
NEGOTIATING RELIGIOUS AUTHORITY IN THE DIGITAL AGE: ISLAMIC PARTICIPATION AND THE TRANSFORMATION OF NAHDLATUL ULAMA IN CENTRAL LAMPUNG

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Abstract

This study examines the participation of the NU organization in Central Lampung Regency in developing science through digital publications. The focus of the study includes forms, patterns, theological foundations, and strategies for optimizing participation. This study is based on the assumption that Islam has great potential to inspire a knowledgeable society. The approach used is qualitative-phenomenological, with data collection techniques including focus groups (FGDs), interviews, observation, and documentation. Data were analyzed through data reduction, presentation, and conclusion drawing. The results indicate that NU's digital participation encompasses three main forms: the production of science-based Islamic knowledge, dissemination through digital media, and collaboration across scientific networks. The pattern of participation evolves from awareness, initiation, and evaluation. This participation reflects a shift in religious authority from a hierarchical structure to a collaborative and adaptive network model. Phenomenologically, this participation is driven by religious awareness as a manifestation of the caliph's responsibility in building a scientific civilization. NU's theological approach involves the bayani, burhani, and irfani methods, emphasizing the preservation of intellectual traditions. This research emphasizes the importance of integrating Islamic values, scientific literacy, government regulations, and ongoing evaluation in strengthening religious digital communities. This implies the need for policies that support the digital capacity of religious groups and the development of contextual and local value-based participation models.

Abstrak

Penelitian ini mengkaji partisipasi organisasi Nahdlatul Ulama (NU) di Kabupaten Lampung Tengah dalam pengembangan ilmu pengetahuan melalui publikasi digital. Fokus kajian meliputi bentuk, pola, landasan teologis, serta strategi optimalisasi partisipasi organisasi NU. Penelitian ini didasarkan pada asumsi bahwa Islam memiliki potensi besar untuk menginspirasi lahirnya masyarakat berpengetahuan. Pendekatan yang digunakan adalah kualitatif-fenomenologis, dengan teknik pengumpulan data berupa diskusi kelompok terarah (FGD), wawancara, observasi, dan dokumentasi. Data dianalisis melalui tahapan reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa partisipasi digital NU mencakup tiga bentuk utama, yaitu produksi pengetahuan keislaman berbasis sains, diseminasi melalui media digital, serta kolaborasi dalam jaringan keilmuan. Pola partisipasi berkembang melalui tahapan kesadaran, inisiasi, dan evaluasi. Partisipasi ini mencerminkan pergeseran otoritas keagamaan dari struktur hierarkis menuju model jejaring yang kolaboratif dan adaptif. Secara fenomenologis, partisipasi tersebut digerakkan oleh kesadaran religius sebagai manifestasi tanggung jawab khalifah dalam membangun peradaban ilmu pengetahuan. Pendekatan teologis NU melibatkan metode bayani, burhani, dan irfani yang menekankan pelestarian tradisi intelektual. Penelitian ini menegaskan pentingnya integrasi nilai-nilai Islam, literasi saintifik, regulasi pemerintah, serta evaluasi berkelanjutan dalam memperkuat komunitas keagamaan digital. Implikasi penelitian ini menunjukkan perlunya kebijakan yang

mendukung penguatan kapasitas digital kelompok keagamaan serta pengembangan model partisipasi yang kontekstual dan berbasis nilai-nilai lokal.

Keywords: Digital participation; Nahdlatul Ulama; phenomenology; religious authority; scientific publications



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INTRODUCTION

The debate over the role of religion in social dynamics continues to attract sustained scholarly and public attention, engaging academics, development practitioners, and broader society. This discourse is often polarized between two opposing perspectives. On the one hand, religion is perceived as a conservative force that constrains rationality and impedes progress, particularly in the domains of science and technology. On the other hand, religion especially in its communal expressions is viewed as a transformative agent that fosters social change, provides a foundation for collective moral values, and drives development grounded in spirituality and civic civilization. These contrasting perspectives constitute the point of departure for this study, which critically examines the extent to which religious groups particularly Islamic communities in Central Lampung contribute to the advancement of scientific knowledge through digital platforms.

The role of religion in shaping social dynamics remains a contested yet enduring subject of scholarly inquiry. Contemporary discourse is often polarized between two opposing views: religion as a conservative force that constrains rationality and scientific progress, and religion particularly in its communal expressions as a transformative agent that fosters social change, moral order, and civilizational development. This study departs from this tension by critically examining how Islamic communities in Central Lampung contribute to the advancement of scientific knowledge through digital platforms. Within the sociology of religion, dominant perspectives have frequently positioned religion in an ambivalent relationship with modernity¹, often overemphasizing ritualistic and symbolic dimensions while neglecting its pragmatic and transformative capacities. In contrast, Islamic intellectual history demonstrates a longstanding integration between religion, science, and civilization². This study recontextualizes that legacy by investigating the forms, patterns, and theological foundations of digital participation among Islamic groups in contemporary settings.

The rapid expansion of digital technology has reconfigured not only economic and political structures but also the production of knowledge, the circulation of authority, and the role of religious actors in the public sphere³. In this context, the study focuses on the participation of Nahdlatul Ulama (NU) in Central Lampung in disseminating scientific knowledge through digital publications⁴. It analyzes participation patterns, examines the theological principles that legitimize

¹ Anwar Firmansyah dan Tiffany Setyo Pratiwi, "Agama dan Pembangunan: Beragam Pandangan dalam Melihat Keberkaitan Agama terhadap Proses Pembangunan dan Modernisasi," *Jurnal Ilmiah Hubungan Internasional* 15, no. 1 (2019), <https://doi.org/10.26593/jihi.v15i1.2966.1-12>; Social Change et al., "Religion in The Modernization Process in Developing" 1, no. 3 (2024).

² Syed Hussein Alatas, "Religion and Modernisation in Southeast Asia," *European-journal-of-sociology* 11, no. 2 (2020).

³ Saskia Sassen, *A Sociology of Globalization* (New York: W.W. Norton, 2007); Saskia Sassen, *Territory, Authority, Rights: From Medieval to Global Assemblages* (New Jersey, USA.: Princeton University Press, 2008); Saskia Sassen, *EXPULSIONS: Brutality and Complexity in the Global Economy* (Cambridge, Massachusetts, USA: Harvard University Press, 2014).

⁴ Muta'allim, "Kh. Hasyim Muzadi's Language Politeness Strategies in Responding The Different Perspective Between Nahdlatul Ulama and Muhammadiyah: a Sociopragmatic Study", *Muslim Heritage*, Vol.10, No.1, (Juni

such engagement, and proposes a conceptual framework for optimizing religious digital participation in a sustainable manner. The study ultimately contributes to interdisciplinary debates on religion, digital technology, and knowledge production in the networked society. Research on the relationship between Islam and development can be broadly grouped into two types⁵. *First*, religion is seen as not having a significant meaning for the growth of work ethic which has an impact on the economic ability of the community⁶. *Second*, seeing that religion has symbolic power that can encourage the growth of people's work ethic, therefore religious spirit is an important factor for the growth of people's work ethic^{7,8,9}. Some of the references to books and articles that discuss NU's view of science are the book *NU and Islam in Indonesia: Fiqh Approach to Facing Modernity* by Greg Fealy and Greg Barton. This book reviews the role of NU in the Indonesian social and political context, as well as how NU responds to modern issues, including science and technology. The authors discuss NU's view of science as part of a moderate and contextual approach to understanding Islamic teachings^{10,11,12}.

Islam Nusantara: From Ushul Fiqh to Understanding Nationality by Abdurrahman Wahid. This book contains views on the concept of Islam in the archipelago, initiated by NU figures. This book covers NU's views on science, especially how NU understands and accepts the development of modern science and technology within the framework of Islam in the archipelago^{13,14}. *NU and Contextual Fiqh* by Ahmad Muchith Muzadi discusses how NU views science as a tool to understand the kauniah verses of Allah (natural phenomena) and integrate them with Islamic teachings^{15,16}. *NU and Indonesianness* by Mohamad Sobary examines the response of traditionalist Muslim communities, including NU, to issues of modernity, such as science and technology. Sobary highlighted how NU has developed a flexible and open attitude towards modern science,

23, 2025): 54-77, <https://doi.org/10.21154/muslimheritage.v10i1.10951>

- 5 Firmansyah dan Pratiwi, "Agama dan Pembangunan: Beragam Pandangan dalam Melihat Keberkaitan Agama terhadap Proses Pembangunan dan Modernisasi."
- 6 Arly E.M. de Haan dan Anika Chatarina Takene, "Memahami Konsep Karl Marx: Agama Adalah Candu Masyarakat Dalam Perilaku Beribadah Jemaat Semau Utara, Klasis Semau," *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial* 8, no. 6 (2021): 1596–1609, <http://jurnal.um-tapsel.ac.id/index.php/nusantara/article/view/5305>
7. Parulihan Sipayung, "Fenomena Pemberhalaan Agama," *Indonesian Journal of Theology* 2, no. July (2014): 155–78. Haan dan Takene, "Memahami Konsep Karl Marx: Agama Adalah Candu Masyarakat Dalam Perilaku Beribadah Jemaat Semau Utara, Klasis Semau"; Sipayung, "Fenomena Pemberhalaan Agama."
- 8 Abu Bakar, "Agama dan Kemiskinan Budaya Kerja Masyarakat Petani Di Pedesaan Di Provinsi Riau", *Jurnal Sosial Budaya* 9, no. 2 (2012): 212-30.
- 9 Muhammad Yusuf Pratama dan Ahmad Nabil Annuha, "Digital Da'wah Transformation of Nahdlatul Ulama: Religious Moderation Strategies in the Technological Era", *NAHNU: Journal of Nabdlatul Ulama and Contemporary Islamic Studies*, 2, no.2 (2024): 321-338.
- 10 Greg Fealy dan Greg Barton, *Nabdlatul Ulama, Traditional Islam and Modernity in Indonesia* (Michigan, USA.: Monash Asia Institute, 1996).
- 11 Khadiq, "Agama Sebagai Modal Pembangunan Masyarakat," *Aplikasi Ilmu-Ilmu Agama* VI, no. 2 (2005): 122–41.
- 12 Muhammad Azlan Lubis dan Ahmad Nabil Annuha, "Habitus Tensions between NU's Santri and Students: Religious Education Cultural Transformation in the Disruption Era", *NAHNU: Journal of Nabdlatul Ulama and Contemporary Islamic Studies*, 3, no.1 (2025), 417-436.
- 13 Abdurrahman Wahid, *Islam Nusantara dari Ushul Fiqh Hingga Paham Kebangsaan*, 3 ed. (Bandung: Mitra Pustaka, 2016).
- 14 Aris Munandar dan Endang Susanti, "Green Dakwah Nahdlatul Ulama: Strategi Komunikasi Digital NU Online dalam Membangun Kesadaran Ekologis", *NAHNU: Journal of Nabdlatul Ulama and Contemporary Islamic Studies* 3, no.2 (2025): 579-602.
- 15 Abdul Muchith Muzadi, *NU dan Fiqh Kontekstual*, 1 ed. (Yogyakarta: LKPSM, 1994).
- 16 Lukman Hakim dan Aris Nurabwani, "Media Framing in The 2024 Presidential Election Contestation and Its Relevance to Critical, Tolerant, and Moderate Learning in Islamic Higher Education", *Muslim Heritage*, 10, No.1, (2025): 154-168.

while maintaining religious values^{17,18}. Some of the articles on this are *The Rise of Civilization, Strengthening the Optimism of Southeast Asian Muslims* by Azyumardi Azra discussing how NU is involved in modern education and science. Azra explained NU's role in building educational institutions that integrate religious science and science, as well as NU's views on the importance of mastering science for the betterment of the ummah¹⁹. *Practice and the agenda of Islam and science* by Zainal Abidin Bagir published in the journal *Zygon* examines NU's intellectual approach to modern science. Bagir highlighted how NU uses the principles of fiqh and maqasid syariah to understand and accept science in the context of Islam^{20,21}.

NU's View of Science and Technology: A Critical Study of NU's Fatwas by A. Sunarto reviews how NU issues fatwas related to the development of science and technology. Sunarto explores NU's moderate and contextual views on science, as well as how they respond to technological developments^{22,23}. *The Transformation of NU in Indonesia* by Hambali and Hartati is an article that discusses the interaction between religion and science in the Indonesian context, focusing on NU's attitude. They examined how NU supports the development of science, both in religious and secular aspects, and encourages constructive dialogue between the two²⁴. This research is based on a theoretical framework that places religion as an active and dynamic social actor in the global digital space. In understanding the participation of Islamic groups in the development of science through digital publications, the theory of digital participation offered by Saskia Sassen, Beth Simone Noveck, and Manuel Castells provides a strong conceptual foundation. These theories allow for a more critical reading of the relationship between religion, digital technology, and the transformation of authority in networked societies. The three theories complement each other and are contextualized through a phenomenological approach that opens up space for the subjective experiences of religious actors in daily digital practices.

In addition, several previous studies are closely relevant to this research. (Yudistira et al., 2022) demonstrate that, beyond their contribution to the development of scientific knowledge, NU and Muhammadiyah (MD) also play a significant role in fostering harmonious interreligious relations²⁵. Meanwhile, (Mahardhani et al., 2023) reveal the influence of patronage politics in shaping social harmony within society²⁶. Accordingly, this study affirms that NU, MD, and rural kyai hold a strategic role not only in advancing scientific development but also in strengthening

17 Mohamad Sobary, *NU dan Keindonesiaan*, 2 ed. (Jakarta: Gramedia Pustaka Utama, 2013).

18 Fajar Khaswara dan Ilim Abdul Halim, "Studi Agama dan Ekonomi tentang Pengaruh Agama terhadap Etos Kerja dan Kemiskinan," *Gunung Djati Conference Series* 8, no. 2 (2022): 120–30.

19 Azyumardi Azra, "Kebangkitan Peradaban, Memperkuat Optimisme Muslim Asia Tenggara," *Kompas*, 19 September 2022.

20 Bagir, "Practice and the agenda of islam and science."

21 Marwa Ulfa, "Transformasi Komunikasi Dakwah dan Pengaruhnya terhadap Praktik Keagamaan Masyarakat Muslim di Indonesia", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no.2 (2024), 385-399.

22 A. Sunarto, "Paradigma Nahdlatul Ulama Terhadap Modernisasi," *Jurnal Sosiologi Islam* 3, no. 2, Oktober 2013 (2013): 51–74.

23 Lailiyatun Nafisah, Rahman Alwi, Rahman, Sukiyat, dan Saifuddin Yuliar, "Deauthorization of Hadith Studies on The Internet: Shift of Religious Authority in The Digital Age", *Muslim Heritage* 10, No.1, (Juni 2025): 78-90.

24 Hambali dan Hartati, "Transformasi NU di Indonesia: Upaya Menghilangkan Polemik di Tengah Perubahan Politik," *Substantia: Jurnal Ilmu-Ilmu Ushuluddin* 20, no. 1 (2018): 35, <https://doi.org/10.22373/substantia.v20i1.3404>.

25 Yudistira, R., Muta'allim., Nurcaya., Julhadi., & Pattiasina, P. J. "The Role of Linguistics and Local Wisdom on Knowing Harmony between Religions at Tana Toraja". *Jurnal Muslim Heritage*. Vol. 7, No. 2. (Desember 26, 2022): 409-431. <https://doi.org/10.21154/muslimheritage.v7i2.5023>

26 Mahardhani, A. J., Nawiruddin, N., Jalaluddin, J., Julhadi, J., & Muta'allim, M. "The Kyai's Position in Rural Local Democracy Based on Patronage Politics at Tapal Kuda". *Muslim Heritage*, Vol. 8, No. 1. (Juni 29, 2023): 115–132. <https://doi.org/10.21154/muslimheritage.v8i1.6004>

social cohesion within the community. Building on the aforementioned studies, Saskia Sassen offers an important framework for understanding the fundamental changes in power and authority structures in the era of globalization. Sassen argues that authority that was previously centralized in the nation-state undergoes “denationalization” a process in which the dominant functions of the state are shifted to new actors operating in *global assemblages*, that is, dynamic, geographically unbound, and often informal cross-border social spaces^{27,28}. In the context of the digital participation of Islamic groups, this theory helps explain how religious communities such as NU form alternative authorities outside the formal framework of the state or mainstream scientific institutions. They created digital spaces that became an arena for the distribution of Islamic and scientific knowledge at the same time, forming a new form of authority recognized by geographically dispersed virtual communities. This is where the reconstruction of the function of religious representation and digital-based scientific authority occurs, which is no longer only authorized by the state or academic institutions, but also by *networked communities* that inhabit the global social space.

The analysis is grounded in the theoretical perspectives of Saskia Sassen, Beth Simone Noveck²⁹, and Manuel Castells³⁰. Sassen’s concept of denationalized authority highlights the emergence of new social formations beyond the nation-state, enabling religious organizations to operate as influential actors in global and digital arenas³¹. Noveck’s framework of participatory knowledge production underscores the role of citizens including religious communities as active contributors to knowledge creation through digital technologies^{32,33}. Meanwhile, Castells’ notion of the network society emphasizes that power in the digital age is structured through information flows and decentralized networks, allowing religious actors to construct alternative narratives and maintain relevance in rapidly evolving environments^{34,35}.

A number of previous studies examining the role of religious groups in development have generally focused attention on their contributions in the fields of socio-economics, education, and public health. These studies have confirmed the significant role of religious organizations such as MD and NU as non-state actors in improving public welfare through the establishment of schools, hospitals, and other social institutions. However, these studies tend not to explore the specific involvement of Islamic groups in the development of science, especially in the context of network-based digital dissemination. Furthermore, most studies of the relationship between reli-

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- 27 Sassen, *Territory, Authority, Rights: From Medieval to Global Assemblages*. Sassen, *EXPULSIONS: Brutality and Complexity in the Global Economy*; Sassen, *A Sociology of Globalization*.
- 28 Arief Rachman, Theguh Saumantri, dan Taufik Hidayatulloh, “Transformation of Religious Authority in The Digital Era: A Post-Normal Times Analysis by Ziauddin Sardar on The Phenomenon of Social Media Da’wah”, *Jurnal Ilmu Dakwah* 45, no. 1 (30 Juni, 2025) 1693-8054. <https://doi.org/10.2158/jid.45.1.25644>
- 29 Beth Simone Noveck, *Smart Citizens, Smarter State: The Technologies of Expertise and the Future of Governing* (Massachusetts, USA.: Harvard University Press, 2015); Beth Simone Noveck, “Solving Public Problems: A Practical Guide to Fix Our Government and Change Our World” (Connecticut, USA.: Yale University Press, 2021), 320.
- 30 Manuel Castells, *The Rise of the Network Society* (New York: Wiley, 2011).
- 31 Dudy Imanuddin Effendi, Dede Irawan, dan Lilim Abdul Halim, “The Phenomenon of Public Islam Within Urban Da’wah Practices in Bandung” *Jurnal Ilmu Dakwah* 46 No. 1 (18 April, 2026), 1693-8054. <https://doi.org/10.2158/jid.46.1.29603>
- 32 Noveck, *Smart Citizens, Smarter State: The Technologies of Expertise and the Future of Governing.*; Noveck, “Solving Public Problems: A Practical Guide to Fix Our Government and Change Our World.”
- 33 Insan Kamil, Riantino Yudistira, M. Yusuf, Muta’allim, dan Hasan Sayfullah, “Hybrid Learning as An Alternative to Modern Learning Models”, *International Conference on Humanity Education and Society* (ICHES) 2, no. 1, (2023).
- 34 Castells, *The Rise of the Network Society*.
- 35 Muta’allim, Siti Masyarafatul Manna Wassalwa, Siti Nuraini, Yuana Dwi Agustin, dan Damon Wicaksi, “Pesantren as Agent of Wasathiyah on Responding The Problems of The Indonesian Community in The Society 5.0 Era (Case Study of Alumni Abuya Sayyid Muhammad Bin Alawi Al-Maliki)” *International Conference on Humanity Education and Society* (ICHES) 2, no. 1, (2023).

gion and science often place the two entities in an epistemological dichotomy. Religion is considered a normative-dogmatic domain, while science is constructed as an objective-rational domain that stands autonomous from religion. This approach creates an epistemic bias that obscures the fact that in classical Islamic history, the integration between religion and science was once the foundation of great civilizations. Unfortunately, this kind of narrative rarely appears in contemporary studies that highlight the role of Muslims in the transformation of science, especially in digital contexts.

Methodologically, this study employs a phenomenological approach to capture the lived experiences and subjective meanings of religious actors engaged in digital participation^{36,37}. Through in-depth interviews, participatory observation, and digital document analysis, the research explores how Islamic values are integrated into scientific discourse and how digital platforms function as both arenas of da'wah and intellectual engagement. Central Lampung is selected as the research site due to its dynamic religious landscape, strong presence of Islamic organizations, and growing digital initiatives. By involving diverse actors ranging from religious leaders and educators to digital activists and students the study provides a comprehensive account of how religion and science intersect in digital contexts. This research addresses critical gaps in existing literature. While previous studies have highlighted the socio-economic and educational contributions of Islamic organizations, limited attention has been given to their role in the development and digital dissemination of scientific knowledge. Moreover, prevailing approaches often maintain a dichotomy between religion and science, overlooking their potential integration. This study advances the field by combining digital participation theory with a phenomenological lens, thereby offering a nuanced understanding of how religious communities actively shape knowledge production in the digital age. It contributes empirically, methodologically, and theoretically by demonstrating that Islamic digital participation constitutes not merely a form of adaptation, but a strategic reconfiguration of religious authority, knowledge, and social engagement in the networked society.

This study employs a qualitative, phenomenological approach to explore the meanings and subjective experiences of religious actors in engaging in digital participation, particularly in advancing scientific knowledge through digital publications. Guided by Alfred Schutz, it adopts an exploratory-interpretive design to uncover and interpret the roles, motivations, and theological values underlying digital scientific activities of Islamic groups. The research is conducted in Central Lampung Regency, Indonesia, selected due to its predominantly rural population, persistent poverty level, and dynamic religious landscape shaped by organizations such as NU and MD. The participants include NU members actively involved in producing and disseminating digital-based scientific content, such as organizational leaders, educational administrators, and digital da'wah activists. Data are collected through in-depth interviews, participatory observation of digital platforms, and documentation of relevant digital materials. Analysis follows phenomenological procedures, including *epoche*, horizontalization, thematic clustering, and the development of textural-structural descriptions to derive essential meanings. To ensure credibility, the study applies triangulation, member checking, audit trails, and reflexivity. Despite its contributions, the study is limited by its localized scope, non-statistical orientation, and the rapidly evolving nature of digital environments, which may affect the temporal relevance of findings.

36 Alfred Schutz, *The Phenomenology of the Social World* (Evanston, Illinois, USA.: Northwestern University Press, 1967).

37 Muhamad Saiful Mukminin dan Labiq Yafuz, "Religious Moderation Representation on Nu Online Instagram Account; Teun A. Van Dijk's Critical Discourse Analysis", *NAHNU: Journal of Nabdlatul Ulama and Contemporary Islamic Studies* 2, no.2 (31 Desember, 2024), 301-320.

DIGITAL PARTICIPATION OF NAHDLATUL ULAMA IN ADVANCING SCIENTIFIC KNOWLEDGE

NU's participation in Central Lampung Regency in the development of science through digital publications takes various forms, ranging from the development of digital resources, joining virtual forums, the production of Islamic-based educational content, the use of social media to disseminate the results of scientific studies, to the involvement of religious communities in online discussion forums. This content generally integrates Islamic values with modern knowledge, such as scientific discussions around the environment, health, technology, and education, which are linked to the postulates of the Qur'an and hadith³⁸. NU demonstrates significant participation in the advancement of scientific knowledge through the strategic utilization of digital resources. Supported by increasingly accessible network infrastructure and the growing capacity of digital human resources, NU actively employs various social media platforms to engage both its members and the broader public. This aligns with the notion of the networked society proposed by Manuel Castells, in which digital connectivity reshapes knowledge production and dissemination^{39,40}. Through digital forums such as webinars, online conferences, and interactive discussions, NU creates deliberative spaces for addressing contemporary issues, including developments in science and technology. Such practices reflect the concept of participatory knowledge governance emphasized by Beth Simone Noveck, where digital platforms facilitate collaborative engagement and collective intelligence^{41,42}.

The outputs of these engagements ranging from scientific articles and digital books to infographics and educational videos serve as effective instruments for disseminating scientific knowledge while maintaining alignment with Islamic values. Furthermore, NU's digital engagement illustrates a shift in the locus of authority and participation, as theorized by Saskia Sassen, where non-state actors increasingly occupy strategic roles within digital public spheres^{43,44,45}. In the context of Central Lampung, this participation indicates that Islamic groups are not merely reactive to technological change but are actively shaping knowledge ecosystems and enhancing public scientific literacy. The diversity of approaches adopted by these groups highlights their adaptability in leveraging digital platforms to achieve shared educational and intellectual goals. Consequently, the participation of Islamic organizations in digital-based scientific development should be understood not merely as a contemporary trend, but as a strategic and transformative effort to support educational advancement and democratize access to knowledge in the digital

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- 38 Maslahus Surur, Wawancara dengan penulis, Partisipasi NU Lampung Tengah dalam Pengembangan Sains melalui Publikasi Digital, 6 Februari 2025.
- 39 Castells, M, *"The Rise of the Network Society (2nd ed.)"*. (Wiley-Blackwell, 2010).
- 40 Riduwan dan Erwan Aristyanto, "Digital Transformation of Waqf Management: Innovation Pathways and Policy Directions in Muslim-Majority Developing Countries", *Muslim Heritage* 10, No.2, (04 Desember, 2025), 307-325.
- 41 Noveck, B. S, *"Smart Citizens, Smarter State: The Technologies of Expertise and the Future of Governing"*, (Harvard University Press, 2015).
- 42 Marwa Ulfa, "Transformasi Komunikasi Dakwah dan Pengaruhnya terhadap Praktik Keagamaan Masyarakat Muslim di Indonesia", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no.2 (31 Desember, 2024), 385-399.
- 43 Sassen, S, *"Territory, Authority, Rights: From Medieval to Global Assemblages"*, (Princeton University Press, 2006).
- 44 Syarnubi, Septia Fahiroh, dan Ahmed J. Obaid, "Integration of Islamic Values in The Ningkuk Ritual: A Model of Character Education Based on Local Wisdom in South Sumatra", *Muslim Heritage* 10, no.2, (Desember 2025), 169-184.
- 45 Akhmad Sofyan, Mochamad Bayu Firmansyah, Muta'allim, Everhard Markiano Solissa, dan Fahrur Rosikh, "Islamic Boarding School Linguistic Landscape In The Development Of Arabic Language Skills And Islamic Knowledge" *International Journal of Educational Research & Social Sciences* 3, no. 6 (27 Desember, 2022), 2178-2185.

era. This contribution extends beyond internal community benefits, offering broader societal value by providing accessible, relevant, and ethically grounded scientific information.

DEVELOPMENT OF DIGITAL RESOURCES

The development of digital resources by NU Central Lampung Regency aims to first, expand the reach of da'wah. Reach more people through digital platforms. Second, strengthen communication, facilitate communication between management, members, and the community. Third, improving the quality of education, namely providing quality and easily accessible learning materials. Fourth, presenting accurate and relevant information, providing correct and up-to-date information to the public. Fifth, increase community participation and encourage the community to be actively involved in NU activities^{46,47,48}. Digital resources that have been prepared by NU Central Lampung are any form of materials, information, or tools that are available in electronic/digital format and can be accessed through technological devices such as computers, smartphones, or the internet.

Institutions at NU have made efforts to increase the availability of stable and adequate internet access in all NU educational institutions. Then the hardware management is to provide adequate hardware, such as computers, laptops, and projectors, to support technology-based learning activities. The construction of digital classrooms is designing and building classrooms equipped with modern technology facilities, such as smart boards and audio-visual systems at SMK Ma'arif which opens an information technology department^{49,50}. Other digital resources that have also been held are online platforms, namely the use of social media, *E-Learning* and websites. Some of the efforts made by NU Central Lampung in developing and utilizing social media platforms are by forming online groups and communities. NU actively forms groups and communities on platforms such as Facebook, Instagram and WhatsApp for discussions, sharing religious knowledge, and coordinating activities. Some of the kyai and NU administrators live *stream* religious studies or deliver directions/information through platforms such as *Facebook Live* and *Instagram Live*^{51,52}.

WhatsApp is an instant messaging app that allows text, voice, and video communication in person and in groups. Facebook is the largest platform for interacting with friends, family and communities. Allows sharing of text, images, videos, and creating pages and groups. Instagram mainly focuses on sharing images and short videos. Has Stories and Reels features for content that is temporary or short-form video formats. YouTube is the largest video-sharing platform

46 Surur, interview

47 Muhammad Arwani Rofi'I dan Siti Fatimatuz Zahroh, "Peran Nahdlatul Ulama (NU) dalam Menjaga Keharmonisan Umat Beragama di Era Disrupsi Digital", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no. 2 (31 Desember, 2024), 339-368.

48 Achmad Tohari, "Respon Masyarakat Pedesaan terhadap Digitalisasi di Kalangan Nahdlatul Ulama", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no. 2 (31 Desember, 2024), 369-384.

49 Imron Nafis, wawancara dengan penulis, Partisipasi NU Lampung Tengah dalam Pengembangan Sains melalui Publiasi digital, 22 Oktober 2024.

50 Insan Kamil, Riantino Yudistira, M. Yusuf, Muta'allim, dan Hasan Sayfullah, "Hybrid Learning as An Alternative to Modern Learning Models", *International Conference on Humanity Education and Society (ICHES)* 2, no. 1, (2023).

51 Mustajab Mujahidin Mustaqim, wawancara dengan penulis, Partisipasi NU Lampung Tengah dalam Pengembangan Sains melalui Publiasi digital, 30 September 2024.

52 Muhammad Arwani Rofi'I dan Siti Fatimatuz Zahroh, "Peran Nahdlatul Ulama (NU) dalam Menjaga Keharmonisan Umat Beragama di Era Disrupsi Digital", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no. 2 (31 Desember, 2024), 339-368.

that allows users to upload, watch, and interact with videos from different categories⁵³. Surur conveyed several social media managed by Nahdlatul Ulama Central Lampung, the first of which is Facebook. Currently, almost all Nahdlatul Ulama structures, schools, madrasas, Islamic boarding schools and banom maintain Facebook pages to publish their activities and opinions as well as as a means of communicating with others⁵⁴.

The digital presence of NU in Central Lampung is reflected in the systematic use of multiple social media platforms to support communication, education, and knowledge dissemination. On Facebook, for instance, digital engagement is managed by organizational and educational units such as the IPNU–IPPNU Branch Leadership of Central Lampung Regency (https://web.facebook.com/ipnuippnulamteng/?_rdc=1&_rdr) and the Nurul Qodiri Islamic Boarding School in Bandar Lampung Tengah (https://web.facebook.com/pondokpesantrennurulqodiri/?_rdc=1&_rdr). Similarly, Instagram has become a widely utilized platform across NU structures, including schools, madrasas, pesantren, and affiliated bodies (*banom*), functioning both as a medium for publishing institutional activities and fostering interactive communication. An example is the account managed by Darul Hikam Islamic Boarding School, Seputih Mataram, Central Lampung (https://www.instagram.com/ponpes_darulhikam/). In addition, YouTube serves as a strategic platform for educational outreach and digital da'wah. Several NU-affiliated institutions operate dedicated channels, including the Darussa'adah Islamic Boarding School, Mojoagung, Central Lampung (<https://www.youtube.com/@Ppdsmojoagung1986>), which provides access to a range of educational and religious content. Collectively, these platforms illustrate the adaptive capacity of NU institutions in leveraging digital media to expand their educational influence and public engagement.

NU of Central Lampung Regency, through its educational institutions, especially universities, has utilized digital technology to support learning, teaching, and research activities. Some examples of the use and development of digital platforms carried out by NU in Central Lampung are online learning such as online learning platforms, online courses and virtual workshops. Many educational institutions affiliated with NU in Central Lampung have taken advantage of online learning platforms⁵⁵. This platform provides a variety of religious learning materials, such as Quranic interpretation, hadith, and fiqh. Nahdlatul Ulama Central Lampung also organizes various online courses, both general and special. For example, courses on leadership, entrepreneurship, or digital expertise. NU often holds webinars and virtual workshops to discuss current issues relevant to society. This activity involved speakers from various backgrounds and was attended by participants from all over Indonesia^{56,57}. Kurniawan added that online teaching, namely virtual classes and digital learning media, has been widely carried out by NU educational institu-

53 Muhammad Ainul Yaqin et al., “Peran Masyarakat dalam Perkembangan Iptek yang Semakin Maju,” *Journal of Community Service and Engagement* 2, no. 6 (2022): 44–52; Kun Wazis, “Pertarungan persepsi budaya maya dalam masyarakat digital,” no. 1 (n.d.): 1–15.

54 Hafidhoh Ma'rufah, “The Transformation of Religious Authority in The Era Of New Media: Analyzing Disparities in Opportunities Between Female and Male Ulama in The Nahdlatul Ulama Online MEDIA”. *Jurnal Sosiologi Reflektif*, 18, no. 1, (2023) : 63-88. <https://doi.org/10.14421/jsr.v18i1.2956>

55 Muta'allim, “Kh. Hasyim Muzadi's Language Politeness Strategies in Responding The Different Perspective Between Nahdlatul Ulama and Muhammadiyah: a Sociopragmatic Study”, *Muslim Heritage*, Vol.10, No.1, (Juni 23, 2025): 54-77, <https://doi.org/10.21154/muslimheritage.v10i1.10951>

56 Ahmad Syarif Kurniawan, wawancara dengan penulis, Partisipasi NU Lampung Tengah dalam Pengembangan Sains melalui Publiasi digital, 20 Januari 2025.

57 Muhamad Saiful Mukminin, “Quantifying Environment in NU Online Media: Corpus-Based Ecolinguistic Discourse Analysis Perspective”, *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 3, no. 2 (31 Desember, 2025), 537-554.

tions in Central Lampung, namely by adopting a virtual classroom system for teaching and learning activities. Platforms like Zoom and Google Meet are widely used to hold online classes. NU educational institutions also develop various digital learning media, such as learning videos, e-books, and online modules. This media can be accessed by students independently

Several Leaders of the Central Lampung NU Branch Representative Council, Banom and NU educational institutions have provided websites that can be used to publish content periodically, such as articles, opinions, tutorials, or NU activities. Websites managed by NU Lampung Tengan include <https://nulamteng.or.id/> is a website managed by the Central Lampung NU Branch Leader; <https://staimaarifkalirejo.ac.id/> is a website managed by the Ma'arif Kalirejo Islamic Religious College; <https://nurulqodiripesantrenku.blogspot.com/2020/02/> is a website managed by the Nurul Qodiri Islamic Boarding School of Central Lampung which is an educational institution affiliated with NU Central Lampung and <https://pcipnuippnulampungtengah.blogspot.com/> is a website managed by the male and female students of NU Central Lampung.

ONLINE FORUMS AS DIGITAL KNOWLEDGE DISSEMINATION PLATFORMS WITHIN NAHDLATUL ULAMA

Online forums in the context of this discussion refer to the dissemination of science through webinars, conferences, regular studies and online discussions. Webinars are seminars held online, allowing remote participation by using streaming video and audio. A virtual conference is a larger event that typically involves a variety of talk sessions, panel discussions, and networking between participants, which are held virtually. Online discussions are interactive forums for online exchange of opinions and regular online studies are regular online meetings to delve into specific topics (e.g. religion, science, literature)⁵⁸. Online forums in the form of webinars attended by residents and administrators of NU Central Lampung in the 2022-2023 period include the Webinar on the New Paradigm of Disasters and Climate Change | National Seminar of the National Coordination Meeting of LPBI NU. <https://www.youtube.com/watch?v=DK6CA7rSI50>; Webinar on the Transformation of the NU Economic Movement by UNU and UMI, February 15, 2023. https://www.youtube.com/watch?v=k4czY_P82Eo; Webinar on Fiqh of NU Civilization for Nationality and Humanity, by Lazisnu, October 21, 2022. <https://www.youtube.com/watch?v=A6nyTT-hTUs>; A larger event that typically involves a variety of talk sessions, panel discussions, and networking between participants, which is held virtually^{59,60,61}.

Kurniawan said that several conferences were also attended by the Central Lampung Nahdlatul Ulama, including *ASEAN Intercultural and Interreligious Dialogue Conference 2023* by PBNU. <https://www.youtube.com/watch?v=xohjgI8MC54> and the 2023 National Conference

58 Abdurrozzaq Hasibuan dan oris kianto Sulaiman, "Smart City, Konsep Kota Cerdas Sebagai Alternatif Penyelesaian Masalah Perkotaan Kabupaten/Kota," *Buletin Utama Teknik* 14, no. 2 (2019): 127–35, <https://jurnal.uisu.ac.id/index.php/but/article/view/1097>; Leopoldina Fortunati dan John O'Sullivan, "Convergence crosscurrents: Analog in the digital and digital in the analog," *Information Society* 36, no. 3 (2020): 160–66, <https://doi.org/10.1080/01972243.2020.1737608>.

59 Kurniawan, interview.

60 K. A. Bukhori, Kun Budianto, Erniwati, dan Moh. Faizal, "Religious Authority and Political Dynamics: The Influence of Fatwa Issuance by Religious Institutions on Political Discourses in Indonesia", *Muslim heritage* 10, No. 2, (31 Desember, 2025), 251-266.

61 Muhammad Yusuf Pratama dan Ahmad Nabil Annuha, "Digital Da'wah Transformation of Nahdlatul Ulama: Religious Moderation Strategies in the Technological Era", *NAHNU: Journal of Nabdlatul Ulama and Contemporary Islamic Studies*, 2, no.2 (2024): 321-338.

on Digital Economy and Sustainable Development by LPTNU. <https://www.youtube.com/watch?v=RArme2wUS7A>. Residents and administrators of Nahdlatul Ulama and Banom are also involved in regular online meetings to delve into certain topics such as religion and science. Some of these online routine studies include Weekend Discussion of Santri, Science, & Technology: Towards 100 Years of Nahdlatul Ulama. By PBNU. Saturday, 6 February 2021 <https://www.youtube.com/watch?v=ZRvflpTBpLE>; Technological Disruption, Vuca, and the NU Young Generation, by LTN PBNU. 14-series online review starting October 31, 2020 https://www.youtube.com/watch?v=i_nac9ZgiI; dan Diskusi & Webinar Pendidikan Islam Masa Depan oleh PWNU Jawa Barat. 9 Oktober 2021. https://www.youtube.com/watch?v=gfHJjd_m7U^{62,63}. The invitation to participate in webinars, conferences, online discussions and online routine studies was conveyed through WhatsApp groups within the scope of the Central Lampung Nahdlatul Ulama Branch Management, especially in the institutions in charge. NU campuses in Central Lampung also often hold webinars, online conferences and online discussions^{64,65}.

SCIENCE PUBLICATIONS

Publications here include the publication of scientific articles, the dissemination of digital books, infographics and visual content, educational videos, podcasts and audio studies, and the dissemination of digital competitions. The science content disseminated is the creation of the group's own members and also content produced by non-groups^{66,67}. NU in Central Lampung Regency, especially through the Ma'arif Kalirejo Islamic Religious College and several universities affiliated with NU, have produced several scientific and research publications in the form of articles, especially in the fields of religion and education, which are published in the journals they publish. Among these journals is the Journal of Sharia Science: Al Wathan. Al Wathan is a scientific journal published by the Darussyafa'ah College of Sharia Sciences Kota Gajah Lampung. This journal covers a wide range of relevant issues in Sharia science. aims to provide a means of continuous discussion in the field of applied science. The journal began publication in January 2021 and has undergone rapid development in terms of quality and indexation; Journal of Islamic Business and Banking: Margin. Margin is one of the journals published by the Ma'arif Kalirejo Islamic College of Lampung.

The journal focuses on business and banking issues in the Islamic context, making an important contribution to the development of science in the field; and Journal of Islamic Education: Dimar. Dimar is one of the journals published by the Almubarak Umam Agung College of Sciences, Bandar Mataram, Central Lampung. The journal focuses on educational issues in the Is-

62 Kurniawan, interview.

63 Rachman, A., Saumantri, T., & Hidayatulloh, T, "Transformation of Religious Authority in The Digital Era: A Post-Normal Times Analysis by Ziauddin Sardar on The Phenomenon of Social Media Da'wah". *Jurnal Ilmu Dakwah*, 45, no. 1, (2025) : 107–122. <https://doi.org/10.21580/jid.v45.1.25644>

64 Kurniawan, interview.

65 Marwa Ulfa, "Transformasi Komunikasi Dakwah dan Pengaruhnya terhadap Praktik Keagamaan Masyarakat Muslim di Indonesia", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no.2 (2024), 385-399.

66 Eny Supriati, Tiara Widya Antikasari, dan Komarudin, "Strategic Model for Strengthening Digital Literacy at UIN Ponorogo and UIN Kediri: Synergy of Curriculum and Educational Programs", *Muslim Heritage* 10, No.1, (14 Juni, 2025), 106-126.

67 Dumiyati, Aries Musnandar, Julhadi, Zaedun Na'im, dan Muta'allim, "The Development of Islamic Education Curriculum on Building Religious Moderation at Manbaul Ulum Islamic Boarding School", *AL-WIJDÁN: Journal of Islamic Education Studies* 8, No. 3 (Juli, 2023), 359-381.

lamic context, making an important contribution to the development of science in the field⁶⁸. In addition, there are hundreds of digital media such as WA Group, Facebook, Instagram, Youtube and Website, which can be used for science publications made by Nahdlatul Ulama of Central Lampung Regency both institutionally and individually, this social media is a means of exchanging information and knowledge⁶⁹. Books in digital format were uploaded several times in the WA NU Central Lampung groups, including “Risalah AhlusSunah wal Jama’ah”. Author: KH. Hasyim Asy'ari (Founder of Nahdlatul Ulama)⁷⁰. Discussing the theological principles of AhlusSunah wal Jama'ah which is the basis of Nahdlatul Ulama; "Al-Qanun al-Asasi li Jam'iyah Nahdlatul Ulama", is the official document of Nahdlatul Ulama on the basic principles of organization, history, and goals of Nahdlatul Ulama; Aswaja An-Nahdliyah: Teachings and Thoughts" LTN NU's collective work on the principles of AhlusSunah wal Jama'ah ala Nahdlatul Ulama⁷¹.

Nurhayati said that infographics and visual content with attractive appearances are also often shared in WA, Facebook and Instagram groups, including the first is the “Zakat for Humanity” Infographic by LAZISNU; second, the “Religious Moderation” Poster from LTN NU on tolerance; third, Digital Book “Qonun Asasi Nahdlatul Ulama” with interesting illustrations. Educational Videos, Podcasts and Audio Studies on religion and science are also often shared on NU Central Lampung social media groups, such as the study videos of Gus Baha and KH. Said Agil Sirodj, Basic Cadre Training of Fatayat NU Central Lampung.

Podcasts that have been shared like Alissa Wahid: Why Are There Gusdurians in Indonesia?. Kick AndiShow. <https://www.youtube.com/watch?v=QjCPNbH2gRo>. Prof. Nadirsyah Hosen: PBNU Movement supports Prabowo-GibranPutCast. Mojokdot.co. <https://www.youtube.com/watch?v=E2yfebPk0-8&t=1610s> and. Martin van Bruinessen: Tarekat, NU, and Dunia Kiai, NU Online, <https://www.youtube.com/watch?v=lQHJzQhM7uA&t=2805s>.⁷² Institutions in the Executive Board of Nahdlatul Ulama (PBNU) have held digital competitions several times. The competition is open to all residents, including residents of NU in Central Lampung. The first of several competitions that was held was the "Gebyar Toleransi Indonesia" Creative Content Competition by the Institute for Human Resources Studies and Development (Lakpesdam) of PBNU in November 2023⁷³. Second, a short film competition with the theme Heroes According to You, by Lazisnu PBNU in 2024. Third, the kyai face digital painting competition by PBNU in October 2023⁷⁴. From Beth Simone Noveck's perspective, this form of participation reflects the *co-creation of public knowledge* by citizens driven by belief, not solely by institutional authority. Digital publication initiatives by students, ustaz, madrasah teachers, and Islamic media activists show that science does not only belong to the state bureaucracy or formal academics, but can also be pro-

68 Surur, interview.

69 Muhammad Yusuf Pratama dan Ahmad Nabil Annuha, “Digital Da'wah Transformation of Nahdlatul Ulama: Religious Moderation Strategies in the Technological Era”, *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies*, 2, no.2 (2024): 321-338.

70 Muta'allim, “Kh. Hasyim Muzadi's Language Politeness Strategies in Responding The Different Perspective Between Nahdlatul Ulama and Muhammadiyah: a Sociopragmatic Study”, *Muslim Haeritage*, 10, No.1, (Juni 23, 2025): 54-77, <https://doi.org/10.21154/muslimheritage.v10i1.10951>

71 Nurhayati, wawancara dengan penulis, Partisipasi NU Lampung Tengah dalam Pengembangan Sains melalui Publiasi digital, 17 Januari 2025.

72 Nurhayati, interview.

73 Muhamad Saiful Mukminin dan Labiq Yafuz, “Religious Moderation Representation on Nu Online Instagram Account; Teun A. Van Dijk's Critical Discourse Analysis”, *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no.2 (31 Desember, 2024), 301-320.

74 Kurniawan, interview.

duced by ordinary citizens who are religiously motivated. Meanwhile, Saskia Sassen will see this phenomenon as part of *the reassembling authority*, where epistemic power in society is being restructured through digital channels. The production of science discourse by Islamic groups through YouTube platforms, blogs, podcasts, or social media has shifted some of the role of formal institutions such as universities or research institutions in defining 'legitimate science'^{75,76}.

From Manuel Castells' side, these forms of participation are expressions of *self-programmable actors in a network society*, who no longer wait for legitimacy from the state or central organization, but build their authority through a network of digital communities. Islamic groups, in this case, become important nodes in the horizontal network of knowledge production. Saskia Sassen in the idea of digital participation emphasizes that the digital space is not just a technological medium, but a new social space that allows for a shift in power and the articulation of new identities by previously marginalized groups. In this perspective, digitalization opens up new opportunities for participation for religious communities, including Islamic groups, in the process of production and dissemination of science^{77,78}. With a phenomenological approach, the subjective experience and meaning provided by Islamic actors in Central Lampung Regency to digital activities are the central point in understanding this participation. According to Sassen, digital infrastructure is not just a technical object, but is part of the social architecture that forms *a networked public* space where people can interact collectively through digital technology. In the context of Central Lampung, Islamic groups show active involvement in building digital resources which include the development of local internet networks and community-based digital platforms such as da'wah sites, study applications, and community YouTube channels⁷⁹.

Phenomenologically, for Islamic groups in Central Lampung, this infrastructure is not just a tool, but is interpreted as a medium of worship and science da'wah, as well as a symbol of community independence⁸⁰. Digital infrastructure is a bridge between Islamic values and the spirit of modernization of science, which was previously considered foreign or even secular. In their day-to-day experience, infrastructure management has become a new way to take on a role in the "global digital stage" as Sassen describes it. Sassen emphasized the importance of digitized spaces as a new articulation arena that is not always centralized. Online forums such as webinars, virtual studies, and online discussions conducted by Islamic groups in Central Lampung show how virtual spaces allow for the democratization of scientific participation. Technology is used not only to disseminate knowledge, but also as a collaborative tool that brings together actors from various backgrounds in inclusive scientific discussions⁸¹. In the phenomenological approach, the par-

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- 75 Muhammad Yusuf Pratama dan Ahmad Nabil Annuha, "Digital Da'wah Transformation of Nahdlatul Ulama: Religious Moderation Strategies in the Technological Era", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies*, 2, no.2 (2024): 321-338.
- 76 Insan Kamil, Riantino Yudistira, M. Yusuf, Muta'allim, dan Hasan Sayfullah, "Hybrid Learning as An Alternative to Modern Learning Models", *International Conference on Humanity Education and Society (ICHES)* 2, no. 1, (2023).
- 77 A. Sunarto, AS. "Paradigma Nahdlatul Ulama Terhadap Modernisasi." *Jurnal Sosiologi Islam*, Vol. 3, No. 2, (Oktober, 2013): 51-74.
- 78 Lailiyatun Nafisah, Rahman Alwi, Rahman, Sukiyat, dan Saifuddin Yuliar, "Deauthorization of Hadith Studies on The Internet: Shift of Religious Authority in The Digital Age", *Muslim Heritage* 10, No.1, (Juni 2025): 78-90.
- 79 Marwa Ulfa, "Transformasi Komunikasi Dakwah dan Pengaruhnya terhadap Praktik Keagamaan Masyarakat Muslim di Indonesia", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no.2 (2024), 385-399.
- 80 Muhamad Saiful Mukminin, "Quantifying Environment in NU Online Media: Corpus-Based Ecolinguistic Discourse Analysis Perspective", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 3, no. 2 (31 Desember, 2025), 537-554.
- 81 Insan Kamil, Riantino Yudistira, M. Yusuf, Muta'allim, dan Hasan Sayfullah, "Hybrid Learning as An Alternative to Modern Learning Models", *International Conference on Humanity Education and Society (ICHES)* 2, no. 1,

ticipants of this forum interpreted online meetings as a form of self-actualization in the modern world, as well as a way of worship that is not interrupted by space and time. Participation in online forums is seen as a collaborative effort between religion and science, where science is no longer positioned as something alien or neutral, but as part of religious responsibility.

Technology such as Zoom, Google Meet, or even WhatsApp groups have become a medium for expression and strengthening community-based Islamic intellectual identity⁸². In line with Sassen, these forums become spaces of engagement where Islamic identity and scientific modernity are actively and productively negotiated. Saskia Sassen in the theory of digital participation emphasized that digital publications are part of the production of discourse spaces that are able to form alternative information flows. In Central Lampung, science publications by Islamic groups include various forms such as scientific articles, educational videos, scientific podcasts, and educational visual content that are produced and disseminated through various digital channels⁸³. From a phenomenological perspective, this publication action is interpreted as intellectual jihad, which is the struggle to disseminate knowledge inspired by Islamic values but based on scientific methods. Publication is not only a means of sharing information, but also a form of expression of values, ideology, and collective identity. Both content created by itself and adopted from outside, becomes a renarrative that is adapted to local needs and religious norms.

Within the framework of Sassen's thought, this action is a form of takeover of the space of digital representation, in which local Islamic groups produce counter-narratives to the dominance of secular knowledge. They are not just consumers, but active producers in the global digital ecosystem, even though they are based in suburban areas such as Central Lampung. Through three forms of digital participation, resource development, online forums, and science publications, Islamic groups in Central Lampung have shown active and significant involvement in the development of digital-based science⁸⁴. In Saskia Sassen's perspective, this is a form of takeover of digital space by previously marginalized non-state and non-institutional actors. Meanwhile, from a phenomenological approach, this participation is meaningful as a way for the community to build its new world of life in the midst of modernization and digitalization, without losing its religious identity.

PARTICIPATION PATTERNS: FROM INDIVIDUAL INITIATIVES TO DIGITAL COLLECTIVITY AWARENESS

The participation of NU organization in the development of science through digital publications in Central Lampung Regency can be explained through several stages. This stage reflects the process of adaptation, innovation, and the contribution of NU in utilizing digital technology to support the development of science. NU Central Lampung realizes the importance of integrating science and technology in education and da'wah⁸⁵. This awareness emerged in response to the

(2023).

- 82 Muhammad Yusuf Pratama dan Ahmad Nabil Annuha, "Digital Da'wah Transformation of Nahdlatul Ulama: Religious Moderation Strategies in the Technological Era", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies*, 2, no.2 (2024): 321-338.
- 83 Muhamad Saiful Mukminin dan Labiq Yafuz, "Religious Moderation Representation on Nu Online Instagram Account; Teun A. Van Dijk's Critical Discourse Analysis", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no.2 (31 Desember, 2024), 301-320.
- 84 Marwa Ulfa, "Transformasi Komunikasi Dakwah dan Pengaruhnya terhadap Praktik Keagamaan Masyarakat Muslim di Indonesia", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no.2 (2024), 385-399.
- 85 Muhamad Saiful Mukminin, "Quantifying Environment in NU Online Media: Corpus-Based Ecolinguistic Discourse Analysis Perspective", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 3, no. 2

times and the need for science literacy. NU began to identify the potential and challenges in utilizing digital technology for the dissemination of science. For this purpose, socialization of the importance of science and technology among Islamic boarding schools and the community is carried out. In this stage, basic training on the use of digital technology was also carried out for Nahdlatul Ulama cadres and administrators⁸⁶.

The activities carried out by NU Central Lampung at this stage include: (1) internal discussions on the relevance of science in Islam and everyday life; (2) socialization on the importance of science and technology through seminars, workshops, and social media campaigns; (3) outreach on the use of digital platforms to access and disseminate scientific information as a medium for da'wah and education; and (4) the organization of workshops on scientific writing and the production of educational video content to generate high-quality digital materials. NU focuses on increasing the capacity of human resources and digital infrastructure. This is done through training, workshops, and the procurement of technological devices to support digital publications. Jam'iyah also conducts training on scientific content writing and digital platform management, the creation of educational content such as articles, videos, and e-books about science and religion and no less important is the development of the official website of the Central Lampung Branch of NU as a publication media⁸⁷. In the awareness phase, NU Central Lampung has fulfilled the 4 (four) indications given, namely internal discussions about the relevance of science in Islam and development, socialization about the importance of science and the use of digital platforms as well as carrying out workshops on writing scientific articles and creating educational video content.

INITIATION

With the awareness of the importance of digital publications, especially in the spread of Islam and the development of science, NU Lampung Tengah, along with its Institutions and Municipalities have initiated the creation and development of digital content with religious and science materials. in the form of writing, pictures, videos or others that meet the needs of the community⁸⁸. This content is designed for education, da'wah, and inspiration. Some of the things that have been done include writing articles, making videos, and designing infographics about science from the perspective of NU. Then hold a study or workshop on writing scientific articles and creating educational video content to produce quality content. NU actively produces and disseminates scientific content through digital platforms. Publications are carried out in the form of scientific articles, e-books, and online journals through websites and social media. The creation of educational videos about science is also uploaded on platforms such as YouTube. In addition, NU collaborates with several parties to produce quality content⁸⁹.

The content that has been created is published through various digital platforms, such as

(31 Desember, 2025), 537-554.

- 86 Mahardhani, A. J., Nawiruddin, N., Jalaluddin, J., Julhadi, J., & Muta'allim, M. "The Kyai's Position in Rural Local Democracy Based on Patronage Politics at Tapal Kuda". *Muslim Heritage*, Vol. 8, No. 1. (Juni 29, 2023): 115–132. <https://doi.org/10.21154/muslimheritage.v8i1.6004>
- 87 Muta'allim, "Kh. Hasyim Muzadi's Language Politeness Strategies in Responding The Different Perspective Between Nahdlatul Ulama and Muhammadiyah: a Sociopragmatic Study", *Muslim Heritage*, Vol.10, No.1, (Juni 23, 2025): 54-77, <https://doi.org/10.21154/muslimheritage.v10i1.10951>
- 88 Rachman, A., Saumantri, T., & Hidayatulloh, T, "Transformation of Religious Authority in The Digital Era: A Post-Normal Times Analysis by Ziauddin Sardar on The Phenomenon of Social Media Da'wah". *Jurnal Ilmu Dakwah*, 45, no. 1, (2025) : 107–122. <https://doi.org/10.21580/jid.v45.1.25644>
- 89 Yudistira, R., Muta'allim., Nurchaya., Julhadi., & Pattiasina, P. J. "The Role of Linguistics and Local Wisdom on Knowing Harmony between Religions at Tana Toraja". *Jurnal Muslim Heritage*, 7, No. 2. (Desember 26, 2022): 409-431. <https://doi.org/10.21154/muslimheritage.v7i2.5023>

websites, social media, and mobile applications. The goal is to reach the widest possible audience. Activities at this stage are creating websites or blogs dedicated to science, uploading content to platforms such as YouTube, Instagram, and Facebook, sharing articles and e-books via WhatsApp, holding webinars or live streams on science topics, developing mobile applications for younger access Educational videos about science uploaded on social media platforms, such as Facebook, WA groups, Instagram and youtube channels, socialize webinar activities or scientific discussions, participate in webinar activities or live streaming on science topics or in conferences and other scientific events⁹⁰. NU expands its collaboration network with various parties. This collaboration aims to strengthen the content of digital publications and increase the social impact of the programs carried out. Cooperation with universities for scientific research and publications. Participation in seminars and conferences on science and technology. Development of community-based science literacy programs. NU Central Lampung collaborates with various parties to improve the quality and credibility of published content⁹¹. Some of the things that have been done are holding webinars or online conferences on science, partnering with universities or research institutes, cooperation with universities for scientific research and publications, Participation in national seminars and conferences on science and technology, development of community-based science literacy programs⁹².

The collaboration and networking strengthen the content of digital publications and increase the social impact of the programs carried out. The organization also participates in seminars and conferences on science and technology. In addition, by utilizing the diverse backgrounds of NU residents in Central Lampung, digital community groups such as the Indonesian Muslim Arts and Culture Institute (Lesbumi) NU and the Indonesian Hadroh Art Association (Ishari) NU were formed for the development of community-based science literacy programs⁹³. In the initiation phase, NU has also carried out 9 existing indications, namely article writing, making educational videos, designing infographics and visual content, creating a website specifically for science, uploading science content to the Youtube, Instagram, Facebook and WhatsApp Group platforms, uploading e-books, participating in online forums, partnering with other institutions and developing community-based science literacy. Patterns of participation in digital publications can be grouped into three categories: (a) individual-based participation, (b) institution-based participation, and (c) community-based participation. In the early stages, many initiatives emerged from individuals such as Islamic boarding school teachers or da'wah activists who developed blogs or YouTube channels. However, as digital engagement increases, Islamic educational institutions (e.g. madrassas or Islamic boarding schools) begin to encourage the development of official media featuring scientific works and contemporary Islamic thought⁹⁴. Eventually, a religious digital community was formed that collectively curated, edited, and disseminated scientific knowledge packaged in Islamic narratives.

90 Wuryanta, Ag. E. W. "Digitalisasi Masyarakat: Menilik Kekuatan dan Kelemahan Dinamika Era Informasi Digital dan Masyarakat Informasi." *Jurnal Ilmu Komunikasi*, 1, No. 2 (Desember, 2004): 131-142. <https://doi.org/10.24002/jik.v1i2.163>.

91 Yaqin, Muhammad Ainul., Purwanto, Agung., Yanuar, Hanif Fadli., Wahyudi, Jodi., Prasetya, Putra Febtiar., Putra, Roby Perdiansyah., & Asbari, Masduki. "Peran Masyarakat dalam Perkembangan Iptek yang Semakin Maju." *Journal of Community Service and Engagement*, Vol. 2, No. 6 (Desember, 2022): 44-52.

92 Surur, interview.

93 Rachman, A., Saumantri, T., & Hidayatulloh, T, "Transformation of Religious Authority in The Digital Era: A Post-Normal Times Analysis by Ziauddin Sardar on The Phenomenon of Social Media Da'wah". *Jurnal Ilmu Dakwah*, 45, no. 1, (2025) : 107–122. <https://doi.org/10.21580/jid.v45.1.25644>

94 Achmad Tohari, "Respon Masyarakat Pedesaan terhadap Digitalisasi di Kalangan Nahdlatul Ulama", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 2, no. 2 (31 Desember, 2024), 369-384.

Beth Noveck calls this pattern distributed *innovation* a knowledge governance that develops in a decentralized, participatory, and open manner. The public is not only a consumer of information, but an active producer in the system of science production based on Islamic values. Saskia Sassen would identify this pattern as the *denationalization of authority*, in which epistemic resources and legitimacy are no longer exclusively owned by state institutions or formal education. This process shows how the digital space becomes a new field of articulation of authority that is not tied to the territorial boundaries of the country⁹⁵. Castells emphasized that this pattern reflects *mass self-communication*, which is when scientific narratives are formed personally but can reach a wide public through digital media. This pattern goes beyond the boundaries of formal organization and strengthens the autonomy of the network. Thus, the digital space is not a neutral arena, but a space for contesting identity, knowledge, and power. In it, local Islamic groups not only survived, but formed new practices that enriched the discourse of science from a religious, local, and participatory point of view.

EVALUATION AND DEVELOPMENT

At the evaluation and development stage, NU in Central Lampung adopts a systematic and evidence-based approach to enhance the effectiveness, quality, and impact of its digital knowledge dissemination. This phase is crucial, as it ensures that digital participation is not merely performative but continuously refined through measurable indicators and reflective practices. Evaluation is conducted through an integrated framework that combines quantitative digital analytics with qualitative feedback mechanisms, thereby enabling NU to align its content strategies with audience needs and broader educational objectives. The first key activity involves analyzing audience responses using digital metrics such as views, likes, shares, and engagement rates across various platforms⁹⁶. These indicators provide immediate insights into the reach, visibility, and resonance of published content. By examining patterns of interaction, NU is able to identify which types of content whether educational videos, scientific articles, or religious lectures generate the highest levels of engagement. This data-driven approach reflects an adaptive strategy in navigating the logic of digital platforms, where algorithmic visibility often determines the extent of public exposure.

Second, NU conducts surveys to assess public satisfaction and to map audience needs more comprehensively. These surveys function as an important feedback loop, allowing content producers to understand not only audience preferences but also gaps in knowledge dissemination. Through this process, NU can recalibrate its thematic focus, presentation style, and communication strategies to ensure that its outputs remain relevant, accessible, and responsive to contemporary societal challenges, particularly in the domains of science and religion⁹⁷. Third, statistical analysis of visitor traffic and interaction patterns is undertaken to provide a more nuanced understanding of digital engagement. This includes monitoring website analytics, tracking user behavior, and evaluating the duration and depth of content consumption. Such analysis enables

95 Arief Rachman, Theguh Saumantri, dan Taufik Hidayatulloh, "Transformation of Religious Authority in The Digital Era: A Post-Normal Times Analysis by Ziauddin Sardar on The Phenomenon of Social Media Da'wah", *Jurnal Ilmu Dakwah* 45, no. 1 (30 Juni, 2025) 1693-8054. <https://doi.org/10.2158/jid.45.1.25644>

96 Aris Munandar dan Endang Susanti, "Green Dakwah Nahdlatul Ulama: Strategi Komunikasi Digital NU Online dalam Membangun Kesadaran Ekologis", *NAHNU: Journal of Nahdlatul Ulama and Contemporary Islamic Studies* 3, no.2 (2025): 579-602.

97 Muta'allim, "Kh. Hasyim Muzadi's Language Politeness Strategies in Responding The Different Perspective Between Nahdlatul Ulama and Muhammadiyah: a Sociopragmatic Study", *Muslim Heritage*, 10, No.1, (Juni 23, 2025): 54-77, <https://doi.org/10.21154/muslimheritage.v10i1.10951>

NU to distinguish between passive exposure and active engagement, thereby informing more targeted and effective content development strategies. In this regard, digital participation is treated as a dynamic and iterative process, requiring continuous monitoring and adjustment.

Fourth, NU invests in advanced capacity-building initiatives to improve the quality of its digital outputs. These include specialized training in scientific writing, digital storytelling, multimedia production, and data visualization⁹⁸. By strengthening the competencies of its human resources, NU ensures that its content not only meets academic and informational standards but also adheres to the communicative demands of digital audiences. This effort reflects a broader institutional commitment to professionalizing digital da‘wah and knowledge dissemination⁹⁹. At the institutional level, higher education institutions affiliated with NU play a pivotal role in this evaluation and development process. They actively integrate digital analytics, audience research, and capacity-building programs into their media management practices. As a result, the evaluation phase becomes a strategic mechanism for sustaining quality assurance, fostering innovation, and amplifying the societal impact of digital participation. Therefore, this stage demonstrates that NU’s engagement with digital platforms is characterized by reflexivity, adaptability, and a strong orientation toward continuous improvement in advancing scientific knowledge within a religious framework¹⁰⁰.

THEOLOGICAL FOUNDATIONS OF PARTICIPATION IN DIGITAL SCIENCE PRODUCTION

NU in Central Lampung grounds its digital participation in a comprehensive theology of *amal ṣāliḥ* (pious action), wherein the advancement of scientific knowledge is framed as an integral dimension of worship (*‘ibādah ghayr maḥḍah*) and the realization of humanity’s role as *khalīfah fī al-ard* (steward on earth)¹⁰¹. This theological orientation is normatively anchored in Islamic sources, including Qur’anic injunctions such as QS. Al-Mujādilah: 11, which emphasizes the elevation of those endowed with knowledge, as well as Prophetic traditions that extol the virtue of seeking knowledge¹⁰². These scriptural foundations function not merely as symbolic references but as operative principles that legitimize and motivate NU’s engagement in digital knowledge production. Empirical findings from interviews and participatory observations reveal that NU actors consistently invoke the concept of “da‘wah through knowledge” as a central guiding ethos¹⁰³. Within this framework, they explicitly reject the epistemological dichotomy between religious and secular sciences, instead promoting an integrative paradigm in which both domains are synergized for the

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- 98 Muta’allim, Siti Masyarafatul Manna Wassalwa, Siti Nuraini, Yuana Dwi Agustin, dan Damon Wicaksi, “Pesantren as Agent of Wasathiyah on Responding The Problems of The Indonesian Community in The Society 5.0 Era (Case Study of Alumni Abuya Sayyid Muhammad Bin Alawi Al-Maliki)” *International Conference on Humanity Education and Society (ICHES)* 2, no. 1, (2023).
- 99 Rachman, A., Saumantri, T., & Hidayatulloh, T, “Transformation of Religious Authority in The Digital Era: A Post-Normal Times Analysis by Ziauddin Sardar on The Phenomenon of Social Media Da‘wah”. *Jurnal Ilmu Dakwah*, 45, no. 1, (2025) : 107–122. <https://doi.org/10.21580/jid.v45.1.25644>
- 100 Riduwan dan Erwan Aristyanto, “Digital Transformation of Waqf Management: Innovation Pathways and Policy Directions in Muslim-Majority Developing Countries”, *Muslim Heritage* 10, No.2, (04 Desember, 2025), 307-325.
- 101 Yaqin, Muhammad Ainul., Purwanto, Agung., Yanuar, Hanif Fadli., Wahyudi, Jodi., Prasetya, Putra Febtiar., Putra, Roby Perdiansyah., & Asbari, Masduki. “Peran Masyarakat dalam Perkembangan Iptek yang Semakin Maju.” *Journal of Community Service and Engagement*, Vol. 2, No. 6 (Desember, 2022): 44-52.
- 102 Interviews; Abdul Muchith Muzadi, NU in Perspective of History & Teachings (Surabaya: Khalista, 2006). Nur Khaliq Ridwan, The Future of NU (Yogyakarta: IRCiSoD, 2019).
- 103 Khaswara, Fajar, dan Halim, Ilim Abdul. “Studi Agama dan Ekonomi tentang Pengaruh Agama terhadap Etos Kerja dan Kemiskinan.” *Gunung Djati Conference Series*, Vol. 8, No. 2 (Januari 13, 2022): 120-130.

broader benefit of the *ummah*. Digital platforms are thus conceptualized as strategic arenas for articulating this synthesis, enabling the dissemination of scientific knowledge that is simultaneously informed by and aligned with Islamic values. This orientation fosters what may be termed a *productive digital subjectivity*, in which religious identity is not only preserved but actively reconstituted through engagement with contemporary technological infrastructures.

From a theoretical perspective, this phenomenon can be interpreted through the lens of Saskia Sassen, whose notion of *global assemblages* illuminates how localized religious practices contribute to the formation of alternative global imaginaries. In this case, NU's theology enables a reimagining of the relationship between religion, technology, and knowledge production beyond the confines of the nation-state¹⁰⁴. Simultaneously, Beth Simone Noveck's framework of participatory knowledge underscores how theological motivations can catalyze active civic engagement in the collaborative production and dissemination of knowledge. NU's digital initiatives exemplify this dynamic, positioning religious actors not merely as consumers but as co-creators of epistemic resources. Furthermore, the perspective of Manuel Castells on the network society provides additional analytical depth. Castells highlights the role of cultural codes in shaping meaning within digital networks; in this context, Islamic faith and values operate as symbolic frameworks that structure the production and circulation of knowledge. Consequently, NU's digital participation can be understood as both an adaptive strategy and a form of epistemic resistance, challenging the hegemony of secular-scientific narratives while advancing an alternative model of knowledge integration rooted in religious ethics¹⁰⁵.

CHALLENGES AND OPPORTUNITIES TO MAXIMIZE PARTICIPATION

NU in Central Lampung faces a set of structural and cultural challenges in optimizing its digital participation for scientific knowledge dissemination. The most prominent constraint lies in the limited digital literacy capacity among its members, particularly teachers and students who possess substantive ideas but lack the technical skills and access required to transform them into high-quality digital publications. This limitation is further compounded by uneven technological infrastructure, which restricts consistent connectivity and reduces the effectiveness of digital engagement across different areas. In addition to these structural barriers, internal resistance persists among certain religious elites who remain skeptical of digital technology, often perceiving it as a source of misinformation, moral degradation, or social fragmentation. Such perceptions, while not dominant, continue to influence the pace of digital adoption within segments of the organization. Despite these challenges, the opportunities for expanding NU's digital engagement are substantial. The open architecture of digital platforms enables local Islamic communities to bypass conventional bureaucratic constraints and directly participate in national and global knowledge networks. This creates new possibilities for amplifying marginalized voices and democratizing access to scientific discourse. Strengthening digital literacy through targeted training programs, alongside strategic collaboration with higher education institutions, can significantly enhance the capacity of NU actors to produce, curate, and disseminate knowledge effectively¹⁰⁶. These efforts

104 Yudistira, R., Muta'allim., Nurcaya., Julhadi., & Pattiasina, P. J. "The Role of Linguistics and Local Wisdom on Knowing Harmony between Religions at Tana Toraja". *Jurnal Muslim Heritage* 7, No. 2. (Desember 26, 2022): 409-431. <https://doi.org/10.21154/muslimheritage.v7i2.5023>

105 Hafidhoh Ma'rufah, "The Transformation of Religious Authority in The Era Of New Media: Analyzing Disparities in Opportunities Between Female and Male Ulama in The Nahdlatul Ulama Online MEDIA". *Jurnal Sosiologi Reflektif*, 18, no. 1, (2023) : 63-88. <https://doi.org/10.14421/jsr.v18i1.2956>

106 Mahardhani, A. J., Nawiruddin, N., Jalaluddin, J., Julhadi, J., & Muta'allim, M. "The Kyai's Position in Rural Local Democracy Based on Patronage Politics at Tapal Kuda". *Muslim Heritage*, 8, No. 1. (Juni 29, 2023): 115–132. <https://doi.org/10.21154/muslimheritage.v8i1.6004>

would not only improve technical competence but also foster a culture of innovation within religious communities.

From a theoretical standpoint, this transitional moment can be interpreted through the perspective of Saskia Sassen, who conceptualizes the decentralization of authority in the era of globalization. As traditional, state-centered forms of authority become increasingly diffused, local religious actors gain the opportunity to reposition themselves within global knowledge infrastructures. In this context, NU's digital participation represents an emergent form of authority grounded in networked engagement rather than institutional hierarchy¹⁰⁷. Similarly, Beth Simone Noveck's concept of *knowledge commons* highlights the importance of open, collaborative systems in which communities actively contribute to and reproduce knowledge. NU's digital initiatives align with this model by encouraging participatory knowledge production rooted in religious and cultural values. Meanwhile, Manuel Castells's theory of the network society underscores the potential emergence of *counter-power* through digital networks. In this regard, NU's digital ecosystem can function as an alternative epistemic space that challenges the marginalization of religious perspectives in scientific discourse, while simultaneously asserting a more inclusive and value-driven approach to knowledge production in the digital age^{108,109}.

CONCLUSION

This research reveals that NU has shown a form of active participation in science development through digital publications. These activities include, first, the development of digital resources, which consists of network infrastructure development, digital human resource development and online platform development. Second, participation in online forums or the formation of online scientific communities, such as in webinars, conferences, regular studies and online discussions, which use internet technology, where participants can communicate and interact with each other even though they are in different locations. Third, science publications, which consist of the publication of scientific articles, the dissemination of digital books, infographics and visual content, educational videos, podcasts and audio studies. This participation not only strengthens the position of Islamic groups as religious entities, but also as epistemic actors in the digital public space. From Saskia Sassen's perspective, the participation of Islamic groups represents the process of *reconfiguring religious authority* in the global era. This process reflects a shift in the locus of authority from formal institutions to a more open and fluid digital network, where local actors can renegotiate their positions in the global knowledge architecture. This goes hand in hand with the symptoms of *the denationalization of authority*, when the production of meaning and legitimacy is no longer limited by state boundaries or traditional institutional authority.

Within the framework of Beth Simone Noveck, the practice of this Islamic group is a concrete example of *the collaborative participation of citizens* in knowledge governance. The public is no longer just a recipient of policies or passive to scientific currents, but has become an active producer who creates, disseminates, and articulates science narratives through digital mediums. This

107 Rachman, A., Saumantri, T., & Hidayatulloh, T., "Transformation of Religious Authority in The Digital Era: A Post-Normal Times Analysis by Ziauddin Sardar on The Phenomenon of Social Media Da'wah". *Jurnal Ilmu Dakwah*, 45, no. 1, (2025) : 107–122. <https://doi.org/10.21580/jid.v45.1.25644>

108 Muhammad Yusuf Pratama dan Ahmad Nabil Annuha, "Digital Da'wah Transformation of Nahdlatul Ulama: Religious Moderation Strategies in the Technological Era", *NAHNU: Journal of Nabdlatul Ulama and Contemporary Islamic Studies*, 2, no.2 (2024): 321-338.

109 Muhammad Azlan Lubis dan Ahmad Nabil Annuha, "Habitus Tensions between NU's Santri and Students: Religious Education Cultural Transformation in the Disruption Era", *NAHNU: Journal of Nabdlatul Ulama and Contemporary Islamic Studies*, 3, no.1 (2025), 417-436.

marks the transformation of the role of citizens into *smart citizens* who contribute to open knowledge-based development. Meanwhile, using the perspective of Manuel Castells, the digital activities of this Islamic group show the formation of *its own autonomous communication network*. The practice of scientific production and dissemination by religious communities is part of *mass self-communication in a network society*, which strengthens collective identity while opening a path of resistance to the dominance of secular or Western-centric narratives in the development of science. Phenomenologically, this digital participation is underpinned by strong religious awareness and the subjective experience of the individual as a caliph on earth. The processes that have occurred show that the dimension of Islamic spirituality can be productively integrated with the process of modern digitalization, creating a new space for the development of inclusive and contextual science.

These findings contribute to the expansion of the theoretical framework of digital participation in religious studies. The perspectives of Sassen, Noveck, and Castells help explain how the digital space plays a role as a new arena of authority, knowledge collaboration, and the formation of social networks. This research shows that local religious actors are not only able to adapt to the digital ecosystem, but also create new forms of authority that are participatory, inclusive, and adaptive to global change. The digital participation of the NU Islamic group in Central Lampung in the development of science proves that religion can be the main source of inspiration and motivation in the creation of a just, knowledgeable, and dignified social order. Supported by digital participation theory and phenomenological approaches, this study shows that the reconstruction of the relationship between religion, technology, and knowledge is a necessity in today's global social landscape. Going forward, further research is needed exploring how these dynamics develop in other regions and in other sectors outside of science.

For academics and policymakers, the results of this study confirm the need to support local digital infrastructure. Governments and religious institutions need to strengthen digital access, media literacy training, and provide inclusive scientific publication platforms for religious groups. They need to encourage cross-sector collaboration. Synergy between Islamic boarding schools, madrasas, campuses, and digital communities will strengthen the knowledge production ecosystem based on local values and open to globality. In addition, it is necessary to develop a contextual model of science participation. Scientific practices based on local Islamic values can be used as an alternative model for modern scientific approaches that are often separate from the social and spiritual context of society.

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