The Transformation of Digital Dawah in the Artificial Intelligence Era: A Literature Review on Content Personalization and the Dynamics of Religious Authority

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Abstract

The rapid integration of Artificial Intelligence (AI) and algorithmic systems into digital communications has fundamentally reshaped the landscape of Islamic proselytizing (dawah). This study explores the paradigm shift from traditional, pulpit-based sermonizing led by established ulama (religious scholars) to algorithmically driven online channels populated by decentralized and often unverified propagators. Utilizing a qualitative descriptive approach combined with a systematic literature review, this paper examines how AI-powered content personalization alters religious consumption and transforms the structure of Islamic religious authority. The analysis reveals two major dynamics: first, AI algorithms prioritize user engagement, click-through rates, and personalized feeds, which effectively democratize religious discourse while simultaneously fragmenting sacred knowledge. Second, this shift creates significant friction concerning authentic Islamic knowledge ('ilm) and authoritative expertise, as algorithmic relevance frequently replaces scholarly credibility and traditional chains of transmission (isnad). Consequently, digital dawah operates within a tension between expanded accessibility and the risks of theological dilution, echo chambers, and the proliferation of unvetted religious interpretations. The study concludes by proposing an analytical framework to understand how traditional religious institutions can navigate and ethically engage with algorithmic spaces to preserve scholarly integrity in the AI era.

Keywords: digital dawah, artificial intelligence, content personalization, religious authority, algorithmic islam, literature review

Introduction

The Fourth Industrial Revolution has profoundly reshaped religious expression across global Muslim communities. Digital dawah—the active call to Islam via digital mediums—has transitioned from static Web 1.0 text repositories and Web 2.0 social networking platforms to intelligent, machine-mediated environments powered by Artificial Intelligence (AI), deep learning, and predictive analytics. Religious guidance is no longer restricted to traditional spatial domains such as mosques, pesantren (Islamic boarding schools), or face-to-face study circles (majlis taklim). Instead, contemporary believers access religious knowledge through algorithmically curated social media feeds, automated chat interfaces, and personalized AI search engines.

While the democratization of digital media enabled diverse Muslim voices to participate in public discourse (Bunt, 2018; Campbell, 2020), the AI era introduces an unprecedented dynamic: algorithmic mediation. Machine learning models construct hyper-personalized

informational environments based on user interaction metrics, behavioral histories, and psychological profiling. This tailored delivery optimizes spiritual engagement; however, it introduces critical theological, epistemological, and sociological concerns. The algorithmic amplification of sensationalized content, the emergence of AI-generated religious rulings (*cyber-fatwas*), and the erosion of traditional chains of transmission (*isnad*) pose fundamental challenges to normative Islamic knowledge production (Nur Hasanah & Kristiyah, 2023). Isnad represents the unbroken chain of scholarly authorities transmitting Hadith or religious jurisprudence, serving as an essential mechanism for verifying epistemological integrity and spiritual accountability in classical Islam.

Existing literature on digital religion has extensively documented online religious identity, digital fatwa portals, and the rise of "celebrity preachers" on platforms like YouTube and Instagram (Eickelman & Anderson, 2003; Slama, 2018; Hew, 2018; Hasan, 2019). Studies in Islamic educational settings have also demonstrated the growing role of technology in facilitating religious learning and character development. Hidayat examined how Qur'anic Education Centre teachers integrate educational technologies into children's character education through instructional media, digital applications, and interactive learning activities. Their findings highlight the importance of educators in guiding technology-mediated religious learning (Hidayat & Fatmawati Nur Khasanah, 2025). However, the role of algorithmic systems in determining the visibility, personalization, and authority of religious content remains a distinct issue that requires further investigation.

However, a significant gap remains regarding how Artificial Intelligence, specifically machine learning algorithms, recommendation systems, and Large Language Models (LLMs), redefines the structural dynamics of religious authority and the ethical boundaries of *dawah*. Most studies evaluate digital platforms as passive transmission tools rather than examining algorithms as active socio-technical actors in religious governance.

This study aims to examine the transformation of digital dawah in the era of Artificial Intelligence by focusing on the relationship between algorithmic content personalization and the changing dynamics of Islamic religious authority. Specifically, it seeks to evaluate the technical mechanisms through which AI-driven algorithms personalize and distribute religious content, as well as their socio-religious implications for contemporary Muslim communities. It also analyzes how the growing mediation of AI contributes to the fragmentation, reconfiguration, and negotiation of religious authority (sultah diniyyah), particularly in relation to scholarly credibility, the authenticity of Islamic knowledge, and traditional chains of knowledge transmission (isnad). Furthermore, this study seeks to formulate an ethical framework for integrating AI into Islamic propagation by drawing on classical Islamic jurisprudence, Islamic ethical principles, and contemporary digital governance considerations.

Methods

Research Design

This study utilizes a qualitative Systematic Literature Review (SLR) design following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. SLR allows for an integrative, transparent, and structured mapping of scholarly developments surrounding AI, digital dawah, content personalization, and religious authority.

Data Collection Technique(s)

Academic literature was retrieved from international indexed databases including Scopus, Web of Science, IEEE Xplore, and Google Scholar for publications appearing between 2018 and 2026. The search string employed combined Boolean operators: ("digital dawah" OR "Islamic propagation") AND ("artificial intelligence" OR "algorithm" OR "content personalization") AND ("religious authority" OR "ulama"). Inclusion criteria were restricted to peer-reviewed journal articles, scholarly book chapters, and indexed conference proceedings written in English or Indonesian focusing directly on AI applications within Islamic contexts.

Data Analysis Technique

Data analysis was conducted using thematic analysis across three primary stages: open coding, category grouping, and thematic synthesis. A total of 32 primary studies were selected, categorized, and synthesized into core theoretical themes: algorithmic hyper-personalization, filter bubbles/echo chambers, the fragmentation of traditional authority, and Islamic digital ethics.

Results

The synthesized literature demonstrates two primary structural shifts in contemporary digital *dawah*: the operationalization of machine learning algorithms for personalized content distribution and the reconfiguration of religious authority.

Outcome 1: Mechanisms of AI Content Personalization

AI platforms utilize complex recommendation architectures—primarily collaborative filtering and content-based filtering—to personalize religious content feeds based on user interactions (watch duration, clicks, shares, and search queries).

Table 1. *Taxonomy of AI Technologies in Digital Dawah Platforms*

No	Ai Technology Category	Function In Digital Dawah	Socio-Religious Impact
1	**Recommendation Algorithms**	Curates tailored videos, podcasts, and articles based on user preference history.	Maximizes engagement; risks creating religious filter bubbles and ideological silos.
2	**Generative AI & LLMs**	Synthesizes complex religious texts to answer real-time user inquiries (*virtual fatwas*).	Enhances accessibility; risks context-less answers and algorithmic "hallucinations."
3	**Predictive & Sentiment Analytics**	Analyzes audience emotional states to optimize preacher communication strategies.	Increases delivery efficacy; risks commercializing religious discourse.

Outcome 2: Shifting Dynamics of Religious Authority

The deployment of AI recommendation systems disrupts traditional hierarchies of religious authority, shifting influence from institutional scholars to algorithmically amplified online actors.

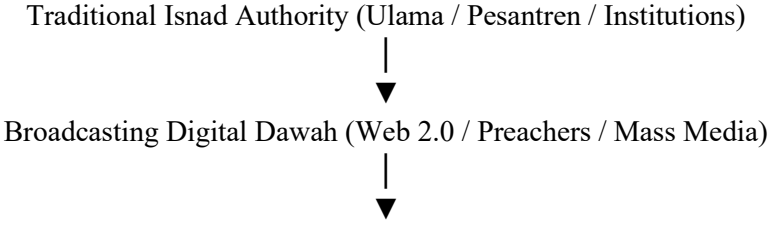


Figure 1. Historical progression of media platforms mediating religious authority in Islamic *dawah*

1. **Fragmentation of Classical Authority:** Classical scholars (*ulama*) trained in traditional seminaries are frequently bypassed by platform algorithms that prioritize high engagement rates, visual appeal, and sensationalism over jurisprudential depth (*ijtihad*).
2. **Algorithmic Gatekeeping:** Non-human actors (platform algorithms) determine content visibility, effectively acting as autonomous gatekeepers of religious knowledge.

Discussion

The findings indicate that artificial intelligence is not merely a neutral channel for transmitting religious messaging; it actively reconfigures the religious experience, epistemological standards, and authority structures in contemporary Islam. The ethical integration of AI into digital religious communication should not be limited to technical accuracy and content moderation but should also consider the cultivation of moral responsibility among content creators and users. A holistic approach to character education emphasizes the integration of cognitive, affective, behavioral, and spiritual dimensions in educational practice (Khobir et al., 2021). This perspective can inform ethical digital dawah by highlighting the importance of honesty, responsibility, critical reflection, and the internalization of Islamic values in producing and consuming AI-mediated religious content.

Epistemic Implications of Algorithmic Personalization

Algorithmic hyper-personalization aligns religious content with the specific psychological and theological preferences of individual users. While this increases user retention and personal spiritual comfort, it introduces significant socioreligious risks. Personalization algorithms tend to construct religious filter bubbles and echo chambers, reinforcing pre-existing biases and reducing exposure to diverse Islamic schools of thought (*madhhab*) (Bunt, 2020; Campbell & Evolvi, 2020; Hoelzchen, 2022). When algorithms optimize for retention, polarized or emotional content is prioritized over nuanced, moderate jurisprudential explanations.

Redefining Religious Authority (*Sultah Diniyyah*)

In classical Islamic tradition, religious authority is grounded in rigorous text-critical scholarship, moral uprightness (*'adalah*), and an authenticated chain of learning (*isnad*). The AI era disrupts this paradigm by substituting algorithmic engagement metrics—likes, shares, watch time, and prompt rankings—as proxy indicators of religious legitimacy. Generative AI models provide instant answers to legal questions without revealing their hermeneutical framework (*usul al-fiqh*). This aligns with what Turner (2011) and Mandaville (2021) conceptualize as the democratization—and subsequent fragmentation—of religious authority, where virtual entities and algorithmically favored influencers compete directly with established religious institutions.

Towards an Ethical Framework for AI-Driven Dawah

To address these challenges, Islamic scholars, digital strategists, and computer scientists must collaborate to build an ethical digital framework (*Akhlaq al-Istikhdam al-Raqmi*). This framework should align with the core objectives of Islamic law (*Maqasid al-Shariah*), particularly the protection of faith (*Hifz al-Din*) and the intellect (*Hifz al-'Aql*). Algorithmic auditing for bias, transparent AI training data, and digital literacy training for traditional scholars are necessary to ensure that personalized *dawah* remains ethically grounded and spiritually authentic.

Limitations of the Study

This review is based on published literature up to 2026. Because generative AI technologies evolve rapidly, long-term empirical data regarding user behavioral adaptation to AI-generated religious content remains an ongoing area of study. Future research should implement mixed-method empirical evaluations across diverse regional contexts.

Conclusion

The transformation of digital *dawah* in the era of artificial intelligence represents a major evolution in Islamic communication. Algorithmic content personalization enhances outreach efficiency and user engagement, yet it simultaneously creates ideological filter bubbles and challenges classical structures of religious authority (*ulama*). As machine learning models and generative AI become primary intermediaries of religious knowledge, traditional safeguards like *isnad* face structural disruption. To harness AI effectively while safeguarding epistemological integrity, Islamic academic institutions and digital practitioners must establish robust ethical frameworks rooted in *Maqasid al-Shariah*, ensuring technology serves as a tool for authentic spiritual enlightenment rather than ideological fragmentation.

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Conflict of Interests

The research was conducted independently without any commercial, financial, or personal relationships that could be construed as a potential conflict of interest.

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