

From Sanad to Algorithms: The Transformation of Islamic Authority and the Reconstruction of Nusantara Islamic Epistemology in the Digital Age

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Abstract

This article analyzes the transformation of Islamic religious authority in the digital era by examining the shift from a sanad-based epistemological structure to legitimacy mediated by digital platform algorithms. In classical Islamic scholarship, sanad functions as a mechanism of transmission, verification, and legitimation that ensures the continuity of religious knowledge and scholarly authority. However, the rise of digital media has reshaped the production and circulation of religious knowledge, where visibility, user engagement, and algorithmic recommendation systems increasingly determine who gains influence within the contemporary religious public sphere. This study aims to explain how these transformations affect the construction of religious authority and how Islamic epistemological traditions negotiate with emerging digital technological structures, this research employs a qualitative approach using a literature-based method that engages recent scholarship on religious authority, digital religion studies, and theories of the mediatization of religion. The analysis is conducted through a conceptual-critical framework that integrates Islamic epistemology with contemporary media theory. The findings suggest that the ongoing transformation should not be understood as a complete replacement of sanad-based authority by algorithmic systems. Rather, it reflects a process of hybridization between normative-transmissive legitimacy and performative-distributive legitimacy. The article proposes the concept of algorithmic authority as an analytical framework to understand how contemporary religious legitimacy is increasingly shaped through the interaction between traditional chains of scholarly transmission and the infrastructural logic of digital platforms. The main contribution of this study lies in developing a conceptual bridge between classical Islamic epistemology and the dynamics of authority in the digital public sphere, offering a new perspective for the study of digital Islam in contemporary Muslim societies.

Keywords: Religious authority, sanad, algorithm.

Abstrak

Artikel ini menganalisis transformasi otoritas keagamaan Islam di era digital dengan menyoroti pergeseran dari struktur epistemologis berbasis sanad menuju legitimasi yang dimediasi oleh algoritma platform digital. Dalam tradisi keilmuan Islam, sanad berfungsi sebagai mekanisme transmisi, verifikasi, dan legitimasi pengetahuan yang menjamin kesinambungan otoritas keilmuan. Namun, perkembangan media digital telah mengubah pola produksi dan distribusi pengetahuan keagamaan, di mana visibilitas, interaksi pengguna, dan sistem rekomendasi algoritmik semakin menentukan siapa yang memperoleh pengaruh dalam ruang publik keagamaan. Penelitian ini bertujuan untuk

menjelaskan bagaimana perubahan tersebut mempengaruhi konstruksi otoritas keagamaan serta bagaimana tradisi epistemologis Islam bernegosiasi dengan struktur teknologi digital. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi pustaka terhadap literatur mutakhir mengenai otoritas keagamaan, studi agama digital, dan teori mediatization of religion. Analisis dilakukan secara konseptual-kritis dengan mengintegrasikan perspektif epistemologi Islam dan teori media digital. Hasil kajian menunjukkan bahwa transformasi yang terjadi tidak dapat dipahami sebagai penggantian otoritas berbasis sanad oleh algoritma, melainkan sebagai proses hibridisasi antara legitimasi normatif-transmisif dan legitimasi performatif-distributif. Artikel ini mengajukan konsep otoritas algoritmik sebagai kerangka analitis untuk memahami bagaimana legitimasi keagamaan kontemporer terbentuk melalui interaksi antara tradisi transmisi keilmuan dan arsitektur platform digital. Kontribusi utama artikel ini terletak pada pengembangan kerangka konseptual yang menghubungkan epistemologi Islam klasik dengan dinamika otoritas dalam ruang publik digital, sehingga memberikan perspektif baru bagi kajian Islam digital, khususnya dalam konteks masyarakat Muslim kontemporer.

Kata Kunci: Otoritas Keagamaan, Sanad, Algoritma.

A. Introduction

The development of digital technology over the past two decades has fundamentally transformed the landscape of production, distribution, and consumption of religious knowledge. The presence of algorithm-based platforms like YouTube and TikTok is no longer simply a medium for conveying religious messages, but has transformed into a new sphere of authority production. In this context, religion is not merely present in the digital space but is restructured through algorithmic logic that determines the visibility, legitimacy, and reach of religious messages.¹

Several studies on digital religion show that this transformation is not simply a shift in medium, but rather a change in the structure of authority and patterns of religious interaction.²Digital media shapes religion according to its own logic: popularity, speed, and audience engagement. Within the framework of Stig Hjarvard's mediatization of religion theory, media is not understood as a neutral instrument, but rather as an institution with formative power over the social and symbolic structures of religion.³Thus, religious authority, previously built through institutional mechanisms and scholarly traditions, is now increasingly influenced by digital metrics such as the number of views, recommendation algorithms, and levels of user interaction.⁴

This transformation has serious implications for the concept of authority. In Max Weber's classic typology, authority is divided into three forms: traditional,

¹ Heidi A. Campbell, *Digital Religion: Understanding Religious Practice in New Media Worlds* (London: Routledge, 2013). 1-15.

² Heidi A. Campbell and Gregory P. Grieve, eds., *Religion in the Digital Age* (London: Routledge, 2014), 3-18.

³Stig Hjarvard, "The Mediatization of Religion: A Theory of the Media as Agents of Religious Change," *Northern Lights* 6 (2008): h. 15.

⁴ Max Weber, *Economy and Society: An Outline of Interpretive Sociology*, trans. Guenther Roth and Claus Wittich (Berkeley: University of California Press, 1978), 212-301.

charismatic, and legal-rational.⁵In religious contexts, traditional authority is typically associated with Islamic boarding schools (*pesantren*) and the transmission of religious traditions; charismatic authority with religious figures possessing personal magnetism; and legal-rational authority with formal institutions such as the state or official religious institutions. However, in algorithm-based digital ecosystems, there are indications of the formation of new legitimacy patterns that cannot be fully explained by these three categories. Digital popularity, algorithmic visibility, and content virality appear to function as alternative legitimacy mechanisms capable of elevating certain figures to religious references without going through traditional transmission channels.

This phenomenon raises a fundamental epistemological question: does religious authority in the digital age still rest on scientific competence and *sanad* (traditional chain of transmission), or has it shifted toward algorithm-based legitimacy? If algorithms determine who is seen, and visibility determines who is heard, then the structure of religious knowledge production is undergoing a transformation that is not only sociological but also epistemological. Authority is no longer solely established through recognition by the scientific community or networks of scholarly transmission, but rather through digital performativity as measured by computational systems.⁶

In the Indonesian context, this dynamic becomes increasingly complex because it intersects with the Nusantara Islamic tradition which has strong roots in the *sanad* system, *divorce*, and scholarly etiquette. Nusantara Islam, as a construct of thought, emphasizes the contextualization of Islamic teachings within local culture and the preservation of the scholarly tradition of Islamic boarding schools. The *sanad* (Islamic chain of succession) is not simply a list of teachers' names, but rather an epistemic structure that guarantees the validity, continuity, and authenticity of religious knowledge.⁷In the *pesantren* tradition, the legitimacy of a *kiai* is built through a long process of learning, recognition by the scientific community, and integration between knowledge and morals.⁸However, as digital spaces become the primary arena for religious interaction among the younger generation, these legitimacy mechanisms face new challenges. Platforms like YouTube and TikTok operate through automated recommendation systems that prioritize audience retention and emotional engagement. In this ecosystem, concise, provocative, or sensational content tends to gain wider distribution than in-depth studies that require intellectual concentration. Consequently, religious figures skilled in digital communication strategies have the

⁵ Weber, *Economy and Society*, h. 215–217.

⁶ Taina Bucher, *If...Then: Algorithmic Power and Politics* (Oxford: Oxford University Press, 2018), h. 67–89

⁷ Tarleton Gillespie, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media* (New Haven: Yale University Press, 2018), h. 40.

⁸ Ahmad Baso, *Islam Nusantara: The Genius Ijtihad and Ijma of Indonesian Ulama* (Jakarta: Pustaka Afid, 2015), pp. 45–70.

potential to gain greater public authority than those with a deep sanad (traditional lineage) but minimal digital visibility.

So far, studies on digital Islam in Indonesia have tended to focus on descriptions of the phenomenon of social media da'wah and the religious consumption patterns of the younger generation.⁹ Meanwhile, studies on Islam Nusantara have focused more on historical and cultural aspects without deeply linking them to structural transformations in the algorithmic ecosystem.¹⁰ This gap indicates a conceptual space that has not been adequately explored, particularly in examining the epistemological implications of this shift in authority for the construction of Islamic thought in the Indonesian archipelago. This article starts from the assumption that the transformation of religious authority in the digital era represents a change in epistemological structure that demands a conceptual response. By combining Weber's theory of authority and the mediatization of religion approach, this article proposes the conceptualization of "algorithmic authority" as a new form of legitimacy in the digital space. Furthermore, this article attempts to formulate a model for reconstructing the epistemology of Islamic thought in the Indonesian archipelago that is able to maintain the principles of sanad (sanad) and scientific adab (ethics), while also being responsive to the logic of the digital ecosystem. Thus, the main contribution of this article lies in offering a conceptual framework for the development of digital Islamic thought in the Indonesian archipelago as an epistemological paradigm that critically negotiates tradition and technology..

B. Literature Review

Religious authority is a fundamental concept in the study of religion and society. Historically, traditional religious epistemology has focused on legitimacy based on the sanad structure and authority recognized by the scientific community or formal institutions. In the current context, social transformation and digital technology have produced new forms of legitimacy that are no longer solely determined by traditional structures such as Islamic boarding schools (pesantren) or kiai (Islamic scholars) as centers of knowledge. This study combines three main theoretical approaches: Weber's classical theory of authority, mediatization theory in the study of digital religion, and contemporary studies on digital authority.

I. Authority Theory: Weber and Recent Criticism

The concept of authority was originally popularized by Max Weber, who distinguished three forms of authority: traditional, charismatic, and legal-rational.¹¹ In traditional religious contexts, authority is often identified with vertical legitimacy, accepted by a community through commitment to a particular scholarly tradition or

⁹Zamakhsyari Dhofier, *Pesantren Tradition: A Study of the Kyai's View of Life* (Jakarta: LP3ES, 1982), pp. 18–35.

¹⁰Rumadi Ahmad, *Islam Nusantara: The Long Road to Religious Moderation* (Jakarta: Kompas, 2015), pp. 55–80.

¹¹ Max Weber, *Economy and Society*, h. 212–301.

professional status. The establishment of this authority involves not only mastery of scholarly content but also social and institutional recognition of a voice worthy of being heard in interpreting teachings.

However, in the social restructuring of the digital era, these variations in authority represent new forms of accommodation that do not fully fit Weber's three categories. Several recent studies have shown that digital platforms give rise to a type of legitimacy called performative digital authority—a legitimacy that depends on visibility, engagement, and online social networks, rather than solely on knowledge or formal credentials.¹² This digital authority becomes increasingly important when clerics or religious figures gain public legitimacy through algorithmic dynamics that mediate content distribution.

2. Digital Religion dan Mediatization of Religion

Studies on digital religion explain that religion is now not only practiced offline, but also metamorphosed in the digital space through social media-based practices, video platforms, and other online community spaces.¹³ Digital media is not only a communication channel but also influences the structure of religious experience and legitimacy. The concept of the mediatization of religion argues that media has become an agent of change in religious life, so religious practices need to be understood as phenomena mediated by specific media logics.¹⁴

From this perspective, digital media is not neutral, but contributes to shaping patterns of legitimacy, the production of meaning, and public trust. This dynamic has given rise to new phenomena such as digital preachers or religious micro-celebrities, namely religious figures who gain authority through expertise in digital positions, namely the ability to adapt to the algorithmic logic of social platforms.¹⁵

3. Digital Authority and Platform Algorithms

Recent studies in digital communication and religion have observed that the algorithms of platforms like YouTube and TikTok play a significant role in shaping what can be called algorithmic authority. Algorithms not only provide content based on individual preferences but also regulate the visibility of content and speakers based on engagement and retention metrics. A bibliometric study of academic discourse on YouTube indicates that algorithmic authority is a leading force in contemporary studies

¹² Heidi A. Campbell, "Introduction: The Rise of the Study of Digital Religion," in *Digital Religion: Understanding Religious Practice in New Media Worlds*, ed. Heidi A. Campbell (New York: Routledge, 2013), h. 1–21.

¹³ Heidi A. Campbell and Giulia Evolvi, "Contextualizing Current Digital Religion Research on Emerging Technologies," *Human Behavior and Emerging Technologies* 2, no. 1 (2020): h. 5–17.

¹⁴ Stig Hjarvard, *The Mediatization of Religion: Theorising Religion, Media and Social Change* (London: Routledge, 2013), h. 17–35.

¹⁵ Crystal Abidin, *Internet Celebrity: Understanding Fame Online* (Bingley: Emerald Publishing, 2018), h. 45–68.

of religious authority, influencing public perceptions of the credibility and legitimacy of digital religious narratives.¹⁶

In this context, the legitimacy of a cleric or religious figure is no longer solely determined by his or her chain of command or formal status, but also by their ability to reach a broad public space through algorithms that prioritize popular content. In the digital space, audience participation also plays a crucial role in negotiating legitimacy through comments, shares, and interactions, which in turn influence content ranking within the algorithm.

4. Nusantara Islamic Epistemology in a Digital Context

Within the Indonesian Islamic heritage, Nusantara Islam emphasizes the importance of the sanad tradition, cultural values, and customs of Islamic boarding school communities as a distinctive epistemic framework. Recent studies in the journal *Ushuluddin* explain that digital religious authority has a distinct character from traditional authority: it is shaped by digital expertise, online visibility, and proficiency in digital visual narratives, not simply the formal credibility of classical scholarly structures.¹⁷

This transformation does not necessarily eliminate the old epistemic structure, but rather forces an epistemological reconstruction that allows Nusantara Islam to maintain the values of sanad, adab, and tradition while simultaneously responding to developments in digital technology. The configuration of religious authority that emerges in virtual space is not simply a secularization of media, but demonstrates that authority can operate in a hybrid mode: a combination of traditional depth and adaptation to digital rules.¹⁸

5. The Role of Local Discourse in a Global Context

Local findings in Indonesia confirm that this phenomenon is not merely an abstract global phenomenon. Recent empirical studies, for example, analyzing how ulama and religious content interact with digital audiences in Indonesia, show that ulama legitimacy in the digital space can emerge from a combination of traditional credibility and digital engagement strategies through multimedia channels.¹⁹ This reflects how the dynamics of the epistemology of Nusantara Islam need to be understood as part of the global discourse on digital religion while still maintaining a distinctive local basis.

¹⁶ Taina Bucher, *If...Then: Algorithmic Power and Politics* (Oxford: Oxford University Press, 2018), h. 52–74.

¹⁷ Nadirsyah Hosen, "Online Fatwa in Indonesia: From Fatwa Shopping to Googling a Kiai," in *Expressing Islam: Religious Life and Politics in Indonesia*, ed. Greg Fealy and Sally White (Singapore: ISEAS Publishing, 2008), h. 159–173.

¹⁸ Giulia Evolvi, "Religion and the Internet: Digital Religion, (Hyper)Mediated Spaces, and Materiality," *Journal for Religion, Society and Politics* 5 (2021): h. 45–62.

¹⁹ Merlyna Lim, "Freedom to Hate: Social Media, Algorithmic Enclaves, and the Rise of Tribal Nationalism in Indonesia," *Critical Asian Studies* 49, no. 3 (2017): h. 427.

C. Method

1. Types and Approaches of Research

This research is a qualitative study based on conceptual analysis (conceptual research) with a critical hermeneutic approach in reading the transformation of religious authority in the digital era. Unlike empirical research based on surveys or social media statistics, this article aims to reconstruct epistemological changes through theoretical synthesis and reflective reading of contemporary phenomena.

This approach starts from the assumption that changes in religious authority in the digital space are not merely technical, but also touch on the structures of legitimacy and the production of meaning. Recent studies in the study of digital religion emphasizes that religion in the digital space does not simply change medium, but experiences a reconfiguration of its forms of practice and authority.²⁰ Thus, this research positions the transformation from the sanad system to algorithmic logic as a change in epistemological structure, not just a change in communication channels. Methodologically, this research combines three analytical frameworks:

- a. A conceptual analysis of the theory of religious authority and legitimacy
- b. Perspective digital religion dan mediatization
- c. Approach platform studi to understand algorithms as mechanisms for the distribution of symbolic power

2. Digital Religion and Mediatization Framework

This research uses a perspective digital religion studies as the primary foundation for understanding religion as a technology-mediated practice. Recent developments have emphasized that digital space is not simply a neutral medium, but shapes the structure of religious experience, patterns of participation, and configurations of authority.²¹

The concept of mediatization explains that the media not only conveys religious messages, but also helps shape their operational logic.²² In the context of digital platforms, this logic is embodied in metric systems such as engagement rate, watch time, and algorithmic recommendation, which indirectly influences who appears as an authoritative figure.

In this context, religious figures active on platforms like YouTube and TikTok compete not only on the depth of their content, but also on their ability to adapt to visual formats, short durations, and narrative strategies compatible with algorithmic recommendation systems.

3. Platform Studies and Algorithmic Authority

²⁰ Heidi A. Campbell and Giulia Evolvi, "Contextualizing Current Digital Religion Research on Emerging Technologies," *Human Behavior and Emerging Technologies* 2, no. 1 (2020): h. 6–9.

²¹ Giulia Evolvi, "Religion and the Internet: Digital Religion, (Hyper)Mediated Spaces, and Materiality," *Journal for Religion, Society and Politics* 5 (2021): h. 47–50.

²² Knut Lundby, "Mediatization of Religion," in *Handbook of Religion and Media*, 2nd ed., ed. Knut Lundby (Berlin: De Gruyter, 2021), h. 25.

To understand the transformation of authority from “sanad” to “algorithm,” this article uses an approach platform studies which views algorithms as a form of structural power in the digital ecosystem. Recent studies have shown that algorithms function as selection mechanisms that determine the visibility and legitimacy of content in the digital public sphere.²³

In this context, authority is no longer solely based on scientific transmission or institutional recognition, but rather on digital performativity, measurable through interaction statistics. Algorithms operate through opaque, automated processes, allowing public legitimacy to be established through the logic of popularity and emotional resonance, not simply epistemic depth.²⁴ Thus, the term “algorithmic authority” in this article refers to a form of religious legitimacy formed through platform recommendation systems, audience participation, and virality dynamics.

4. Data Sources and Analysis Techniques

The main sources of this research are international and national scientific literature published in the last five years (2020–2024), especially from reputable journals in the fields of:

- a. Digital religion
- b. Media and communication studies
- c. Sociology of religion
- d. Contemporary Islamic studies

In addition to a literature review, this article utilizes phenomenological illustrations of digital da'wah practices in Indonesia. These illustrations are not analyzed as quantitative data, but rather as conceptual examples to demonstrate how authority is negotiated in interactions between religious content creators and digital audiences. The analysis technique is carried out through:

- a. Critical hermeneutic analysis of the concept of sanad and traditional legitimacy
- b. A discursive analysis of legitimacy patterns in digital space
- c. Theoretical synthesis to formulate the reconstruction of the epistemology of Nusantara Islam in an algorithmic context

5. Epistemological Position of Research

This research is reflective-critical and non-normative. This means that digital transformation is not read as mere decadence or threat, but as a field of epistemological negotiation that opens up the possibility of reconstruction. Nusantara Islam is positioned as an epistemic tradition characterized by contextual, dialogical, and adaptive characteristics to social change. Within this framework, epistemological reconstruction is not intended to replace the sanad structure, but rather to formulate a new relationship between traditional authority and digital logic.

With this approach, the article is at the intersection of research:

²³ Taina Bucher, “Algorithmic Imaginaries and the Politics of Invisibility,” *Information, Communication & Society* 23, no. 4 (2020): h. 540.

²⁴ Nick Couldry and Ulises A. Mejias, *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism* (Stanford: Stanford University Press, 2019), h. 120–135.

1. Sociology of religion
2. Digital religion
3. Islamic epistemology
4. Media and platform governance

This methodological approach allows the article to be not only relevant in the Indonesian context, but also to contribute to the global discourse on the transformation of religious authority in algorithmic modernity.

D. Result and Discussion

I. Sanad as an Epistemological Structure

In the Islamic scholarly tradition, the sanad (chain of transmission) has never existed simply as a formal chain of transmission linking a narrator to the original source of teachings. It is an epistemological structure that underpins the entire edifice of legitimate knowledge. Through the sanad, knowledge is not only transmitted but also tested, verified, and legitimized within a multi-layered and continuous network of authority. Therefore, the sanad is truly a mechanism of epistemic control that maintains continuity between past and present. In this system, religious knowledge gains authority not because of rhetorical appeal or broad audience reach, but because of its connection to a chain of scholarship recognized for its integrity. A scholar is not judged solely by what he conveys, but by who he learned from, the tradition in which he was trained, and how the scholarly community recognizes his capacity. Authority develops through a long process involving talaqqi (religious practice), testing, collective recognition, and the internalization of adab (ethics). Thus, the sanad is not merely informational but also formational: it shapes scholarly character while maintaining the quality of transmission.

In the context of Nusantara Islam, this sanad structure takes on an increasingly distinctive meaning. The pesantren tradition, for example, not only teaches texts but also builds a personal and ongoing epistemic relationship between kiai and santri. This relationship is not merely pedagogical, but also a moral and spiritual one that shapes the ethics of knowledge. Here, the sanad serves as a bridge between textual and personal authority. It connects the text with the figure, and the figure with the community. Several contemporary studies of religious authority show that in traditional Muslim societies, the legitimacy of ulama is constructed through a combination of textual mastery and social recognition within the network of knowledge.²⁵ Authority doesn't emerge instantly; it develops through gradual and collective social processes. Within this framework, the sanad serves as a verifiable marker of credibility. It limits the possibility of unilateral claims to authority and simultaneously creates a mechanism for internal accountability.

Furthermore, the sanad forms an epistemological orientation that emphasizes continuity and caution. This tradition produces an intellectual culture that tends to be

²⁵Nadirsyah trousers, Online Fatwa in Indonesia, h. 159–162.

cautious in issuing fatwas, conscious of its position in the chain of knowledge, and respectful of the opinions of previous authorities. In this sense, the sanad is not only a mechanism of legitimacy but also an epistemic ethos. From the perspective of the sociology of religion, this structure can be read as a form of traditional authority based on historical continuity and communal recognition.²⁶ However, reducing the sanad solely to "traditional authority" is not entirely adequate, because in practice, the sanad operates as a complex system of scientific verification. It is not simply a legacy of custom, but rather a rational validation system within its own context.

Therefore, before discussing the transformation toward algorithmic logic, it is important to emphasize that the sanad is not a symbol of past romanticism. It is an epistemological structure that integrates texts, figures, and communities into a single network of legitimacy. The changes occurring in the digital era cannot be properly understood without first understanding the depth of the epistemic function of the sanad itself. Only with this awareness can the transformation from "sanad" to "algorithm" be read as a shift in the structure of legitimacy that truly touches the foundations of epistemology, not simply a change in the medium of communication.

2. Digital Disruption and the Shift in Legitimacy

The most fundamental change brought about by the digital era lies not merely in the way information is disseminated, but in the structures of legitimacy that underpin it. While in the sanad tradition, authority developed through a long process and multi-layered communal recognition, the digital space presents a new terrain where legitimacy can be established quickly, even instantly. This shift does not occur in a vacuum; it arises from the logic of platforms that regulate the distribution of public attention. Platforms like YouTube and TikTok allow anyone to produce, package, and disseminate religious narratives without going through institutional selection mechanisms. On the one hand, this situation opens up broader and more democratic participation. But on the other, it also changes the way authority is recognized and accepted. Credibility is no longer measured solely by the depth of the sanad or the recognition of the ulama community, but by the number of viewers, the intensity of interaction, and the level of virality.

Recent studies in digital religions shows that digital media is not only a new channel for religion, but also reshapes religious experience and its patterns of authority.²⁷ The platform's algorithm works through a recommendation system that prioritizes content based on engagement metrics such as watch time, clicks, comments, and emotional response. In this context, visibility becomes a key resource. What frequently appears on users' homepages is more likely to be perceived as relevant, credible, and even authoritative.

This is where the shift in legitimacy begins to become apparent. In a sanad structure, authority is built from the bottom up through a process of learning and

²⁶ Max Weber, *Economy and Society*, h. 215–217.

²⁷ Heidi A. Campbell and Giulia Evolvi, "Contextualizing Current Digital," h. 6–9.

recognition. In an algorithmic structure, legitimacy often moves from the outside in: public visibility creates the perception of authority, which then strengthens its symbolic influence. Authority can be formed not through a lengthy scientific process, but through successfully navigating the platform's logic. Digital communication researchers refer to this phenomenon as algorithmic power, a condition in which automated systems determine what is worthy of being seen and who is worthy of being heard.²⁸ Algorithms not only reflect user preferences but also shape those preferences through repeated curation. Thus, religious authority in the digital space is the result of a complex interaction between content creators, audiences, and recommendation systems that is not entirely transparent.

In the context of Nusantara Islam, this shift presents an interesting dynamic. Traditions that have emphasized caution in issuing fatwas and the importance of sanad (certificate of authority) are now confronted with a culture of short, visual, and fast-paced content. The one-minute video format demands simplification of argumentation. The complexity of fiqh (jurisprudence) or differences in schools of thought are often reduced to clear, easily digestible statements. As a result, legitimacy can shift from depth of argumentation to clarity of expression. However, it is important to note that this disruption does not necessarily mean the disappearance of old structures. What is occurring is more accurately understood as a shift in the terrain of legitimacy. The sanad (certificate of authority) retains symbolic and moral significance, but it now operates in a space governed by the logic of digital distribution. A scholar with a strong sanad (certificate of authority) still needs visibility to have a voice in the online public conversation. Conversely, figures without a formal sanad (certificate of authority) can gain significant influence if they master algorithmic dynamics.

Thus, digital disruption should be read as a transformation of legitimacy structures, not simply a change in communication medium. It marks a shift from a system based on the transmission of knowledge to a system based on the attention economy (attention economy).²⁹ In this system, attention becomes the primary currency, and algorithms become its distribution mechanism. It is at this point that an epistemological question becomes unavoidable: if legitimacy is now heavily influenced by digital visibility and interaction, what is the position of the values of sanad, adab, and scientific prudence? Will they be reduced to mere symbols, or can they find new forms within the algorithmic ecosystem? This question provides a bridge to the subsequent discussion of how algorithmic authority operates and how Islam Nusantara responds to it.

3. Algorithmic Authority as a New Form of Legitimacy

While in the sanad structure, legitimacy rests on the continuity of transmission and recognition from the scientific community, in the digital ecosystem, legitimacy is

²⁸ Taina Bucher, *Algorithmic Imaginaries*, h. 533.

²⁹ Nick Couldry and Ulises A. Mejias, *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism* (Stanford: Stanford University Press, 2019), h. 123.

increasingly formed through far more fluid and dynamic mechanisms. This is where what can be called algorithmic authority emerges, a form of legitimacy resulting from the interaction between content creators, audiences, and platform recommendation systems. This term does not refer to algorithms as "authoritative" subjects in the normative sense, but rather to the fact that algorithms play a role in determining who is seen, who is heard, and who is gradually deemed credible by the public. In the digital space, visibility is not simply a side effect; it is a prerequisite for existence. Figures who do not appear on timelines, are not recommended, or do not participate in the flow of virality are effectively marginalized from the public conversation.

Digital communication studies show that platform recommendation systems work based on engagement metrics such as viewing duration, interaction frequency, and user emotional responses.³⁰ This mechanism creates an ecosystem where content capable of eliciting a quick and intense reaction has a greater chance of continued promotion. Thus, legitimacy is no longer solely derived from the depth of content, but also from the ability to spark attention and participation. In the context of digital preaching on YouTube and TikTok, this phenomenon is evident. A preacher who can package a religious message in a concise, expressive, and easily shareable format will more easily reach a wider audience than someone who delivers lengthy and complex arguments. Gradually, quantitative metrics such as the number of viewers, subscribers, or followers have begun to be associated with credibility. These numbers serve as symbolic indicators that someone is "heard" and therefore "worthy" of being listened to.

This is where the transformation of legitimacy becomes more subtle. In a sanad structure, recognition comes from a community of experts. In an algorithmic structure, recognition comes from the aggregation of audience responses mediated by an automated system. Authority is no longer fully verified through a scientific process, but rather through statistically measurable public resonance.³¹ However, algorithmic authority does not completely replace older forms; it adds a new layer to the construction of legitimacy. A cleric with a strong pesantren (Islamic boarding school) background and a strong sanad (Islamic chain of transmission) still possesses significant symbolic capital. However, without digital visibility, this capital struggles to function in the online public sphere. Conversely, figures with advanced digital communication skills can gain significant influence despite lacking strong traditional legitimacy. In this situation, algorithms act as mediators, strengthening or weakening an individual's symbolic position.

Furthermore, algorithms don't operate neutrally. They operate within the logic of the attention economy, where content that evokes strong emotions, whether

³⁰ Taina Bucher, "Algorithmic Imaginaries and the Politics of Invisibility," *Information, Communication & Society* 23, no. 4 (2020): h. 534.

³¹ Heidi A. Campbell and Giulia Evolvi, "Contextualizing Current Digital Religion Research on Emerging Technologies," *Human Behavior and Emerging Technologies* 2, no. 1 (2020): h. 9.

admiration, anger, or controversy, tends to be prioritized.³² Consequently, simplistic or polarizing religious narratives often spread more easily than reflective and argumentative discourse. In this context, algorithmic authority can encourage a shift in religious communication styles, from deliberative to performative. However, it is important to avoid reductionism. Algorithmic authority is not simply the result of technical manipulation; it is a product of the relationship between technological structures and social behavior. Audiences play a role in shaping legitimacy through their viewing choices, comments, and content sharing. In other words, algorithmic authority is relational, born from the reciprocal circulation between creators, users, and platform systems.

It is within this framework that the transformation from sanad to algorithm can be understood as a shift in legitimacy regimes. The sanad emphasizes historical continuity and personal integrity; the algorithm emphasizes visibility and collective resonance. The epistemological challenge is not simply a matter of who is more legitimate, but how these two regimes can interact without mutually negating each other. The next section will deepen the dimensions of this negotiation by examining how the Nusantara Islamic scholarly tradition confronts and adapts to the algorithmic logic that now frames the religious public sphere.

4. Negotiations between Tradition and Algorithm

The transformation of religious authority in the digital space does not necessarily eliminate traditional epistemological structures, but rather gives rise to a complex negotiation process between two legitimacy regimes: the sanad and the algorithm. While the previous section explained that algorithms create new patterns in the distribution of authority, it is important to emphasize at this stage that the Islamic scientific tradition is not completely eliminated. What is occurring is a process of adaptation, resistance, and reconstruction. In the Islamic tradition, the sanad is not merely a transmission device, but a symbol of epistemic continuity (continuity of knowledge).³³ He asserted that religious knowledge was not born ahistorically, but rather was tied to a verified chain of transmission. However, in the digital ecosystem, such legitimacy mechanisms are no longer a primary prerequisite for gaining an audience. A content creator with rhetorical skills and visual mastery can reach millions of users without ever demonstrating formal scholarly credentials.

This situation does not mean that traditional authorities have lost their relevance entirely. In Indonesia, for example, institutions like Nahdlatul Ulama and Muhammadiyah have begun strategic adaptations by strengthening their digital presence through official channels, online da'wah platforms, and social media-based

³² Nick Couldry and Ulises A. Mejias, *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism* (Stanford: Stanford University Press, 2019), h. 126.

³³ Jonathan A. C. Brown, *Hadith: Muhammad's Legacy in the Medieval and Modern World*, 2nd ed. (London: Oneworld Publications, 2020). h. 345.

religious literacy.³⁴This adaptation demonstrates that tradition is not passive in the face of disruption, but rather seeks to rearticulate its authority in new languages and media. This negotiation is also evident in the emergence of religious scholars and academics with strong scientific credentials and active participation in the digital space. They do not reject algorithms, but rather utilize them as a medium for disseminating knowledge. In this context, algorithms are no longer viewed as a threat, but rather as new instruments in the process of da'wah (preaching) and the transmission of knowledge. However, the use of these instruments still carries risks, as the logic of attention-based algorithms often encourages simplification, sensationalization, and fragmentation of discourse.³⁵

Thus, the relationship between tradition and algorithms cannot be understood dichotomously, between authentic and counterfeit, between sanad and popularity. What occurs is interpenetration: tradition enters the algorithmic space, while the algorithm reshapes how tradition is presented and perceived. Authority is no longer determined solely by who speaks, but also by how the digital system distributes that voice. At this point, the epistemological challenge becomes increasingly pressing: how to maintain the integrity of the sanad in a space that lacks classical verification mechanisms? Several contemporary studies of digital Islamic authority indicate that online communities are beginning to develop new forms of evaluation, such as reputation-based assessments, endorsements by authoritative figures, and public clarification of misinterpretations.³⁶Although not identical to sanad, this mechanism shows an attempt to seek legitimacy in a different format.

From a theoretical perspective, this negotiation can be understood as a process of hybridization of authority, a meeting between normative authority based on tradition and performative authority based on visibility. This hybridity is not only a technological phenomenon, but also an epistemological transformation that alters how people understand who is worthy of being followed and on what basis. Thus, the transformation from sanad to algorithm cannot be read as a linear shift, but rather as a field of ongoing contestation and negotiation. Tradition seeks to maintain a structure of legitimacy rooted in transmission, while algorithms offer legitimacy based on distribution and resonance. Between the two, people move in search of references, form preferences, and indirectly influence the direction of religious authority in the digital age.

5. Epistemological Implications and Conceptual Recommendations

³⁴Ahmad Najib Burhani, "Digital Islam and Religious Authority in Indonesia," *Contemporary Islam* 15, no. 3 (2021): h. 362.

³⁵S. Zuboff, *The Age of Surveillance Capitalism* (New York: PublicAffairs, 2019); see also the further discussion in the algorithmic context in Taina Bucher, *If... Then: Algorithmic Power and Politics* (Oxford: Oxford University Press, 2020). h. 333.

³⁶ Heidi A. Campbell and Stephen Garner, *Networked Theology: Negotiating Faith in Digital Culture* (Grand Rapids: Baker Academic, 2021). h. 17

The shift in authority from sanad to algorithms not only changes the medium of religious transmission but also touches its epistemological foundations. While sanad has for centuries served as a mechanism for verification, validation, and the maintenance of the continuity of tradition, algorithms present a different logic: visibility, engagement, and public resonance. This shift carries complex implications. First, there is a shift from an epistemology of transmission to an epistemology of distribution. In the classical tradition, religious knowledge is transmitted through personal relationships (teacher and student) that contain ethical and spiritual dimensions. The sanad is not only a channel for information, but also a pathway for character formation and scholarly etiquette.³⁷In the digital space, distribution no longer relies on personal relationships, but on computational systems that determine which content appears and which disappears. Authority becomes heavily dependent on platform architecture.

Second, legitimacy has become increasingly performative. In this context, what determines it is not only the depth of knowledge but also the ability to perform, package messages, and read the audience's rhythm. This phenomenon is not entirely negative; it opens up broader spaces for participation. However, it also has the potential to blur the line between substantive competence and pseudo-popularity. As studies of digital religion have shown, authority in online spaces often arises from a combination of credibility and connectivity.³⁸

Third, the community as an audience is no longer passive. They play an active role in shaping who is considered authoritative through likes, shares, comments, and subscriptions. In this sense, authority becomes the result of collective interaction, not just institutional recognition. This marks a certain democratization of religious structures, but also carries the risk of fragmentation and polarization of discourse. Nevertheless, it is important to emphasize that the Islamic tradition has considerable adaptive capacity. History shows that scholarly authority has always undergone transformation as media shifts from oral to manuscript, from manuscript to print, and now to digital.³⁹From this perspective, algorithms can be understood not as the end of the sanad, but as a new phase in the history of knowledge mediation.

At this point, this article advances a conceptual argument: that what is occurring is not a replacement of authority, but a rearticulation of authority. The sanad remains crucial as the foundation of epistemic legitimacy, while algorithms become arenas for the distribution and negotiation of meaning. The challenge is how to ensure that distribution does not erode the integrity of transmission. Based on the above analysis, several conceptual recommendations can be proposed.

³⁷ Jonathan A. C. Brown, *Hadith: Muhammad's Legacy in the Medieval and Modern World*, 2nd ed. (London: Oneworld Publications, 2020). h. 56.

³⁸ Heidi A. Campbell, *Digital Creatives and the Rethinking of Religious Authority* (London: Routledge, 2021). h. 135

³⁹ Armando Salvatore, "The Public Sphere and Muslim Authority in the Digital Age," *Journal of Religion, Media and Digital Culture* 9, no. 2 (2020): h. 156.

First, epistemological literacy among the Muslim community needs to be strengthened. This literacy encompasses not only the ability to use technology but also the ability to distinguish between scientifically based authority and popularity-based authority. This can be achieved through Islamic education curricula, digital preacher training, and media literacy programs based in Islamic boarding schools (*pesantren*) and universities.

Second, religious institutions need to build a digital ecosystem that is not only informative but also dialogical. A merely formal digital presence is insufficient. What is needed is a communication strategy that responds to algorithmic dynamics without losing its depth and substance.

Third, a more integrative theoretical approach is needed in the study of digital Islam, one that views technology not merely as a tool but as a structure shaping relations of power and legitimacy. In this regard, the concept of "algorithmic authority" can be further developed as an analytical category in contemporary Islamic studies, alongside the concepts of *sanad* and *ijazah*.

Ultimately, the question that needs to be continually asked is not whether algorithms are replacing *sanad*, but how Muslims interpret authority amidst changing media. If *sanad* once maintained the continuity of text and meaning, the challenge today is to maintain continuity of integrity amidst the never-ending flow of information. This transformation is not simply a technological phenomenon, but rather a reflection of the changing ways in which humans believe in, follow, and understand religion. Herein lies the urgency of this study: not merely to interpret change, but to offer a conceptual framework that helps tradition continue to breathe in a constantly changing world.

E. Discussion

I. Reconfiguration of Religious Authority in Algorithmic Ecosystems

The digital transformation of the past two decades has significantly altered the structure of production and distribution of religious knowledge. While in classical Islamic tradition, authority was established through *sanad* mechanisms that emphasized the continuity of scholarly transmission, in the digital ecosystem, religious legitimacy is increasingly influenced by algorithmic logic that regulates the visibility of religious content and figures in online public spaces. This change relates not only to the medium of communication but also touches the epistemological foundations of how religious authority is recognized, accepted, and maintained by Muslim communities.

Within the sociology of authority, this phenomenon can be interpreted as a reconfiguration of previously institutional legitimacy patterns toward a more distributed structure. Max Weber's classical typology of authority distinguishes three forms: traditional, charismatic, and legal-rational. In the Islamic religious context, traditional authority is typically tied to networks of *ulama*, Islamic boarding schools, and *sanad* transmissions that historically shaped scholarly legitimacy. However, the digital space introduces new mechanisms in which public visibility, follower numbers, and the intensity of audience interaction can serve as alternative indicators of

legitimacy.⁴⁰ Platform algorithms like YouTube and TikTok operate through recommendation systems that prioritize content based on user engagement metrics, such as viewing duration, frequency of interactions, and emotional response levels. These systems indirectly determine which religious narratives gain widespread reach and which religious figures emerge as public authorities. In this context, authority no longer relies solely on networks of scholarly transmission, but also on the ability to navigate the logic of digital platforms that emphasize attention and virality.⁴¹ However, it is important to emphasize that this transformation does not mean the loss of traditional epistemological structures. The sanad (chain of narrators) retains its normative function as a mechanism for verifying religious knowledge and a symbol of intellectual continuity within the Islamic tradition. What is occurring is more accurately understood as a process of hybridizing legitimacy between transmission-based authority and digital distribution-based authority. In this configuration, religious legitimacy is increasingly shaped through the interaction between scholarly credibility, digital communication capabilities, and the dynamics of audience participation in online spaces.

2. Epistemological Challenges in the Production of Religious Knowledge

This shift in the structure of legitimacy carries significant epistemological implications. In the Islamic scholarly tradition, the process of transmitting knowledge through the sanad serves not only as a transmission channel but also as a mechanism for shaping intellectual ethics. The relationship between teacher and student in the talaqqi system emphasizes the dimension of adab (adab), caution in issuing fatwas (religious edicts), and moral responsibility for the knowledge imparted. Thus, the sanad not only guarantees the authenticity of information but also shapes an epistemic character that emphasizes integrity and humility in the production of knowledge. Conversely, the digital ecosystem tends to operate within the logic of an attention economy that prioritizes speed, accessibility, and emotional resonance. In this system, brief, provocative, or controversial content often receives wider distribution than in-depth and argumentative religious discourse. This phenomenon has the potential to encourage the simplification of religious teachings and the fragmentation of religious knowledge in the digital public sphere.⁴²

Studies in the field of digital religion show that digital media is not only a means of spreading religion but also reshaping people's religious practices and experiences. Heidi A. Campbell asserts that digital technology creates new forms of religious authority produced through the interaction between content creators, online

⁴⁰ Max Weber, *Economy and Society: An Outline of Interpretive Sociology*, ed. Guenther Roth and Claus Wittich (Berkeley: University of California Press, 1978), h. 215–216.

⁴¹ Taina Bucher, *If...Then: Algorithmic Power and Politics*, h. 34–38.

⁴² Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019), h. 295.

communities, and the architecture of media platforms.⁴³In this context, religious legitimacy can emerge through a collective process mediated by technology, in which audiences actively participate in determining who is deemed credible or worthy of following. This situation presents a challenge to the Islamic scholarly tradition, which has traditionally placed epistemological prudence as a key principle in the production of religious knowledge. As religious authority is increasingly influenced by digital metrics such as follower counts or virality, the line between authority based on scholarly competence and authority based on popularity becomes increasingly blurred. Therefore, digital transformation demands a reflective effort to maintain a balance between the openness of the digital public sphere and the epistemological integrity of the Islamic scholarly tradition.

3. Reconstructing the Digital Preaching Paradigm for a Progressive Society

Despite presenting various challenges, digital transformation also opens up opportunities for reconstructing a paradigm of da'wah and religious authority that is more adaptive to changing times. Islamic history shows that scholarly traditions have always interacted with changing communication media, from oral traditions and manuscripts to print technology. Each change in medium has implications for how religious knowledge is produced and distributed, but it does not necessarily eliminate existing epistemological structures. In the context of Indonesian Muslim society, the pesantren tradition has great potential to play a strategic role in this adaptation process. Pesantren function not only as religious educational institutions but also as spaces for the production of intellectual authority that integrate knowledge, ethics, and social practices of religion. By developing more inclusive digital communication strategies, pesantren and religious institutions can utilize technology as a medium for da'wah without abandoning the principles of sanad (traditional Islamic lineage) and adab (traditional Islamic teachings).

Strengthening digital religious literacy is also a crucial step in building a progressive Muslim society. This literacy encompasses not only the ability to use technology but also the critical ability to assess the credibility of religious knowledge sources in the digital space. In an increasingly digitally connected society, the ability to distinguish between authority based on scholarly competence and authority based on popularity is key to the sustainability of the Islamic intellectual tradition. Thus, the transformation from sanad to algorithms should not be understood as a narrative of the decline of traditional religious authority. Rather, it can be seen as a process of restructuring legitimacy structures that opens up space for integration between the depth of Islamic scholarly tradition and the dynamics of digital technology. From this perspective, the future of religious authority is determined not solely by the strength of tradition or the dominance of technology, but by the ability of both to negotiate

⁴³ Heidi A. Campbell, *Digital Creatives and the Rethinking of Religious Authority* (London: Routledge, 2021). H. 6-9.

productively in building a more reflective, inclusive, and societal-oriented ecosystem of religious knowledge.

Conclusion

This study demonstrates that the transformation of Islamic religious authority in the digital era cannot be understood as a linear shift from the sanad tradition to the dominance of algorithmic technology. Rather, this change represents a complex process of epistemological negotiation between two distinct legitimacy regimes. In Islamic tradition, sanad serves as a structure of authority that guarantees the continuity of knowledge, the authenticity of transmission, and the moral responsibility between teacher and student. Thus, scientific legitimacy arises from the recognition of the scientific community, rooted in traditional verification mechanisms. Meanwhile, the digital ecosystem introduces a new logic through algorithms that build legitimacy based on visibility, interaction, and public resonance, giving rise to a form of “algorithmic authority” that operates through platform architecture and audience participation. The study's main findings indicate that what is occurring is not the replacement of sanad by algorithms, but rather a rearticulation of authority in the digital space. The Islamic scientific tradition is not completely replaced but adapts to the new medium, while algorithms do not fully determine authority without interaction with religious social and cultural practices. In this dynamic, scholars, religious institutions, and digital users together shape a new, hybrid landscape of legitimacy. Therefore, the theoretical contribution of this article lies in the effort to reconcile sanad as a classical epistemological structure with algorithms as a contemporary knowledge distribution structure, so that both can be understood as legitimacy regimes that negotiate each other in shaping Islamic authority in the digital era. The issue of religious authority is not solely determined by the level of popularity or number of followers in the digital space, but by responsibility for the meaning and knowledge disseminated. This transformation shows that Islamic authority has always been in a dynamic historical process, and today this process takes place in a landscape shaped by code, data, and digital interactions. Thus, the narrative "from sanad to algorithm" is not a story of the loss of tradition, but rather about the restructuring of authority structures so that the Islamic scientific tradition maintains direction, integrity, and relevance amidst ever-evolving technological changes.

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