



Communicating Shariah and Regulatory Frames for AI-Powered Halal Auditing

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ABSTRACT

The integration of Artificial Intelligence (AI) is perceived as a communication agent in identifying Shariah and regulatory aspects of halal audit in Malaysia. AI offers transformative potential to enhance efficiency, accuracy, and transparency in the monitoring process. It strengthens the compliance and verification process of the halal audit. It is found that past research has overlooked Shariah and regulatory perspectives in halal auditing. Therefore, this study seeks to identify dominant frames used in the existing literature regarding Shariah compliance and regulatory requirements in AI-powered halal auditing systems. Guided by Compliance Theory, which categorises motivations into normative, coercive, and instrumental compliance, the research adopts a qualitative meta-analysis of ten articles published between 2022 and 2025. The findings reveal that instrumental compliance driven by strategic benefits such as operational efficiency, digital transformation, and cost reduction is the most prevalent frame, followed by coercive compliance, which is motivated by external and regulatory enforcement. Normative compliance, rooted in ethical and religious obligations, was least emphasised, highlighting a risk of underrepresenting Shariah-based motivations in AI adoption. The results suggest that while AI can serve as a strategic enabler for halal auditing, over-reliance on instrumental and coercive approaches may undermine the deeper Shariah and Islamic ethical principles. The study highlights the importance of developing balanced communication strategies that integrate AI adoption with regulatory requirements and Shariah principles, ensuring the integrity of AI-powered halal audits throughout the entire halal ecosystem.

Keywords: *Halal, Audit, Artificial Intelligence (AI), Shariah, Regulatory, Compliance Theory*

INTRODUCTION

Artificial intelligence (AI) has emerged as a transformative technology capable of impacting numerous aspects of our lives, with the halal industry being one of the sectors that has notably profited from this technology (Iswanto, 2024). AI has been integrated across multiple sectors within the halal industry, including food and beverages, tourism, finance, supply chain, and certification. AI technologies such as machine learning, computer vision, and Natural Language Processing (NLP) are used in the food sector to verify halal status, improve quality control, and monitor compliance throughout the food supply chain (Nawaz et al., 2025). AI-powered assistants support the development of Muslim-friendly tourism by facilitating access to halal services, delivering personalised recommendations, and addressing religious concerns (Hoang & Nguyen, 2025).

AI has the capacity to serve as a catalyst in empowering the halal certification and monitoring systems. This technology can enhance efficiency and reduce reliance on manual audits by allowing the process of verifying the ingredients and products to be carried out automatically (Tobing et al., 2024). Moreover, AI plays a significant role in the halal certification process by facilitating automated decision-making, enhancing data analysis, and improving the efficiency of information processing, thereby enabling more accurate assessments of halal compliance (Ridho, 2025). Therefore, the adoption of AI in halal auditing presents a promising opportunity to enhance compliance and verification processes through the development of AI-powered halal audit systems designed to streamline audit procedures.

Despite its potential, the adoption of AI in halal auditing faces significant challenges. The reliance on manual processes, disparate data sources, and a lack of thorough auditing in traditional systems hinders the ability to ensure ongoing compliance in a certified supply chain (Androulaki et al., 2018). The halal certification process is often time-consuming due to several challenges, including inadequate experience and knowledge among halal auditors, limitations in technological infrastructure, delays in preparing audit checklists and reports, as well as inefficient documentation practices and poorly organized filing systems. These factors collectively hinder the effectiveness of monitoring activities and impede compliance with halal standards (Aziz & Hussin, 2024).

The adoption of AI in halal audit may also give rise to new challenges from both Shariah and regulatory perspectives. Issues such as algorithmic bias, data privacy, transparency, and unethical decision-making are crucial not to be overlooked, as they are essential for ensuring compliance with Islamic principles (Ismail et al., 2024). A lack of transparency and explainability in AI model outputs can undermine the credibility and acceptance of AI-powered audits among Shariah scholars and other stakeholders

(Zhang et al., 2022). Additionally, the lack of robust legal guidelines hinders the government's ability to effectively monitor and enforce the ethical use of AI. This underscores the need for collaborative efforts to develop regulatory frameworks and ethical AI algorithms that align with halal standards, thereby ensuring that technology functions as a catalyst for ethical growth and upholding integrity within the industry (Rahman et al., 2024).

The communiqué emphasizes the need to integrate AI within the ethical framework of Islamic finance to enhance transparency, ethical integrity, and operational sustainability (John, 2024). These principles are equally relevant to halal auditing, where compliance with Shariah requirements is of paramount importance. The use of AI technologies has the potential to enhance the development of Islamic financial products in Islamic banking, particularly in areas such as risk management, decision-making, and fraud detection. It illustrates how AI can enhance accountability and accuracy within Shariah-compliant systems (John, 2024). In the context of internal halal auditing, AI can be strategically adopted to strengthen compliance monitoring processes, identify non-conformances throughout the halal supply chain, and facilitate the auditing process. This alignment ensures that while operational efficiency and technological advancement are pursued, the core Islamic principles, such as trust (*amanah*), justice (*'adl*), and public benefit (*al-maslahah*), remain intact (Budiman et al., 2024).

While numerous studies have highlighted the technological capabilities of AI in enhancing auditing systems, there is a lack of research focusing on how Shariah principles and regulatory frameworks are communicated and operationalized within AI-powered halal audit systems. Most existing studies are either case-based or focused on specific technological applications (Azwar & Usman, 2025). The integration of AI within the Shariah and regulatory framework of halal auditing systems remains under-theorized and insufficiently documented. This raises concerns about how Shariah and regulatory compliance are communicated and framed in scholarly and institutional narratives.

Therefore, this study aims to address this gap by examining how Shariah and regulatory frameworks can be effectively communicated and integrated into AI-powered halal audit systems. Guided by compliance theory, the study emphasizes the importance of structured compliance mechanisms in driving adherence to Shariah principles and legal requirements. The main objective is therefore to identify the dominant frames used in the existing literature regarding Shariah compliance and regulatory requirements in AI-powered halal auditing systems.

LITERATURE REVIEW

The Role of Artificial Intelligence (AI) in Halal Auditing

The integration of artificial intelligence (AI) into halal auditing systems represents a significant development in the halal certification procedure. AI enhances the efficiency of the halal certification process by automating quality monitoring, detecting non-Halal ingredients, accelerating verification, and ensuring compliance with halal standards across all production stages (Ridho, 2025). According to a study by Aitkazinov (2023), the emerging technology supports auditors in three key areas, namely streamlining audit work processes and workflows, handling recurring judgments based on available data, and addressing inconsistencies in judgments among auditors that may lead to disagreements or varied conclusions. AI is very effective at handling tasks that involve making conclusions based on clear and objective evidence. These tasks are usually low-risk, repetitive, and require minimal human intervention and expert judgment. However, for more complex tasks that require professional judgment, AI does not replace the auditor. Instead, it serves as a smart assistance to enhance an auditor's professional judgment by providing relevant data and supporting the auditor's decision-making process (Aitkazinov, 2023).

Numerous studies have pointed to how the use of AI tools can enhance the auditing process by improving prediction and detecting anomalies (Aitkazinov, 2023; Fedyk et al., 2022; Johnny & Peace, 2024). Machine learning models are used to analyze extensive datasets, detect anomalies, and predict potential issues, while Natural Language Processing (NLP) tools enable the analysis of unstructured data, including contracts and financial statements (Johnny & Peace, 2024). These tools can be utilized in the halal auditing process, where AI can ensure the production and operational procedures comply with halal standards by detecting, monitoring, and managing possible errors that may arise in the product (Tobing et al., 2024).

Shariah Principles in Halal Auditing

The fundamental objective of Shariah auditing is to uphold the principles of *Maqasid As-Shariah* (the higher objectives of Islamic law) and ensure adherence to Shariah principles across all business operations. It extends beyond traditional assurance and verification of financial statements, internal controls, and corporate governance (Yazkhiruni et al., 2018). In the context of halal auditing, Shariah principles serve as the foundation for distinguishing between what is halal (permissible) and haram (prohibited) in Islam. Islam has reinstated every matter to its rightful place by upholding equality and justice and carefully distinguishing between what is permissible and what is prohibited (Al-Qaradhawi, 2015).

Herindar (2022) highlights that adherence to the teachings of the Quran, particularly in the consumption of halal food, is a fundamental duty for every Muslim, reflecting the fundamental concepts of halal and haram that form the foundation of Islamic law. Muslims should be very particular in selecting food that aligns with the concept of *Halalan Thayyiban*, which is not only to eat what is lawful based on the *Qur'an* and *Hadith*, but also to eat what is wholesome, or *thayyib* (Salamon, 2021). Muslims are very conscious of their consumption choices to ensure the product is halal and in accordance with Islamic principles (Harith et al., 2022). According to Al-Ghazali (1973), the main purpose of Shariah is to safeguard the welfare of humanity by preservation of the five fundamentals: preservation of *deen* (religion), preservation of *nafs* (life), preservation of *'aql* (intellect), preservation of *nasl* (lineage), and preservation of *mal* (property). Maqasid al-Shariah strengthens governance in the halal industry by emphasizing public benefit (*maslahah*), product safety, and social well-being. This increases consumer confidence and aligns production with Islamic ethical values (Hilme et al., 2024).

The principles of auditing are closely aligned with the objectives of Maqasid Shariah. The auditor's principles related to ethical conduct, such as trust, integrity, confidentiality, and discretion, play a crucial role in ensuring the credibility and effectiveness of the halal auditing process (Jais, 2022). In Islam, the audit function signifies the auditor's accountability not only to stakeholders but ultimately to Allah SWT. This reflects the Islamic belief in *Muraqabah*, which is the constant awareness that all actions are observed by Allah SWT. Islam emphasizes that every individual is accountable to Allah SWT in all aspects of life and that Allah is fully aware of and takes account of everything (Kasim et al., 2015).

Regulatory Requirements in Halal Auditing

Malaysia occupies a unique position in the rapidly growing global halal market, being one of the few countries where a government agency is officially mandated to regulate halal products, premises, and operational procedures (Fischer, 2016). The Trade Descriptions Act (TDA) 2011 grants jurisdiction to the Department of Islamic Development Malaysia (JAKIM) and the State Islamic Religious Councils (JAIN) as the competent authorities responsible for issuing and regulating halal certification in Malaysia (Jalaluddin et al., 2024). Malaysian state holds the authority to impose legal sanctions on companies that fail to comply with established halal standards, unlike many countries that rely on non-state halal certifying bodies (Fischer, 2016).

Malaysia has established halal standards and a manual in addition to existing regulations, such as the Malaysian Halal Certification Procedure Manual (MPPHM) 2020 and the Malaysian Halal Management System (MHMS) 2020, as well as the Malaysian

Standard. These standards outline stringent requirements for halal certification, covering sourcing, processing, and auditing procedures, which are enforced through comprehensive documentation, inspections, and laboratory testing (Ahmad et al., 2018; Fischer, 2016). The procedures in halal certification are carried out in line with halal and tayyib principles, encompassing Shariah compliance, hygiene, cleanliness, quality, safety, security, and control (Mustaffa et al., 2017).

Accurate and complete documentation is critical for halal audits, including ingredient lists, supplier certificates, production records, and audit checklists. Incomplete or poorly managed documentation can delay audits and compromise compliance (Aziz & Hussin, 2024). Policies and procedures are among the factors that can influence the effective management of halal food. Companies must establish regulations related to halal practices, such as prohibiting the sale of unlawful food and beverages on their premises. Failure to implement such rules and regulations may jeopardize the company's halal status (Ahmad et al., 2017). Halal certification is granted only when a company meets the fundamental principles. JAKIM holds the authority to revoke it if the company fails to comply with the regulations (Bakar et al., 2023).

Communicating Compliance through AI in Halal Auditing

Technological advancements such as AI are transforming how compliance is communicated and interpreted in halal auditing by enhancing integrity, transparency, and efficiency throughout the supply chain (Ismail et al., 2024). As the halal market grows and supply chains become more complex, effective communication strategies to stakeholders and consumers become essential to promote ethical practices in the halal supply chain (Abdussalam & Auladi, 2024). It is crucial to establish effective mechanisms for seamless communication in promoting transparency within the halal ecosystem. This can be facilitated through regular updates, compliance reports, and informative materials that emphasise the ongoing halal assurance efforts and operational practices (Ismail et al., 2024).

The ability of AI-driven communication systems or tools, such as dashboards and automated reporting, can keep the stakeholders informed in real-time. This fosters engagement and allows for quick responses to potential issues and compliance status (Ismail et al., 2024; Ridho, 2025). AI systems integrated with blockchain technology enable accurate auditing, traceability of disruptions or attacks within the supply chain, and effective tracking of ingredient provenance. Blockchain functions as a secure and transparent ledger for recording data on food products, including ingredients, sourcing, processing, storage, manufacturers, and certification (Sunmola et al., 2025). Moreover, the combination of AI and blockchain facilitates real-time tracking and verification of halal compliance throughout the supply chain. Through automated checks,

knowledge graphs, machine learning, and smart contracts, they can detect non-compliance, validate ingredient authenticity, and generate records (Nawaz et al., 2025; Ridho, 2025; Sunmola et al., 2025).

The secure and transparent ledger system enabled by AI and blockchain provides an optimal platform for tracking product provenance across the halal supply chain, reinforcing consumer trust through verifiable information on ingredient origins and production processes (Sunmola et al., 2025). Clear and transparent communication is the key to promoting ethical practices and religious values within the halal supply chain. Usmonov (2025) underscores the ethical concerns surrounding AI adoption, such as moral accountability, where human-centred qualities are essential for decision-making, while AI just functions as a supportive tool. Therefore, the utilization of AI as a communication tool must be guided by ethical considerations, thereby organizations can engage stakeholders, address concerns, and strengthen the credibility of halal auditing. This commitment helps maintain consumer confidence and supports ethical and responsible operations in the halal market (Ismail et al., 2024).

Compliance Theory

Compliance theory is employed to identify the dominant frames present in the existing literature on Shariah compliance and regulatory requirements in AI-powered halal auditing. Compliance with regulations and organizations is motivated by three kinds of factors: instrumental motivation, normative motivation, and coercive motivation (French et al., 1959; Tyler, 2006).

Tyler (2006) contrasts the two main perspectives of legal compliance: instrumental and normative compliance. Most deterrence literature views compliance from the instrumental perspective, where people obey the law out of self-interest, for personal gains and losses. Instrumental compliance believes that people shape their behaviour in response to shifts in tangible, immediate incentives and penalties imposed by the laws. For instance, policymakers rely on instrumental logic when enforcing the law as an effective tool to reduce the rate of crime. On the other hand, normative compliance is thought to be more influenced by sustained obedience than by fear of punishment. From the normative perspective, people respond to the law voluntarily and out of personal morality. They believe it is ethically correct and acknowledge the legitimacy of legal authorities.

Coercive compliance controls lower-level individuals using fear and force (Lunenborg, 2012). According to French & Raven (1959), coercive power originates when an individual believes that he will be punished by another person if he fails to respond to the influence attempt. Negative feelings or undesirable consequences will appear in parts of an individual's life that relate to the threatened punishment. The degree of coercive

power depends on the severity of the punishments, the likelihood of punishment if it fails to conform, and the likelihood that can be avoiding punishment by conforming.

With reference to the above literature, this study found that compliance is facilitated by the communication medium, which, in this case, is the use of AI. According to media framing, there are situations where decision-makers respond differently to issues that are identical from a normative analytical perspective, but are presented, conveyed, or framed differently (Keren, 2012). According to Scheufele (1999), media and audiences actively contribute to the construction of social reality through interpretive frames. Framing theory adopts a social constructivist approach, acknowledging the dynamic interaction between media discourse and individual cognition, in contrast to previous viewpoints that saw media effects as direct or linear.

RESEARCH METHODOLOGY

This study employs a qualitative approach using a meta-analysis method. The article aims to identify the dominant frames used in the existing literature regarding the AI-powered Halal auditing systems. It enables the researcher to synthesize findings from multiple past studies, guided by Compliance Theory, which helps explain the motivation behind adherence to Shariah principles and halal regulatory requirements. This theoretical lens is used to categorize and interpret how coercive, normative, and instrumental elements are framed in the selected literature.

Specifically, searches were conducted using key terms such as "Halal," "audit," "Artificial Intelligence (AI)," "shariah," "regulatory," and "compliance" via online databases including Google Scholar, ResearchGate, ScienceDirect, and Scopus. The search was limited to English-language articles published between 2022 and 2025. Articles were screened based on their relevance to the discussion from the perspectives of Shariah and regulatory compliance in the context of AI-powered halal audit systems. Table 1 shows a total of 10 articles selected for in-depth review. Each reviewed articles were coded systematically (e.g., MA 1, MA 2, MA 3 ..., MA 10) to facilitate the analysis process.

Table 1: Description of Selected Articles

Article	Author(s) & Year	Title	Keywords	Methodology
MA 1	Johnny & Peace (2024)	The Role of AI in Regulatory Compliance and Financial Auditing	Artificial Intelligence; Regulatory Compliance; Financial Auditing; Machine Learning; Fraud Detection; Automation	Qualitative approach/extensive literature review, industry reports, case studies, and semi-structured interviews

MA 2	Leocádio et al., (2024)	Artificial Intelligence in Auditing: A Conceptual Framework for Auditing Practices	Artificial Intelligence; Auditing; Conceptual Framework; Real-Time Monitoring	Qualitative approach involving systematic literature review (SLR)
MA 3	Shalhoob (2025)	The role of AI in enhancing Shariah compliance: Efficiency and transparency in Islamic finance	Artificial Intelligence; Sharia Compliance; Islamic Finance; Islamic Financial Institutions; Accounting Practices	Quantitative approach using survey-based research with statistical analysis
MA 4	Aitkazinov (2023)	The Role of Artificial Intelligence in Auditing: Opportunities and Challenges	Audit; Artificial Intelligence	Qualitative approach through a comprehensive literature review, incorporating academic research, industry studies, and real-world case examples
MA 5	Shalhoob & Babiker (2025)	Exploration of AI in Ensuring Sharia Compliance in IF Institutions: Focus on Accounting Practices	Artificial Intelligence; Sharia Compliance; Islamic Finance; Islamic Financial Institutions; Accounting Practices	Qualitative approach based on secondary data collection from peer-reviewed journal articles, industry reports, regulatory guidelines, and relevant case studies
MA 6	Zafar & Ali (2025)	Shariah Governance Standard on Generative AI for Islamic Financial Institutions	Shariah Governance; Generative AI; Islamic Finance; Ethical AI; Risk Management	Qualitative approach involving conceptual and integrative methodology
MA 7	Sunmola et al. (2025)	Holistic Framework for Blockchain-Based Halal Compliance in Supply Chains Enabled by Artificial Intelligence	Halal Certification; Artificial Intelligence; Blockchain; Knowledge Graph; Machine Learning; Supply Chain	Mixed-method approach combining a literature review and an illustrative case study
MA 8	Khadim et al. (2024)	Integrating Artificial Intelligence into Shariah Islamic Banking Recommendations for The Development of Islamic Banking	Shariah Commission; Shariah Compliance; Robot Consulting	Qualitative approach involving literature-based research
MA 9	AlFzari et al. (2024)	Shariah Compliance in Fintech App Solutions: An Islamic Legal Perspective	Shariah Compliance; Fintech; Islamic Finance; Riba; Gharar; Ethical Investments; Blockchain; Artificial Intelligence	Qualitative approach involving content analysis of legal and regulatory documents, supplemented by expert perspectives
MA 10	Fedyk et al. (2022)	Is artificial intelligence improving the audit process?	Artificial Intelligence; Technology Adoption;	Mixed-methods approach involving semi-structured

FINDINGS AND DISCUSSION

This study has identified the dominant frames used in existing literature regarding Shariah compliance and regulatory standards in AI-powered halal auditing systems. The results reveal that the existing literature presents diverse and overlapping narratives, shaped by three main compliance frames: coercive, normative, and instrumental.

Instrumental Compliance

With reference to compliance frames across ten articles, Table 2 indicates that all three compliance types were present across the literature, with overlapping emphasis in particular articles. Figure 1 illustrates that the instrumental compliance is the most prevalent frame (44.1%). It suggests that most communication or behaviour analyzed is driven by strategic reasoning or benefits-based decision-making. This frame positions AI's role as a tool for advantage and strategic enabler. It offers organizations advantages through enhanced operational efficiency, creates revenues, reduces costs, and increases capacity (Fedyk et al., 2022). This interaction is mediated by AI, which connects strategy inputs with service results. AI increases the effectiveness of customer service by enhancing tailored content and strategic communication. The findings demonstrated AI's disruptive potential in business communications and operations by demonstrating how it fully mediates strategic communication and personalized media content into enhanced service efficiency (Binlibdah, 2024). In other words, the AI becomes the agent that communicates the compliance to the halal auditor in a more guided and prompt manner.

A higher number of reviewed articles emphasized instrumental compliance in MA 5, MA 6, MA 9, and MA 10 articles. According to Fedyk et al. (2022), audit firms use AI to increase efficiency and quality. Investments in AI result in lower audit fees (-0.9%), fewer audit restatements (-5%), and fewer accounting staff (-3.6% after three years and -7.1% after four years) (as reported in MA 10). This study highlights the strategic and useful role of AI. Compliance is primarily approached to optimize efficiency, reduce operational costs, and mitigate risks, rather than from an ethical, religious, or enforcement perspective.

In MA 5, Shalhoob & Babiker (2025) show that the implementation of AI in Islamic Financial Institutions can facilitate the internal audit process, improve risk management, and reduce compliance expenses by leveraging AI tools such as automated compliance monitoring, predictive analytics, and natural language processing (NLP). Similarly, MA 6 highlights how AI helps to boost customer satisfaction, streamline audit

operation processes, and fortify compliance systems (Zafar & Ali, 2025). It is an example of how AI can be used to optimize resource allocation and streamline compliance workflows. In other words, by automating repetitive tasks, AI frees up compliance professionals to concentrate on strategy.

Additionally, MA 9 demonstrates the strongest instrumental orientation with a recorded score of 4 in this frame. AlFazari et al. (2024) assert that Islamic finance has long promoted profit-and-loss sharing arrangements, in which both the financier and the entrepreneur jointly bear the risks and share the rewards of a business venture. Therefore, the creation of digital platforms is necessary to enable transparent and equitable risk-sharing, while safeguarding the rights and interests of both parties in accordance with Shariah law (AlFzari et al., 2024). The AI's functional capacity to manage risk efficiently. However, this framework carries the potential risk of overlooking the deeper elements of regulatory and Shariah perspectives on compliance. Hence, it may lead to a superficial or minimal adherence to Islamic and regulatory standards.

Table 2: Distribution of Frames according to Compliance Theory (n = 10)

Articles	Normative Compliance	Coercive Compliance	Instrumental Compliance
MA 1	2	2	2
MA 2	2	2	2
MA 3	1	1	2
MA 4	1	1	1
MA 5	3	3	3
MA 6	3	3	3
MA 7	1	1	2
MA 8	4	2	2
MA 9	1	4	4
MA 10	1	2	3
Total	19	21	24

Coercive Compliance

Subsequently, coercive compliance is the second most common frame (35.6%), indicating a significant reliance on enforcement mechanisms or the perception of consequences in ensuring compliance. Several studies (MA 5, MA 6, and MA 9) revealed that coercive compliance appears more frequently across the 10 reviewed literatures. It demonstrates how the coercive compliance frame is based on external pressures resulting from regulatory demands, external mandates, certification requirements, and the fear of penalties or non-compliance. It presents AI as a mechanism to support regulatory enforcement. However, this approach may lack emphasis on the religious element, as genuine halal assurance ultimately requires a foundation rooted in Islamic ethics and spiritual commitment.

For example, as reported in MA 5, an AI system must be transparent, explainable, and accountable to meet regulatory and Shariah compliance. The study emphasizes collaboration between Islamic scholars, regulators, and AI experts to develop an AI governance model that not only fulfils the technical requirements but also aligns with regulatory and Islamic ethics. Explainable AI techniques, such as decision-tree-based machine learning, must be executed to increase stakeholder trust and optimize algorithm transparency. Regulatory monitoring will become challenging with the absence of Explainable AI solutions in AI systems (Shalhoob & Babiker, 2025).

Correspondingly, MA 6 stresses the role of the Shariah Supervisory Board and an AI Governance Committee in ensuring ethical and jurisprudential alignment. For instance, murābahah contracts and sukuk documentation for AI-generated financial products must obtain SSB approval before being released onto the market. A systematic Shariah review procedure must be employed to examine any ambiguity in AI outputs to ensure adherence with regulatory standards (Zafar & Ali, 2025).

AlFzari et al. (2024) also state in MA 9, the significance of aligning Fintech applications with Islamic legal principles in AI and digital services. Shariah law compliance and ethical guidelines must be incorporated while advancing industrial innovation. This perspective reflects coercive compliance by focusing on how Shariah compliance and regulatory requirements must be adhered to when enhancing technological solutions. The values mentioned, such as transparency, explainability, accountability, and Shariah compliance, can be directly adapted in halal auditing as they are equally essential for ensuring compliance with halal audit regulatory requirements.

Normative Compliance

Normative compliance is the least represented (28.8%), pointing to a lesser but still notable influence of ethical or value-based motivations. Normative compliance emphasizes a strong focus on moral and value-based elements, Shariah principles, and the importance of religious legitimacy in AI integration. AI is seen as a moral instrument to uphold the Shariah principles, such as fairness, transparency, and ethical practices (Zafar & Ali, 2025). These values are reinforced in MA 5, MA 6, and MA 8.

MA 5 underscores the fundamental moral principles that act as guidance in developing AI solutions. Financial documents and contracts can be analyzed using natural language processing (NLP) to identify occurrences of non-compliance with Shariah principles, such as the existence of Gharar (excessive uncertainty) or Riba (usury). This system flags potentially forbidden elements in real time, ensuring compliance with Islamic beliefs (Shalhoob & Babiker, 2025). Islamic values, including justice, transparency, and accountability, outlined in Shariah principles, must not be compromised to uphold the objective of Shariah (*Maqasid al-Shariah*) in integrating AI, whether in financial or

halal auditing. Shariah principles should be the foundation and reference point to prevent the misuse and irresponsible reliance on technology.

As indicated in MA 6, AI development should be grounded in the Qur'an, Sunnah, and Maqasid al-Shariah to prevent unethical and exploitative behaviours. The principle of sadd al-dharā'i' (blocking means to harm) serves as one of the guidelines to curb the use of AI technology that could lead to prohibited practices (Zafar & Ali, 2025). This Shariah foundation applies not only to Islamic finance but also to the halal auditing process in safeguarding halal integrity.

It is also highlighted in MA 8 that when adopting AI, it cannot be limited and focused only on performance or efficiency. Shariah compliance and Islamic values must be incorporated as core elements to serve as technological innovation and a moral tool. It ensures AI adoption not only meets technical performance and efficiency but also embodies moral and religious values (Khadim et al., 2024).

Communication of compliance in AI-powered halal auditing significantly shapes stakeholder perceptions of legitimacy, trust, and confidence in the Halal Assurance System (HAS). Transparent and effective communication, whether through AI-driven systems, institutional reports, or media, enhances stakeholder engagement and builds consumer trust by making compliance processes more visible and understandable (Ismail et al., 2024). When AI and blockchain technologies are used to automate compliance checks and provide verifiable information about product origin, they foster greater transparency and traceability, which in turn strengthens trust and confidence among consumers, auditors, and regulators (Nawaz et al., 2025; Sunmola et al., 2025).

The way compliance is framed in communication also matters. It emphasizes the efficiency and innovation (instrumental compliance), which highlights technological advancement. Whilst coercive compliance focuses on enforcement and certification, which reinforces regulatory credibility (Ismail et al., 2024; Sunmola et al., 2025). Normative compliance, which conveys moral and spiritual alignment, is crucial for reinforcing the ethical and faith-based dimensions of halal assurance.

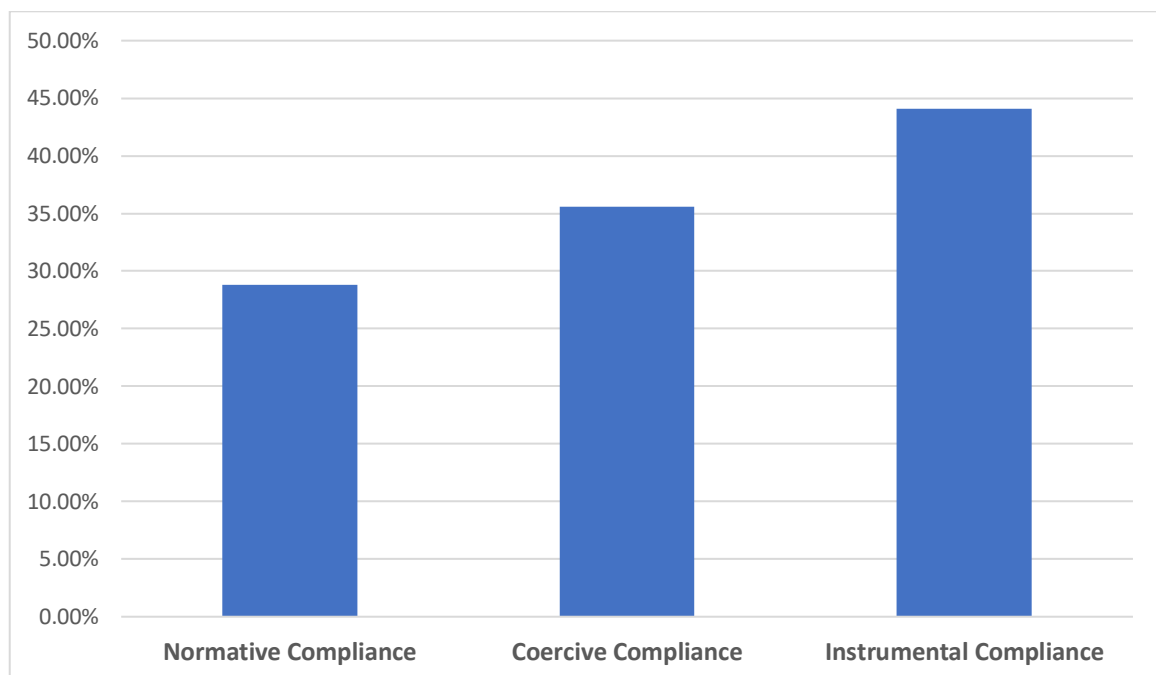


Figure 1: Distribution of Frames According to Compliance Theory (n=10)

CONCLUSION AND IMPLICATIONS

In conclusion, instrumental compliance emerges as the most dominant compliance frame, suggesting that both scholarly and institutional narratives frequently portray the use of AI as driven by strategic objectives and interests aimed at gaining benefits. This is followed by coercive compliance, where adherence is motivated by the need to comply with regulations or external pressures. Lastly, the normative compliance, where AI adoption is guided by the belief that it is ethically or religiously the right thing to do.

These findings highlight the complex interaction of compliance motivations in the context of AI-powered Halal auditing. Most articles represent a combination of frames rather than a single perspective, implying that regulatory, Shariah, and operational concerns are deeply interconnected in the current scholarly debate. However, the instrumental compliance is seen as a priority in the adoption of AI in halal audit for operational efficiency. It may undermine the focus on regulatory and Shariah compliance frames. The dominance may raise concerns as AI is used for leverage in terms of strategic terms.

AI adoption should also be guided by a commitment to Islamic principles and regulatory requirements. This study enriches the theoretical understanding of how compliance incentives are framed in the context of AI-powered halal audits by applying compliance theory through the lens of coercive, normative, and instrumental compliance

frames. In addition to that, Shariah and regulatory compliance frames are communicated and interpreted in AI-powered halal auditing systems through the lens of Compliance Theory. The meta-analysis of ten articles revealed that instrumental compliance is the most dominant frame, reflecting a strategic reason where AI adoption is driven primarily by efficiency, operational cost reduction, and its advantages. The second most prevalent frame, which is coercive compliance, underscores the significance of external enforcement mechanisms. A less frequently represented frame, which is normative compliance, highlights the ethical and religious motivations rooted in Shariah principles.

The integration of AI in halal audit necessitates technological preparedness and strategic communication to ensure transparency, trust, and compliance with Shariah and regulatory requirements. Effective policy communication and media framing are significant in influencing stakeholder perceptions, public awareness, and strengthening the legitimacy of AI-powered halal audit. Policymakers and media practitioners should adopt framing strategies that stress accountability, ethical values, and the complementarity of AI and human oversight in halal audit. This study, therefore, suggests that the study of AI integrated in halal audit should be further investigated in accordance with the media communication strategies among the halal industry and the public. AI-powered systems have the potential to be trained for the halal audit requirements and provide just-in-time decision-making, especially for stakeholders within the halal industry.

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