurlaila (2025)	Sharia Accounting in Digital Era	Conceptual Review	Digitalization challenges sharia accounting integrity	Supports **institutional vulnerability argument**
13.	Safriatullah et al. (2025)	AI in Islamic Banking	Regulatory–Ethical Review	AI adoption raises ethical and governance risks	Strengthens **AI ethics and sharia compliance discussion**
14.	Iqbal et al. (2023)	AI-Driven Sharia Auditing	Empirical & Technological Study	AI enhances efficiency of sharia audit with ethical safeguards	Supports **technological opportunity narrative**
15.	AL-Sammarraie (2025)	AI & Big Data	Systematic Review	AI reshapes decision-making systems	Provides **technological framework** for AI discussion
16.	Djumadi (2023)	Blockchain & Sharia Governance	Comparative Study	Blockchain supports transparency but needs governance control	Grounds **blockchain governance analysis**

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

17.	Yasin & Billah (2024)	Blockchain & Maqasid al-Shariah	Normative–Technological Analysis	Blockchain aligns with maqasid if properly regulated	Reinforces **maqasid-based digital finance argument**
18.	Tapscott & Tapscott (2016)	Blockchain Revolution	Technological–Economic Analysis	Blockchain creates trustless yet transparent systems	Provides **global technological context**
19.	Parkins (2015)	Blockchain & Trust	Analytical Journalism	Blockchain ensures verifiable trust in transactions	Supports **trust-building narrative in digital economy**
20.	Arvianti et al. (2025)	E-Government & Public Complaints	Applied Governance Study	Digital systems enhance accountability	Parallels **hisbah with e-government supervision**
21.	Kominfo & Katadata (2023)	Digital Literacy Index	National Survey	Digital literacy gaps hinder governance effectiveness	Supports **critical limitation and policy implication**
22.	Rijalul Fikri (2025)	Islamic Law & Digital Crime	Legal Reconstruction	Islamic law must adapt to digital economic crimes	Strengthens **legal adaptation argument**
23.	Umam et al. (2020)	Cryptocurrency & Islamic Economics	Critical–Normative Study	Digital assets challenge Islamic economic principles	Supports **critical stance toward unregulated technology**
24.	Umam (2025)	Political–Economic Commentary	Critical Essay	Fiscal trust and governance legitimacy are crucial	Adds **normative–critical reflection**

1. Recontextualizing the Concept of Al-Hisbah in the Digital Environment

In Islamic economics, Al-Hisbah functions as a moral, social, and economic oversight instrument to maintain justice and market order. Traditionally, the muhtasib ensures economic activities comply with Sharia and ethical norms (Al-Mawardi, 1996). In today's digital economy, this supervisory function can be systematically elaborated through blockchain and AI, enabling automated, transparent, and accountable monitoring free from human bias (Rosbi & Abu-Bakar, 2023).

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

Historically, the muhtasib was an individual possessing intellectual capacity, Islamic knowledge, and moral integrity, appointed by or selected through consensus. In the modern era, this role can be assumed by algorithmic and data-driven supervisory systems capable of real-time monitoring. AI offers normative assessments across various economic cases, while blockchain provides transparent record-keeping and transactional filtering. Thus, the function of the muhtasib can be realized through an automated system that is not only efficient but also objective. Arvianti et al. (2025) highlight that Indonesia's Ombudsman has already entered the digital era since approximately 2016-2017 through e-government integration. This should be viewed as evidence that digital-based supervision is feasible within Islamic contexts as well.

2. Blockchain Technology as the Foundation of Digital Al-Hisbah

Blockchain's decentralized, transparent, and immutable characteristics align closely with Islamic principles of justice. Every economic transaction recorded on blockchain can be publicly verified and cannot be manipulated. In the context of Hisbah, this system can ensure that financial records transactional or philanthropic, such as zakat and waqf, operate according to Sharia rules.

Furthermore, in the context of smart contracts, Djumadi (2023) explains that blockchain enables automated Sharia filters in transactions. Smart contracts can be programmed to reject transactions containing “riba”, “gharar”, or “maysir”, and approve only lawful transactions. In this way, the blockchain system itself becomes an independent automated mechanism that determines transaction permissibility.

3. Integrating Blockchain and Artificial Intelligence for Moral Economic Supervision

Blockchain, together with artificial intelligence (AI), holds significant potential in expanding the functions of Al-Hisbah. These two technological platforms strengthen and enhance accountability within Islamic economics as a comprehensive economic system.

Blockchain, functioning as a digital gateway, can filter prohibited transactions according to predetermined programming parameters before they are further processed by AI. Meanwhile, AI is capable of enhancing supervisory capacity based on specific parameters provided by the “muhtasib” over time. AI can be utilized to analyze economic data, detect speculative and suspicious behavior, and issue early warnings regarding violations of business ethics.

Both systems operate as a layered strategy to prevent non-Sharia-compliant practices within the economic system. This enables the development of a proactive and adaptive supervisory mechanism that responds effectively to the dynamics of the digital economy. Building upon the discussions in the preceding sections, Digital Al-Hisbah is therefore not merely the digitalization of supervision but rather an epistemological transformation of Sharia oversight from manual monitoring to algorithmic supervision grounded in Islamic values (Nawaz & Karim, 2024).

4. Challenges in Implementing Digital Al-Hisbah

Despite its promise, the implementation of Digital Al-Hisbah faces several significant challenges. First, Sharia regulations and fatwa (religious rulings) must evolve to accommodate digital mechanisms. As previously noted, e-governance already provides initial legitimacy for digital economic oversight, but Sharia-based digital Hisbah requires deeper scholarly examination. A muhtasib must be dabit, faqih and have moral qualities. Conversely, moral judgment becomes problematic for machines due to their inherent lack of human subjectivity, which is a critical limitation. Technological literacy among Sharia financial institutions in Indonesia remains low. Reports from 2023 indicate Indonesia's digital literacy index stands at only 3.65, with a minimal increase of 0.16 points from 2022 to 2023 (Katadata, 2023). Thus, intensive training and socialization initiatives are necessary. ssues of data privacy and cybersecurity must be prioritized to prevent misuse of digital oversight systems. Many scholars, including Umam (2020), emphasize these risks. Low digital literacy in Indonesia is also compounded by persistent structural

JESYA
JURNAL EKONOMI & EKONOMI SYARIAH
Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

irregularities within national governance, where digitalization is often hindered to preserve labor-intensive systems despite inadequate workforce compatibility.

One of the primary challenges in implementing *Digital Al-Hisbah* lies in **aligning advanced digital technologies with Shariah ethical and jurisprudential principles**. Technologies such as blockchain and artificial intelligence (AI) are not value-neutral; they introduce issues of algorithmic opacity, automated decision-making, and uncertainty (*gharar*) that may conflict with Islamic legal requirements of transparency, accountability, and moral responsibility (Hammi & Nurlaila, 2025). While blockchain offers immutability and trustless verification, and AI enables predictive supervision, their integration into Shariah oversight systems requires careful normative calibration to ensure consistency with *maqasid al-Shariah* rather than mere technical efficiency.

A second major challenge concerns **regulatory governance and institutional readiness**, particularly in contexts where secular digital regulations and Shariah supervisory frameworks operate simultaneously. Empirical studies on Islamic digital finance in Indonesia reveal persistent gaps between financial regulators and Shariah authorities in addressing real-time compliance within rapidly evolving digital ecosystems (Andika et al., 2025). This challenge is compounded by limited technological literacy and the shortage of professionals who possess both advanced technological expertise and deep knowledge of Islamic jurisprudence, thereby constraining the effective operationalization of Digital Al-Hisbah systems (Hammi & Nurlaila, 2025).

Finally, the implementation of Digital Al-Hisbah raises **epistemological and ethical concerns regarding the delegation of moral supervision to automated systems**. While AI can enhance monitoring capacity and detect unethical economic behavior, Islamic legal theory emphasizes that moral judgment and accountability must ultimately rest with human agents, particularly the *muhtasib* (Safriatullah et al., 2025). Moreover, the complexity of digital economic behavior—including online fraud, deceptive marketing (*tadlis*), and algorithmic manipulation—demands adaptive supervisory mechanisms that extend beyond traditional enforcement models (Rijalul Fikri, 2025). These challenges underscore that Digital Al-Hisbah should be understood not as a replacement of human authority, but as a supportive system that strengthens ethical governance while preserving human responsibility as *khalifah fil ardh*.

CONCLUSION

The digital re-actualization of Al-Hisbah is an inevitable necessity for Islamic economics in an era of technological transformation. Through the integration of Hisbah principles with blockchain and AI, Sharia economic supervision can become more transparent, efficient, and accountable. However, the responsibility for Muslims to preserve the integrity of the modern economic system. Many scholarly references indicate that while digital mechanisms are feasible for implementation, final decisions in every supervisory action must remain in the hands of humansâ€"those who possess subjectivity and responsibility as “khalifah fil ardh” (stewards on earth).

DAFTAR PUSTAKA

Abu-Alhaj, T. A. A., Norasid, M. A., & Al-Siyabi, S. M. H. (2026). *Hisbah and Its Real-World Applications in Islamic Banks: A Contemporary Qur’anic Maqasidic Study*. Journal of

Andika, A. K., Nurnasrina, N., Fibriani, N. F. B. S., & Huda, N. (2025). *Implementasi Regulasi OJK dalam Transaksi Digital Perbankan Syariah di Indonesia: Tantangan dan Peluang*. **Jurnal Al-Hisbah**, 5(2). https://doi.org/10.57113/his.v5i2.432

Fanani, A., & Takayasa, T. I. (2022). *Hisbah in Public Moral and Marketplace Control: From Historical to Indonesian Contexts*. Hikmatuna: Journal for Integrative Islamic Studies, 8(1), 40–54.

Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

https://doi.org/10.28918/hikmatuna.v8i1.4666

Febrina, I., & Abdulah, B. (2024). *Hisbah in the* Cultural Analysis and Social Change, 11(1), 416–431. https://doi.org/10.64753/jcasc.v11i1.3879

AL-Sammarraie Ali HK. (2025). ***Artificial Intelligence in the Era of Educational Big data: A Systematic Review.*** CyberSystem Journal: Vol. 2 no. 1, pp. 33-52

Al-Mawardi. (1996). ***Al-Ahkam As-Sulthaniyyah***. Beirut: Dar al-Kutub al-Ilmiyyah.

Arvianti, et.al (2025). ***Penerapan E-Government Pada Pengaduan Masyarakat Berbasis Online Di Ombudsman Perwakilan Provinsi Jawa Timur***. PRAJA Observer: Vol. 5, No. 01

Djumadi D. (2023). ***Teknologi Blockchain dalam Perspektif Ekonomi/Keuangan*** *Context of Shariah Governance in Islamic Finance: A Comparison Between Indonesia and Malaysia*. Jurnal Ilmiah Manajemen Kesatuan, 12(6), 2457–2466. https://doi.org/10.37641/jimkes.v12i6.2957

Ibn Taymiyyah. (1999). ***Al-Hisbah fi al-Islam***. Riyadh: Dar al-Watan.

Iqbal, Z., Khan, M., & Aziz, R. (2023). ***AI-Driven Shariah Auditing in Islamic Finance.*** Journal of Islamic Finance, Vol 12, No. 2, Pp. 45–59.

Kementerian Komunikasi dan Informatika Republik Indonesia & Katadata Insight Center. (2023). ***Indeks Literasi Digital Indonesia 2023: Menjaga Ketahanan Digital di Tahun Pemilu***. Jakarta: Kementerian Komunikasi dan Informatika RI.

Hammi, M. A., & Nurlaila, N. (2025). Tantangan dan Implementasi Teori Akuntansi Syariah di Era Digitalisasi. Jurnal Penelitian Multidisiplin Terpadu, 9(1).

Muhaimin. (2025). ***Albania Ingin Ganti Para Menteri yang Korupsi dengan AI, Indonesia Berani Tiru?***. SindoNews: https://international.sindonews.com/read/1610647/41/ albania-ingin-ganti-para-menteri-yang- korupsi-dengan-ai-indonesia-berani-tiru-1756004913.

Mutmainnah, D., et al. (2025). *Exploring Hisbah as a supervisory mechanism for promoting Sharia compliance in modern business contexts*. Journal of Enterprise and Development (JED).

Oktaviandi, M. R., & Yogi, Y. (2024). *Economic Justice Through Al-Hisbah: Reviewing The Role And Performance Of Market Supervisory Institutions*. Al-Kharaj: Journal of Islamic Economic and Business, 6(1). https://doi.org/10.24256/kharaj.v6i1.5022

Parkins, D. (2015). ***Blockchains: The great chain of being sure about things***. The Economist Newspaper: https://www.economist.com/news/briefing/21677228-technology-behind-bitcoin-lets-people-who-do-not-know-or-trust-each-other-build-dependable.

Rahman, M., Alam, K., & Yusuf, H. (2022). ***Reconstructing Hisbah in the Age of Digital Governance***. Journal of Ethics and Information Technology, Vol. 24, No. 4, hal. 987–1002.

Rijalul Fikri, A. L. (2025). *Adaptation of Islamic Criminal Law in Facing Digital Economic Crime in the Era of Technological Disruption*. **Istinbath: Jurnal Hukum**, 21(2). https://doi.org/10.32332/istinbath.v21i02.9808

Safriatullah, S., Auliadi, R., Amrullah, A., Nurmalawati, N., & Jais, M. (2025). *Tantangan Implementasi AI di Perbankan Syariah: Perspektif Regulasi dan Etika*. **Jurnal Ilmiah Guru Madrasah**, 4(1), 40. https://doi.org/10.69548/jigm.v4i1.40

Sholikah, M., Huda, N., Rini, N., Fatwa, N., & Wiliasih, R. (2024). *Al Hisbah in Modern Era: Investor Protection Institution in Indonesian Islamic Capital Market*. Jurnal Ilmiah Ekonomi Islam, 10(2),

Jurnal Ekonomi & Ekonomi Syariah Vol 9 No 1, Januari 2026
E-ISSN : 2599-3410 | P-ISSN : 2614-3259
DOI : https://doi.org/10.36778/jesya.v9i1.2552

2316–2320. https://doi.org/10.29040/jiei.v10i2.13145

Sukmadinata, N.S. (2009). ***Metode Penelitian Pendidikan***. Bandung: PT Remaja Rosdakarya.

Tapscott, D., & Tapscott, A. (2016). ***Blockchain Revolution: How the technology behind Bitcoin is changing money, business, and the world***. Random House.

Umam, AK. (2025). ***Kalo Indonesia Bubar, Kamu Mau Bayar?.*** Ekispedia: https://ekispedia.id/kolumnis/politik/kalo-indonesia-bubar-kamu-mau-bayar/.

Umam, AK. (2021). ***Perkembangan Pembahasan Al-Hisbah dan Penerapannya dalam Sistem Ekonomi***. Surabaya: Universitas Airlangga

Umam, AK, et.al. (2020). ***Dinamika Cryptocurrency dan Misi Ekonomi Islam***. An-Nisbah, vol. 07, no. 02

Yasin, A. & Billah, A. (2024). *Blockchain-Based Digital Transaction Security System: Perspective of Imam al-Shāṭibi's Maqāṣid al-Sharīʿah Concept*. Al-Muamalat: Jurnal Ekonomi Syariah.