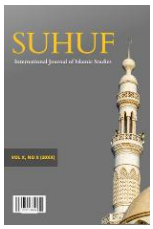
SUHUF

Vol. 38, No. 1, 2026

International Journal of Islamic Studies

journal homepage: https://journals2.ums.ac.id/index.php/suhuf/index



From Isnad to Algorithm: A Hybridization Model of Nahdlatul Ulama and Muhammadiyah's Communication Strategies for Institutionalizing AI Ethics in Gen-Z Da'wah

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https://doi.org/10.23917/suhuf.v38i1.16282

ARTICLE INFO

ARTICLE HISTORY
Received Month 02, 2026
Revised Month 03, 2026
Accepted Month 05, 2026

KEYWORDS
AI ethics in Da'wah
Nahdlatul ulama
Muhammadiyah
Gen-Z religious authority
Hybridization model

ABSTRACT

Background: The proliferation of AI-driven platforms in Islamic Da'wah raises urgent questions about algorithmic bias, synthetic content risks, and the erosion of traditional religious authority among Gen-Z audiences. **Objective**: This study analyzes how Nahdlatul Ulama (NU) and Muhammadiyah, Indonesia's two largest Islamic organizations, formulate communication strategies to institutionalize AI ethics while preserving Da'wah authenticity for Gen-Z in 2026. **Methodology**: A qualitative, systematic-comparative library research design was employed. Data were synthesized from official organizational documents (2018-2026), including the 2023 NU National Congress resolutions and the 2025 Muhammadiyah *Risalah* Islam Berkemajuan, and analyzed using the Miles, Huberman, and Saldana model of data condensation, display, and conclusion drawing. **Results**: The study identifies a hybridization model in which NU reconstructs authority through a person-centric "Digital *Isnad*" anchored in scholarly chain-of-transmission verification, while Muhammadiyah implements a system-centric "Digital Orchestration" governed by "Information *Fiqh*." Both organizations deploy Sufism-informed spiritual filters against digital dehumanization. **Conclusion**: AI ethics institutionalization in both organizations represents a strategic transition from tool adoption toward digital sovereignty, integrating classical tradition with algorithmic governance. **Implications**: The proposed "2026 Strategic Cycle" offers a replicable blueprint for religious organizations worldwide seeking to embed moderate Islamic values into AI governance frameworks.

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1. Introduction

The integration of Artificial Intelligence (AI) into the religious sphere is a crucial phenomenon that demands serious attention, given its impact on Gen-Z's theological understanding and spiritual

practices in 2026. This urgency is increasingly pressing given the emergence of synthetic content risks through Da'wah deepfakes and algorithmic personalization that can obscure the authenticity of religious authority figures. The significance of this study lies in the need to ensure that technological advancements remain grounded in human dignity and divine values, considering that AI is now entering the realms of jurisprudence and automated Islamic legal interpretation, which require profound risk considerations [1], [2], [3].

Without robust ethical institutionalization by organizations such as Nahdlatul Ulama and Muhammadiyah, the use of AI in Da'wah risks creating algorithmic biases that could reduce the richness of spiritual traditions into mere statistical data [4], [5], [6]. Therefore, strengthening morality through Sufism-based education is required as a primary filter against digital dehumanization [7]. This approach aligns with efforts to maintain a spiritual work ethic in the face of contemporary disruption, ensuring that technology does not uproot the inner spiritual depth of believers [8], [9]. Recent scholarship on AI and Sufism confirms that while AI can mimic religious knowledge textually, it remains fundamentally incapable of grasping the experiential dimensions of spiritual practice [10].

Exploration into the hybridization of tradition and technology is vital because it touches upon fundamental aspects of religious authority, which are now challenged by the presence of digital entities. Digital transformation through AI platforms compels religious institutions to reformulate their Da'wah narratives and authority models to remain relevant to younger generations without losing cultural context [11], [12], [13]. By conducting this research, communication strategies that unite algorithmic innovation with the authenticity of Islamic teachings can be formulated, enabling AI to serve as a means of expanding the values of moderation and justice [14], [15], [16].

Studies on AI from an Islamic perspective indicate a response centred on the principle of social welfare *maṣlaḥah* and the protection of fundamental human values [1], [6], [9]. Researchers highlight that applying AI to understand Islamic law poses significant ethical challenges, particularly regarding bias in training data and the ambiguity of moral responsibility when systems commit reasoning errors [2], [4], [5]. Integrating *Maqasid* Sharia values is a crucial step in aligning algorithms with the protection of faith, intellect, and lineage [4], [5], [6]. A recent integrative framework proposes bridging *Maqasid* Sharia with international AI governance standards to regulate AI applications in Muslim-majority digital economies [17].

In digital communication, AI has shifted the dynamics of religious authority, where platforms like IslamGPT or organizational Da'wah portals have become primary references for Gen-Z [12], [13], [18]. Research suggests that while AI increases accessibility to sacred texts, it poses a risk of homogenizing interpretations, which could marginalize Indonesia's diverse theological traditions [6], [13], [18]. Consequently, traditional Islamic communication ethics, such as *ṣidq* (truthfulness) and *amānah* (trustworthiness), must be reinterpreted in the context of algorithmic transparency and data accountability [12], [13], [14]. Empirical research on algorithmic religious authority in Indonesian social media corroborates that visibility and virality increasingly supersede traditional credentials as markers of legitimacy [19].

The contemporary Islamic media industry operates in an environment requiring a balance between religious idealism and macro-technological realities [20], [21], [22]. Internal and external factors, including AI developments, influence media management policies in maintaining content integrity as a tool for social transformation [15], [20]. A solid Da'wah media framework requires the integration of ownership values and proselytization goals so that media products do not merely become commercial commodities in cyberspace [15], [20], [22].

While AI ethics and Da'wah media have been widely discussed, there remains a lack of qualitative research comparing how Nahdlatul Ulama and Muhammadiyah practically institutionalize AI ethics within their Gen-Z communication strategies. Previous studies have been limited by fragmented theoretical focuses that fail to address the hybridization between the tradition

of *Isnad* chain of narration and algorithmic authority [12], [18], [20]. A recent comparative study on NU and Muhammadiyah's AI adoption documents how both organizations have developed distinct digital tools, yet it does not analyze the underlying communication strategies or ethical frameworks guiding this adoption [23]. The practical problem to be solved is the risk of eroding the authenticity of Da'wah due to automated content that experts do not verify. This research aims to fill this gap by exploring the hybridization strategies of both organizations in institutionalizing accountable AI ethics [13], [14], [20]. Additionally, it engages with the growing literature on AI-generated content fabrication and its ethical implications for religious communication [24].

This study aims to analyze the communication strategies of Nahdlatul Ulama and Muhammadiyah in responding to the ethical challenges of AI to maintain the authenticity of Da'wah among Gen-Z. Furthermore, the study intends to formulate a hybridization model between traditional values and modern technology as a standard for institutionalizing AI ethics in Islamic media.

2. Method

This research employs a qualitative approach, using a systematic, comparative library research method. This design was selected to explore in-depth how Indonesia's two largest Islamic organizations, Nahdlatul Ulama and Muhammadiyah, formulate AI ethics through official documents, scholarly thoughts, and their digital policies.

2.1 Data Sources and Selection Criteria

To ensure transparency and minimize bias, literature selection was conducted rigorously based on the following criteria:

Databases: Searches were performed via Google Scholar, Scopus, and the official portals muhammadiyah.or.id and nu.or.id.

Keywords: "Islamic AI Ethics," "Gen-Z Da'wah," "Muhammadiyah Digitalization," "Cyber NU," and "Hybridization of Religious Authority."

Inclusion Criteria: Journal articles focusing on "AI Ethics and Authority in Islam" and the "Dynamics of Nahdlatul Ulama and Muhammadiyah" published between 2022 and 2025. Journal articles related to supporting themes, including *Tasawuf* Sufism, Law, Da'wah, and Communication, published between 2008 and 2026. Official *fatwa* documents or organizational decrees issued by Nahdlatul Ulama and Muhammadiyah within the 2023–2025 period.

Exclusion Criteria: Sources that are not accessible in full-text, abstract-only access. Duplicate sources or identical references. Sources that do not align with the specific research objectives or are irrelevant to the study.

2.2 Data Analysis Procedure

This study applies the data analysis model by [25], consisting of three simultaneous activity flows:

Data Condensation: Summarizing and focusing data from organizational policy manuscripts and related literature. Open coding was performed to identify key themes such as "algorithmic accountability" and "digital *Isnad*."

Data Display: Data are grouped thematically to compare strategies between Nahdlatul Ulama and Muhammadiyah. This section also includes content analysis of sample Da'wah posts on YouTube/Instagram from both organizations as practical validation of the identified theories.

Conclusion Drawing: Verification is conducted through peer debriefing to ensure the reliability of data interpretation before final results are formulated.

2.3. Epistemological Framework and Validity

The research is grounded in a social constructivist epistemological stance, which views AI ethics not merely as a technical matter but as a construction of values pursued by religious institutions. Although this study does not utilize primary interviews, findings are validated through source triangulation comparing internal organizational documents with third-party expert analysis to ensure the research claims have a robust foundation.

The structured workflow of this qualitative study is visually depicted in Fig. 1 below.

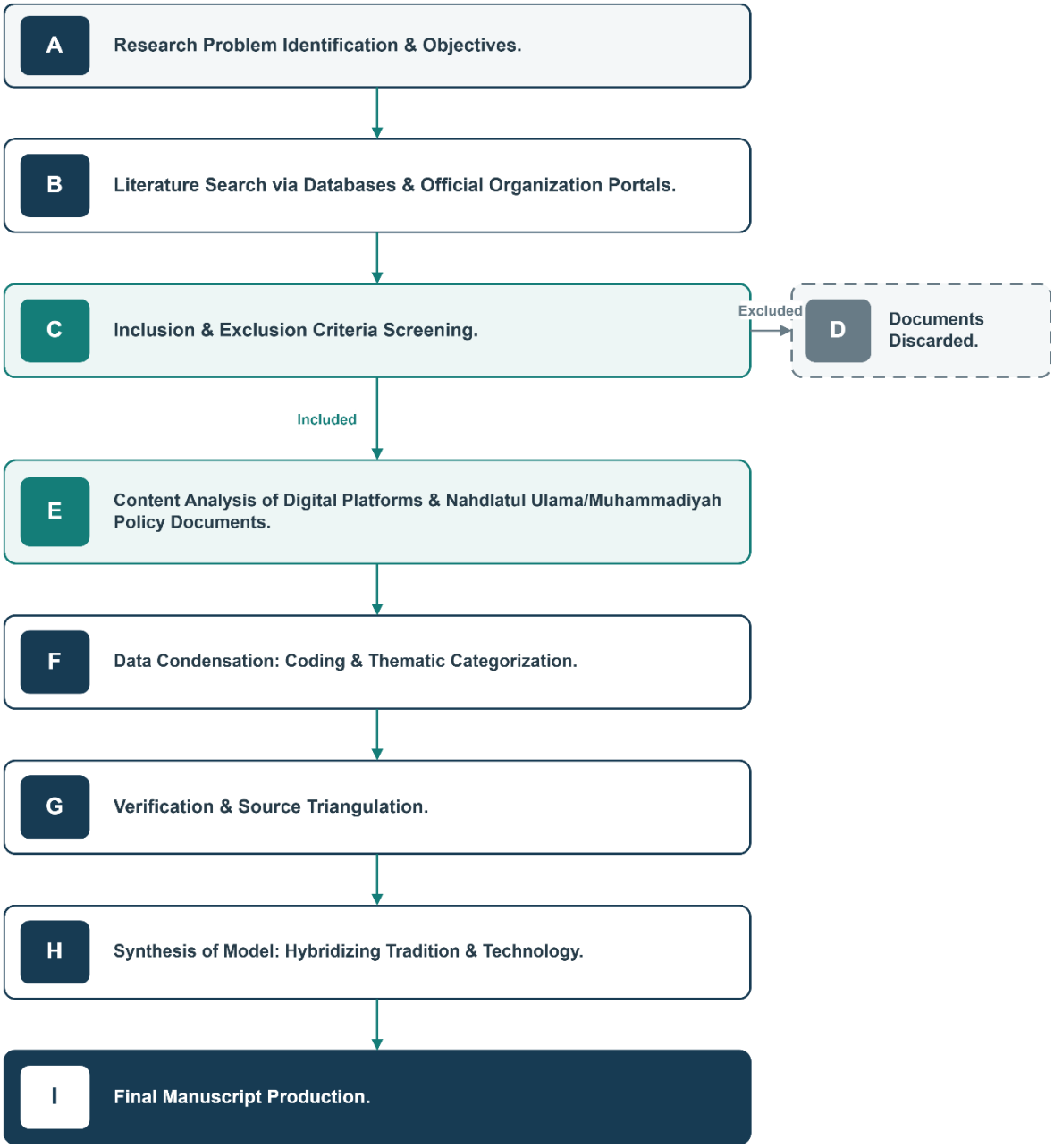

Fig. 1. Research Flowchart

3. Results and Discussion

3.1 The Dialectics of *Isnad* and Information *Fiqh*: Reconstructing Religious Authority Amidst the Threat of Digital Dehumanization

Komisi Bahtsul Masail Waqiiyah *Munas Alim Ulama* Nahdlatul Ulama 2023 emphasized that AI may be used to ask questions about religion, but it should not be the primary guideline for practice. First, the accuracy of AI is not guaranteed, even with knowledge that may surpass that of humans. Second, AI is plagued by hallucinatory answers. Third, this AI is still produced by non-Muslims, which can introduce bias into the answers presented [26].

Majelis Tabligh Pimpinan Daerah Muhammadiyah PDM of Semarang City emphasized that AI is an "*Akal Imitasi* (Imitative Intelligence)" and emphasized that its sophistication could become slander if not guided by "Information *Fiqh*". First, Information *Fiqh* is rooted in Quranic values, such as the command to *tabayyun* clarification in Surah Al-Hujurat, verse 6, which instructs Muslims to verify the truth of information before believing it. Second, Information *Fiqh* is our compass for walking correctly, maintaining a balance between openness and privacy, and preventing violations such as *tajasus*, finding faults in others, and *ghibah* (gossip) [27].

Both Nahdlatul Ulama and Muhammadiyah perceive Artificial Intelligence AI as a supporting tool or instrument rather than a replacement for absolute authority within the contexts of Da'wah proselytization and religious life. Both organizations acknowledge the serious threats posed by AI, such as data bias, information hallucinations, and the potential for digital *fitna* such as deepfakes. They emphasize the critical importance of ethical filters to ensure AI usage contributes to the public good *maslahah* and preserves Islamic values. In short, Nahdlatul Ulama seeks to humanize technology through the concept of *Isnad* chain of transmission, while Muhammadiyah constructs systemic institutional safeguards. This dual response resonates with broader global patterns documented in comparative studies on religious organizations' engagement with AI governance [17]. The epistemological differences, perceived risks, and legal positions of both organizations are summarized Table 1.

Table 1. Epistemology of *Isnad* vs System in the Reconstruction of Religious Authority

Dimensions of Analysis	Nahdlatul Ulama Perspective Traditional-Transformative	Muhammadiyah Perspective Modernist-Reformist
Foundation of Authority	Person-Centric *Isnad*: Emphasizes the "human *Isnad*" to validate AI outputs that risk being "incoherent" or containing data hallucinations [13].	System-Centric Procedure: Emphasizes the "Information *Fiqh*" as an ethical guideline to direct "Imitative Intelligence" toward the public interest [14].
Technological Risks	Originality of Teachings: Threats to the authenticity of teachings due to data bias and the deconstruction of religious authority figures [13], [16].	Digital *Fitna*: The potential for digital slander and "deepfake Da'wah" if AI operates without transparency [14].
Legal Status of AI	Informal Supporting Tool: AI is viewed as a secondary informal aid that must remain rooted in the originality of Islamic values and the figure of the *Kiai* [16].	Instrument of Modernization: AI is an instrument for modernizing Da'wah that requires accountable ethical institutionalization to ensure justice [13], [14].

Source: Processed by the author based on official institutional documents and related literature.

3.2 AI Strategy Comparison: Nahdlatul Ulama Task Force vs Muhammadiyah Digital Orchestration

The communication strategies of Nahdlatul Ulama and Muhammadiyah in adopting AI demonstrate a complementary dichotomy between structural ethical oversight and systemic efficiency. Nahdlatul Ulama focuses its hybridization on the establishment of an AI Task Force to ensure that technology remains human-centered, a crucial step in mitigating algorithmic biases that

could erode the richness of spiritual traditions [4]. Conversely, Muhammadiyah implements Digital Orchestration, aiming to synchronize all organizational information assets. This strategy emphasizes the protection of content integrity and social transformation, ensuring that members are not merely passive consumers but actors capable of navigating technology with wisdom and independence [18], [20], [28], [29]. This strategic contrast mirrors the organizations' historical positioning: NU's traditionalist-transformative orientation versus Muhammadiyah's modernist-reformist identity, as documented in recent comparative institutional analyses [30], [31].

The comparative details of the strategic dimensions, primary instruments, and objectives for the younger generation across these two approaches are presented in Table 2.

Table 2. Comparison of Nahdlatul Ulama AI Task Force and Muhammadiyah Digital Orchestration Strategies

Strategy Dimensions	Nahdlatul Ulama Task Force	Muhammadiyah Digital Orchestration
Main Instrument	AI Task Force & Ulama Oversight	Digital Da'wah Orchestration
Primary Focus	Human-Centered AI Ethics & Literacy	Information Literacy & Technological Independence
Practical Action 2025	Government-Pengurus Besar Nahdlatul Ulama Collaboration Structural. Collaboration with the Coordinating Ministry for Human Development and Culture, Menko PMK, in digital religious learning.	Synchronization of Organizational Movements Systemic. Integration of digital Da'wah portals under a unified orchestration system.
Objectives for Gen-Z	Protecting the authenticity of religious authority from deepfake risks.	Transforming Gen-Z from consumers into wise technology managers.

Source: Processed by the author.

3.3 Analytical Critique of AI Challenges: Risks of Mental Self-Diagnosis and the Crisis of Intellectual Authority

The integration of Artificial Intelligence (AI) into digital religious practices triggers a significant tension between technological efficiency and the integrity of traditional authority. This transformation also reflects the growing role of AI in Islamic education systems, where it offers both opportunities and challenges in shaping learning evaluation and religious understanding among students [32]. A crucial obstacle is the emergence of AI-driven risks of mental self-diagnosis. Nahdlatul Ulama has issued a stern warning regarding the tendency of Gen Z to engage in "self-treatment" via AI without professional consultation, which potentially exacerbates mental health conditions [33]. Analytically, this phenomenon reflects the failure of algorithms to capture the complete human dimension. As argued by [1], technology must remain anchored in human dignity to prevent spirituality from being reduced to mere statistical data.

Furthermore, Muhammadiyah highlights the peril of a "crisis of intellectual authority" caused by AI dominance, which threatens to erode the ummah's critical thinking skills [34]. The organization warns that over-reliance on AI-generated religious content cultivates passive consumption rather than active intellectual engagement with Islamic sources. This concern aligns with empirical findings on AI content fabrication in religious contexts, where deepfake technology has been deployed to generate synthetic endorsements from purported Islamic scholars, eroding trust in legitimate

religious communication channels [24]. Without a robust ethical framework, the automation of religious jurisprudence risks producing homogenized interpretations that ignore the richness of tradition [2]. Therefore, the implementation of AI must align with the principle of *maṣlaḥah*, public interest, to protect fundamental human values [9].

The mapping of these critical challenges, including their specific explanations and the resulting risks to both mental health and religious intellectualism, is systematically presented in Table 3.

Table 3. Mapping the Challenges of AI Hegemony on Mental Health and Intellectual Authority

Critical Dimension	Explanation of Challenges	Primary Emerging Risks
Mental Health	Mental Self-Diagnosis: The tendency of Gen Z to utilize AI as a substitute for professional practitioners.	Exacerbating mental health conditions due to unaccountable medical-spiritual recommendations.
Intellectual Authority	Crisis of Authority: A shift in reference from religious scholars, *ulama*, to algorithms, eroding the *Isnad* tradition.	The loss of depth in religious understanding and the erosion of critical thinking skills constitute epistemological crises.
Technological Dominance	AI Hegemony: The dominance of automated systems in determining truth standards for religious information.	Homogenization of religious interpretation that marginalizes theological diversity and local traditions.

Source: Processed by the author.

3.4. AI Institutionalization Recommendations: A Comparison of Nahdlatul Ulama's Database and Muhammadiyah's *Risalah Islam Berkemajuan*

The institutionalization of AI within religious organizations in 2026 must transition from mere tool adoption toward digital sovereignty. First, Nahdlatul Ulama needs to accelerate the development of an AI infrastructure rooted in the *Kitab Kuning* corpus of classical Islamic texts and the *Bahtsul Masail* fatwas. This is crucial for maintaining a "digital *Isnad*" to ensure that Gen-Z receives authoritative references while remaining shielded from global algorithmic biases [35].

Second, Muhammadiyah, through the "*Risalah Islam Berkemajuan*" Message of Progressive Islam, provides a moral compass for technological governance. By emphasizing rationality and public interest *maṣlaḥah*, Muhammadiyah plays a pivotal role in ensuring that AI implementation does not diminish human dignity. The synergy between tradition-based data strength, Nahdlatul Ulama, and a progressive ethical framework, Muhammadiyah, will foster an Indonesian Islamic AI model that is moderate, accountable, and dialogical toward global developments [36].

The comparative aspects of AI institutionalization strategies between Nahdlatul Ulama and Muhammadiyah, ranging from policy foundations to their respective strategic roles, are summarized in Table 4.

Table 4. Comparison of AI Institutionalization Strategies: Nahdlatul Ulama vs Muhammadiyah

Comparative Aspect	Nahdlatul Ulama	Muhammadiyah
Policy Foundation	*Munas Alim Ulama* Nahdlatul Ulama 2023	*Risalah* Islam Berkemajuan 2025

Primary Focus	Data Sovereignty: Developing AI based on internal Nahdlatul Ulama databases.	Ethical Framework: Ensuring technological innovation aligns with public welfare maṣlaḥah.
Authority Objective	Adherence to the Ahlussunah wal Jamaah an-Nahdliyah school of thought to avoid external biases.	Emphasizing ijtihad, rationality, social justice, and moral responsibility.
AI Characteristics	Specific & Protective: Safeguarding the purity of *Isnad* chains of transmission and scholarly traditions.	Global & Dialogical: Serving as a pioneer for Islamic yet international AI ethics.
Strategic Role	Populating algorithms with authoritative content, *kitab kuning*/fatwas.	Serving as a moral compass and a pioneer for reformist movements in technology.

Source: Processed by the author.

3.5. Synthesis of Recommendations for AI Institutionalization: Nahdlatul Ulama and Muhammadiyah 2026

The primary focus of AI institutionalization in 2026 must be directed toward building an independent and inclusive data infrastructure. For Nahdlatul Ulama, this entails developing AI with an authoritative internal database to maintain informational autonomy and prevent narrative distortion [37]. Meanwhile, Muhammadiyah focuses on an ethical framework that ensures technological innovation serves the public interest, grounded in progressive Islam that transcends national boundaries [38]. These two focal points,data sovereignty and inclusive ethics,are essential for a balanced AI ecosystem.

The objective of authority in AI development recommends a bridge between classical scholarly traditions and modern reasoning. Nahdlatul Ulama aims to ensure that every AI output remains connected to a clear chain of narrative *Isnad* through the digitalization of the Yellow Books *Kitab Kuning*, which includes mitigating student resistance during the acceleration of the learning process [39]. On the other hand, Muhammadiyah views AI authority as a tool for rational *ijtihad*, enabling the technology to address moral and social crises with a progressive, intellectual theological foundation [40]. This synergy creates an AI authority that is textually robust and contextually adaptive.

The characteristics of the AI developed by both organizations must possess a unique identity: technologically advanced yet spiritually grounded. AI within the context of Indonesian Islam must not be purely mechanistic; it must integrate spiritual values and religious ethics, such as Sufism *Tasawuf*, to avoid the crisis of modern science that neglects divine values [41]. This characteristic is enriched by Muhammadiyah's acceptance of neo-Sufism elements aligned with Sharia and modernity, creating an artificial intelligence model that is not only functionally intelligent but also carries values of purification [42]. This aspiration for "Spiritually Intelligent AI" engages with emerging discourse on the ontological limits of AI in comprehending experiential dimensions of spiritual practice [10].

The strategic role of AI institutionalization is to position Nahdlatul Ulama and Muhammadiyah as pioneers in formulating global AI ethics based on moderate Islam. Muhammadiyah plays a role in formulating international ethical standards, while Nahdlatul Ulama maintains the integrity of missionary Da'wah content. Through a moderation model integrated into AI systems, both organizations can transform Da'wah in a way that protects against digital radicalism [43]. This effort includes continuous dialogue between religious scholars, *ulama*, regulators, and industry

stakeholders to reconcile digital innovation with Sharia compliance that protects consumers [44], [45], [46].

The synthesis of recommendations for AI institutionalization between Nahdlatul Ulama and Muhammadiyah in 2026 is summarized in Table 5.

Table 5. Matrix of Synthesis Recommendations for AI Institutionalization: Nahdlatul Ulama and Muhammadiyah 2026

Aspect	Nahdlatul Ulama	Muhammadiyah	Synthesis Synergy
Primary Focus	Authoritative data sovereignty & internal database.	Inclusive ethical framework & progressive Islam.	Independent and ethical data infrastructure.
Authority Objective	Maintaining *Isnad* through digitalization of *Kitab Kuning.*	A rational *ijtihad* tool for solving social crises.	Bridging classical tradition with modern reasoning.
AI Characteristics	Integration of *Tasawuf* & spiritual values.	Neo-Sufism is aligned with Sharia & modernity.	Functionally and spiritually intelligent AI.
Strategic Role	Maintaining content integrity & radicalism protection.	Formulation of international AI ethical standards.	Pioneer of global AI ethics based on moderate Islam.

Source: Author's synthesis based on literature review.

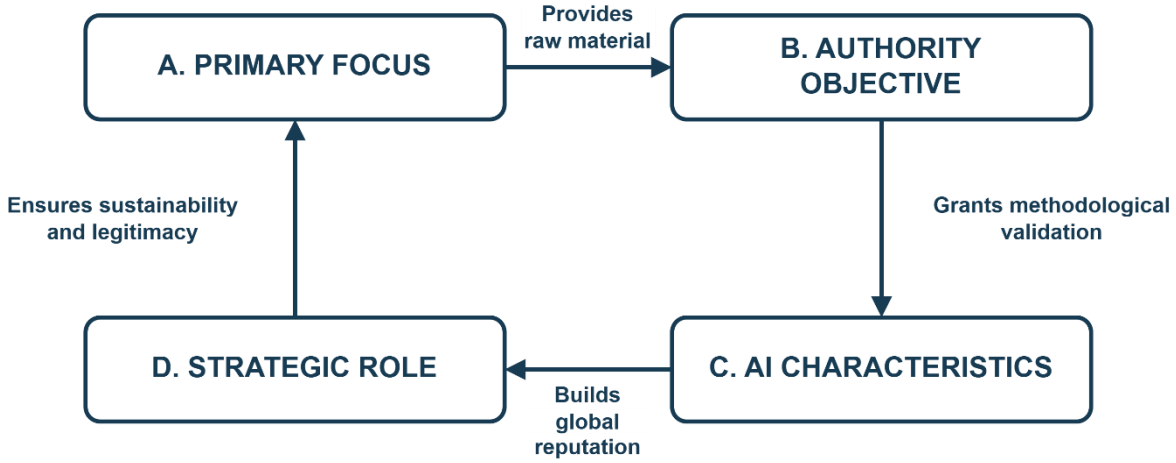

Fig. 2. Strategic Cycle of AI Institutionalization 2026

Brief Explanation of the Diagram Flow:

Relationship A to B Provision of Raw Material: The Primary Focus on independent data infrastructure provides the authoritative "raw material" of information. Without data sovereignty A, the Authority Objective of bridging classical tradition B cannot be realized due to the absence of accurately digitized classical texts *kitab kuning* or ijtihad results.

Relationship B to C Methodological Validation: The Authority Objective, acting as a bridge between classical and modern reasoning, provides the "validation" for the technology. Spiritually-infused AI characteristics C can only emerge if the system is constructed upon a rigorous methodology B that integrates *Isnad* scholarly chains of transmission with Ijtihad modern intellectual analysis.

Relationship C to D Reputation Building: AI that is both functionally and spiritually intelligent. C serves as the "tangible output" offered to the world. This unique AI identity allows Nahdlatul Ulama and Muhammadiyah to fulfil their Strategic Role D as pioneers of global AI ethics, offering an alternative to secular or purely materialistic technological standards.

Relationship D to A Guarantee of Sustainability & Legitimacy: The Strategic Role at a global level D provides a feedback loop of political legitimacy and legal security for the Primary Focus A. As moderate Islamic ethics become a global benchmark, the independent data infrastructures of Nahdlatul Ulama and Muhammadiyah are better protected from global tech monopolies, ensuring the ecosystem remains relevant and sustainable.

3.6. Comparative Analysis with Previous Studies

This research provides a novel contribution to the landscape of Islamic digital ethics by offering a hybridization model between traditional authority and technological innovation in 2026. Significant differences exist between the findings of this study and those of the previous literature, both in analytical depth and in practical approach.

Earlier studies by Raquib et al. and Elmahjub tended to focus on general philosophical frameworks for aligning AI with the principles of *Maqasid* Sharia [6], [9]. In contrast, this study finds that by 2026, organizations such as Nahdlatul Ulama and Muhammadiyah have moved far beyond philosophical discourse toward practical institutionalization. This is evidenced by the establishment of the AI Task Force by Nahdlatul Ulama and the Digital Orchestration system by Muhammadiyah as formal organizational policies. This difference occurs due to time context and urgency. During the 2022-2023 period, AI threats were still largely speculative. However, this research captures the reality of 2026, where the risks of “Da’wah Deepfakes” and “information hallucinations” have become an actual crisis demanding immediate institutional action rather than mere ethical theory.

Research by Niam and Munibi et al. identified tensions between AI, such as IslamGPT, and clerical authority, in which technology was often viewed as a threat to the human role [13], [18]. However, This study extends that analysis by demonstrating that NU and Muhammadiyah do not merely resist AI but actively seek to co-opt it through hybridization strategies that transform AI from a potential competitor into an instrument of organizational authority [32], [44]. This finding aligns with recent comparative analyses of NU and Muhammadiyah's responses to other technological disruptions, such as cryptocurrency, where both organizations similarly balanced doctrinal caution with pragmatic engagement [31].

Most global studies on AI ethics, including Ahmed et al. place heavy emphasis on universal technical aspects such as transparency and privacy [1]. This study finds a distinctive result: in the Indonesian Islamic context, AI ethics is inseparable from organizational identity, theological tradition, and the politics of religious authority. The moderate Islam values (wasatiyyah) championed by both NU and Muhammadiyah provide a culturally specific ethical layer that supplements rather than replaces universal technical standards [37], [38], [43]. Digital strategies for promoting religious moderation through social media further underscore the centrality of organizational identity in shaping technology adoption patterns [30]. The comparison between this study and previous research is summarized in Table 6.

Table 6. Comparison of This Study with Previous Research

Comparative Variable	Previous Research	This Study 2026	Points of Difference & Causes

Primary Focus	[6], [9]: Theoretical ethics and general Sharia compliance.	Formal policy institutionalization and hybrid communication strategies.	Research Focus: Macro-organizational policies, Nahdlatul Ulama/Muhammadiyah vs individual philosophical discourse.
Authority Solution	[13], [18]: Concern that algorithms will erode the role of Ulama/Kiai.	Hybridization: Digitalization of *Isnad* as a validation for AI algorithms.	Method: A cross-organizational comparative analysis yields a more applicable synergy model.
Ethical Dimensions	[1], [5]: Technical regulation, legal, and global governance.	Integration of spiritual values, Sufism, and local data sovereignty.	Epistemology: Emphasizing "Spiritually Intelligent AI" unique to the Indonesian context.
Subject/Audience	[12]: General users of digital media.	Specific to Generation Z Gen-Z within organizational ecosystems.	Context: Addressing the crisis of self-diagnosis of mental & religious issues among the digital native generation.

Source: Author's synthesis.

4. Conclusion

This study concludes that the institutionalization of AI ethics within Nahdlatul Ulama and Muhammadiyah in 2026 represents a strategic transition from mere tool adoption toward digital sovereignty. Through the "*Isnad*-System Hybridization Model," this research demonstrates that religious authority is not eroding, rather, it is being reconstructed. Nahdlatul Ulama strengthens authority through "Digital *Isnad*" and the digitalization of Kitab Kuning, while Muhammadiyah provides a moral compass through "Information *Fiqh*" and the *Risalah* Islam Berkemajuan. This synergy creates an Indonesian Islamic AI model that is functionally intelligent and spiritually grounded, specifically designed to mitigate the risks of "Da'wah Deepfakes" and mental self-diagnosis among Gen-Z.

Theoretically, this research offers a new framework for "Spiritually Intelligent AI," integrating Sufism and Neo-Sufism as ethical filters, a dimension often absent in global technical-centric AI ethics literature. This framework engages with emerging scholarly discourse on the ontological boundaries between artificial computation and authentic spiritual experience. Practically, the "2026 Strategic Cycle" proposed here serves as a blueprint for religious institutions to navigate the crisis of intellectual authority. However, the implementation of these models remains contingent upon the organizations' ability to overcome internal resistance and accelerate digital literacy at the grassroots level.

The author acknowledges significant methodological limitations regarding the lack of robust primary empirical data. As a systematic library research grounded in social constructivism, the findings primarily reflect institutional policy discourses and strategic frameworks up to 2026. Consequently, the claims regarding the practical effectiveness of these hybridization models remain conceptual and require further quantitative verification to assess their actual impact on Gen-Z religious behavior.

To address these gaps, future studies should: (a) measure how Gen-Z audiences interact with and trust "*Isnad*-based" AI compared with public generative AI systems; (b) critically assess the infrastructure costs and technical feasibility of building independent, authoritative databases within religious organizations; (c) investigate the role of gender, geographic, and socioeconomic differences

in the reception of AI-mediated Da'wah; and (d) examine the effectiveness of Sufism-informed ethical filters in reducing demonstrable harms such as misinformation adoption and self-diagnosis behaviors among digitally native Muslim youth.

Author Contribution: The first author contributed to the original draft of the article, while the second author revised and improved the content. All authors have read and approved the final manuscript.

Acknowledgment: Not related.

Conflicts of Interest: The authors declare no conflict of interest.

Declaration on the Use of Generative AI: Generative AI tools were utilized exclusively to improve linguistic clarity and formatting. All generated material was thoroughly reviewed and validated by the authors, who assume full responsibility for the final version.

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