

## Navigating Faith in the Digital Age: The Role of Technology in Shaping Gen-Z's Religious Perspectives

Masripah<sup>1</sup>, Ani Siti Anisah<sup>2</sup>, Asep Irvan Irvani<sup>3</sup>

Universitas Garut, Indonesia<sup>123</sup>

Correspondent : [masripah@uniga.ac.id](mailto:masripah@uniga.ac.id)<sup>1</sup>

Received : August 27, 2024

Accepted : September 19, 2024

Published : October 27, 2024

Citation: Masripah., Anisah, A, S., & Irvani, A, I. (2024). Navigating Faith in the Digital Age: The Role of Technology in Shaping Gen-Z's Religious Perspectives. Eduscape : Journal of Education Insight, 2(4), 230-243. <https://doi.org/10.61978/eduscape.v2i4>

**ABSTRACT:** This study aims to analyze the impact of digital technology on contemporary Islamic thought and religious practices among Generation Z (Gen-Z). Employing a Mixed Methods Research (MMR) approach with a Triangulation design, the study involved 264 respondents using a five-point Likert scale questionnaire and semi-structured interviews with five key informants. The findings reveal that digital technology positively influences contemporary Islamic thought by 56.4%, religious practices by 50.2%, and the combination of both by 51.5%. Generation Z utilizes technology such as social media, religious applications, and online forums to understand Islam contextually and flexibly. They leverage technology to explore contemporary issues such as moderation and pluralism while supporting daily religious practices through digital Qur'an applications and online studies. However, the study also identifies challenges, including the risk of inaccurate information, exposure to radicalization, and potential impacts on religious traditions and spiritual depth. This research underscores the need for religion-based digital literacy to help Generation Z utilize technology wisely, with guidance from religious leaders and parents and the development of relevant religious applications. With a strategic approach, digital technology can effectively strengthen a moderate, inclusive, and contextually relevant understanding of Islam in the digital era. The findings of this study are expected to provide a foundation for developing strategies in Islamic education and dakwah tailored to support the spiritual lives of Generation Z in the future.

**Keywords:** Digital Literacy, Digital Technology, Generation Z, Islamic Thought



This is an open access article under the CC-BY 4.0 license

## INTRODUCTION

The development of digital technology has brought significant changes to various aspects of human life, including education, social dynamics, culture, and religion. Digital technology transforms communication and fundamentally reshapes how information is accessed, shared, and understood (Heryanto et al., 2023; Irvani et al., 2020; Marion & Fixson, 2021). In the context of

religion, particularly Islam, digital technology is vital to support religious practices, da'wah, and disseminating religious values (Uyuni & Soraya, 2023). This transformation creates opportunities and challenges, especially in understanding and practicing Islamic teachings.

Generation Z (Gen-Z), born between 1996 and 2010, is the primary group affected by this transformation. As "digital natives," they have grown up in an environment fully integrated with technology (Bhalla et al., 2021; Evans & Robertson, 2020). According to a Pew Research Center report (Lal & Harbridge-Yong, 2023), nearly 80% of Gen-Z members worldwide spend more than four hours daily accessing the internet, primarily through mobile devices. Data from Hootsuite and We Are Social (Dennis & Sobari, 2022; Kurniawan et al., 2023; Lestari, 2019) further indicates that 64% of active social media users in Indonesia are from the Gen-Z age group. This demonstrates that this generation utilizes technology for social and entertainment purposes and to explore dimensions of spirituality and religion.

Digital technology provides extensive and easy access to religious information through various platforms such as social media, digital Qur'an applications, and online discussion forums. Platforms like YouTube, Instagram, and TikTok have become key channels for young preachers to convey Islamic messages in creative formats aligned with Gen-Z preferences (Al Fajar et al., 2024). For instance, short video content on Qur'anic exegesis or brief sermons have become a popular method of engaging this generation in religious discourse. However, this accessibility also presents significant challenges. The ease of obtaining religious information instantaneously is often not accompanied by the ability to critically assess its accuracy, opening the door to the spread of misinformation, radical ideologies, or online extremism (Henschke & Reed, 2021; Shaikh, 2024; Valentini et al., 2020).

Contemporary Islamic thought is one intriguing phenomenon evolving amidst the advancement of digital technology. Contemporary Islam refers to the adaptation of Islamic values relevant to the challenges of the modern era (Haque et al., 2016; Mujahid, 2021; Usman et al., 2022). In the digital era, Generation Z tends to access more inclusive, adaptive, and contextual Islamic discourse. Research shows that 72% of Muslim university students in Indonesia use social media to discuss contemporary Islamic issues such as pluralism, the relationship between religion and state, and the role of women in society (Amani et al., 2024). However, exposure to overly liberal or radical interpretations poses challenges to preserving the authenticity of Islamic teachings.

Religious practices, such as daily worship, religious studies, and interaction with religious communities, have also undergone significant changes due to technological advancements. Digital applications like electronic Qur'ans, prayer time reminders, and online religious study platforms have become integral to the spiritual routines of Gen-Z (Ramadina, 2021). A study indicates that 85% of young Muslim Indonesians find digital Qur'an applications helpful for their daily worship practices (Maharani et al., 2025). Nevertheless, concerns remain that using technology for worship might diminish the depth of spirituality as traditional worship experiences are replaced with digital interactions.

This study explores how digital technology influences contemporary Islamic thought and religious practices among Generation Z. The focus is to understand how technology positively impacts religious understanding and the risks it poses, such as misinformation or the erosion of traditional values. Additionally, the research seeks to identify opportunities that educators, community leaders, and policymakers can leverage to create relevant and effective da'wah strategies for this generation.

The findings of this study are expected to provide valuable insights to support the development of authentic, contextual, and adaptive religious education in the digital era. By utilizing technology wisely, Generation Z can catalyze the emergence of a Muslim generation that not only profoundly understands their religion but also practices it in ways relevant to contemporary challenges. Therefore, a profound understanding of the interaction between digital technology, Islamic thought, and religious practices is key to formulating strategic steps for the future of religion in the digital age.

## METHOD

This study employed a Mixed Methods Research (MMR) approach with a Triangulation Design, combining quantitative and qualitative data to achieve more comprehensive results (Creswell & Clark, 2017). Quantitative data were collected using a five-point Likert scale questionnaire designed to measure three key indicators: (1) the influence of digital technology on contemporary Islamic thought, (2) the influence of digital technology on religious practices, and (3) the combined influence of digital technology on Islamic thought and religious practices. The questionnaire consisted of 20 items, which were validated and tested for reliability. Five items addressed the first indicator, five addressed the second, and ten addressed the third.

Qualitative data were gathered through semi-structured interviews with five university students selected as key informants using purposive sampling. These students provided insights into the research topics based on their academic background and active participation in digital technology-based activities.

The study was conducted among students of the Faculty of Islamic Education and Teacher Training at a university in Garut Regency during the 2023/2024 academic year. The quantitative sample comprised 264 students selected through simple random sampling. In comparison, the qualitative sample included five students chosen to represent different academic programs and levels of participation in digital technology-based activities. The five interviewed students were assigned the codes S1 through S5 for data analysis.

The primary research questions guiding this study are as follows:

1. How does digital technology influence contemporary Islamic thought among Generation Z?
2. What is the influence of digital technology on religious practices among Generation Z?

3. What are the implications of digital technology's influence on the thought and religious practices of Generation Z?

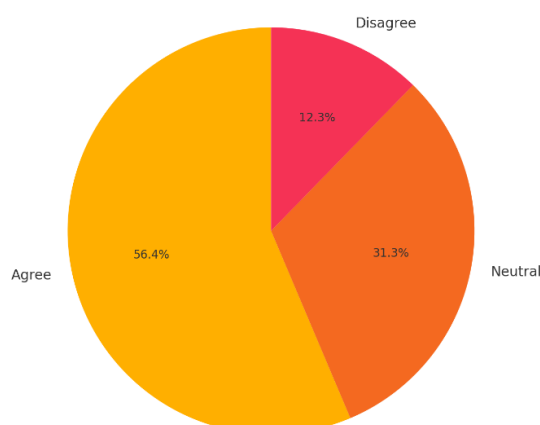
The data analysis process employed a triangulation approach, integrating quantitative findings from the questionnaire with qualitative insights from interviews. This approach aims to enhance the validity of the research results and provide a deeper interpretation of the phenomenon under investigation.

## RESULT AND DISCUSSION

### 1. The Influence of Digital Technology on Contemporary Islamic Thought Among Generation Z

The findings of this study reveal that digital technology has a positive impact of 56.4% on contemporary Islamic thought among Generation Z. Data obtained from the questionnaire indicate that most respondents believe digital technology plays a significant role in broadening their understanding of Islamic teachings relevant to modern challenges. Questions related to comprehending Islamic teachings through digital media, such as online discussions and modern Islamic articles, received notably positive responses. A detailed representation of the questionnaire results is presented in Figure 1.

**Figure 1. Diagram of Questionnaire Results on the Impact of Digital Technology on Contemporary Islamic Thought**



For example, one indicator in the questionnaire regarding the contribution of technology to expanding insights into the evolution of Islamic thought received the highest approval percentage. This demonstrates that Generation Z actively utilizes technology to understand Islam more contextually (Rafsanjani et al., 2024). It reflects how technology serves as a bridge to access new information and perspectives, enabling deeper and more relevant exploration of diverse viewpoints within Islamic thought in response to contemporary challenges (Adiyono & Anshor, 2024; Broo et al., 2022; Kim et al., 2022; Laufer et al., 2021). Additionally, technology highlights Generation

Z's adaptation to the digital era, where religious learning is no longer confined to physical spaces but extends to more inclusive and flexible digital platforms.

Qualitative interviews provide deeper insights into how digital technology influences contemporary Islamic thought among Generation Z. One key aspect revealed is social media and digital platforms, such as YouTube and Instagram, as respondents S2 and S5 highlighted. They explained that these technologies help them explore critical issues in modern Islam, such as religious pluralism, moderation, and the role of women in Muslim societies. Conversely, other respondents, such as S1 and S4, emphasized caution when accessing Islamic information online. While technology is perceived as beneficial, they acknowledged the risks of misinformation that might deviate from authentic Islamic teachings (Alabdulhadi & Alkandari, 2024). Furthermore, respondents reported active participation in online discussions addressing contemporary Islamic issues, although concerns about potential bias or inaccuracies in these forums persist. These findings indicate that Generation Z utilizes technology to contextualize their understanding of religion while requiring guidance and digital literacy education to mitigate its negative impacts (Gultom et al., 2022).

The influence of digital technology on contemporary Islamic thought among Generation Z signifies a significant transformation in how this younger generation approaches religion. They are no longer confined to traditional methods, such as in-person religious study sessions or printed books, but now leverage technology to explore contemporary issues. This aligns with previous research (Wachidah, 2021), which asserts that digital technology's evolution greatly contributes to modern Islamic thought's development.

These findings illustrate that Generation Z in Indonesia is strongly interested in contemporary Islam and strives to integrate their religious understanding with digital technology. This generation perceives technology as a tool to comprehend Islamic teachings in a modern context, including how Islam addresses global and local issues (Mustapa et al., 2023; Nurhaeni et al., 2021; Sanusi, 2024). As primary technology users, Generation Z presents a significant opportunity to develop a more interactive and relevant approach to Islamic outreach tailored to their needs.

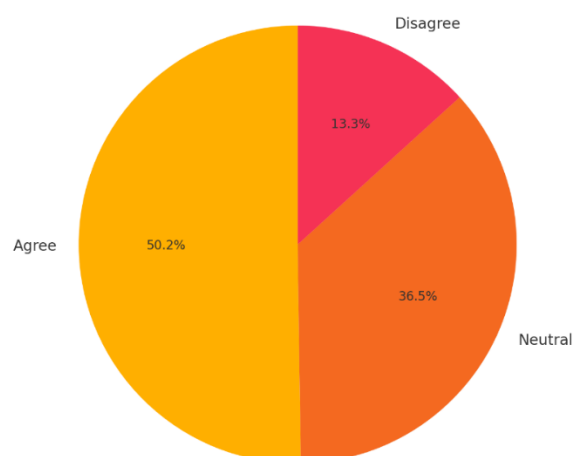
However, the risk of exposure to misleading or radical information remains a challenge. Therefore, religious educators, scholars, and community leaders must collaborate to provide accurate, engaging, and value-aligned digital content. Islamic educational institutions can also integrate digital literacy into their curricula to equip Generation Z with the skills to filter and verify information effectively (Juhaidi et al., 2023; Yumna et al., 2024).

## 2. The Impact of Digital Technology on Religious Practices Among Generation Z

The survey results indicate that digital technology has a positive influence of 50.2% on religious practices among Generation Z. Data from the questionnaire reveal that most respondents utilize digital applications and online platforms to support their daily religious activities. One of the questions in the survey, which inquired about the use of digital Qur'an applications, received the highest approval percentage of 50.2%. This highlights that religious applications are among the most frequently used tools by Generation Z for reading and understanding the Qur'an, whether

for personal purposes or educational learning (Faqih et al., 2022). A detailed presentation of the results of the questionnaire can be seen in Figure 2 below.

**Figure 2. Diagram of Questionnaire Results on the Impact of Digital Technology on Religious Practices Among Generation Z**



Furthermore, respondents actively participated in religious studies through platforms such as YouTube and Zoom. Using these technologies was considered beneficial in maintaining connections with religious communities, particularly during situations where physical gatherings were challenging, such as during the pandemic (Al Lily et al., 2020). This indicates that digital technology supports individual worship practices and strengthens spiritual connections within online communities.

Qualitative interviews provided deeper insights into how Generation Z utilizes digital technology in religious practices. Respondent S2 reported that applications like the Hijrah App and prayer time reminders were highly useful in maintaining consistency in daily worship. Respondent S4 mentioned that the digital Qur'an applications offered convenience for reading and understanding the Qur'an, especially in mobile situations or when they were away from home. Additionally, they frequently participated in online religious studies organized by Islamic communities, such as "Yuk Ngaji," through platforms like YouTube.

However, interviews also revealed skepticism regarding the spiritual connectedness achieved through digital interactions. Respondent S1, for instance, felt that although technology facilitated worship, it lacked the depth of connection with the religious community, as virtual experiences could not fully replicate face-to-face interactions. This indicates that while digital technology supports practical worship needs, some young individuals still perceive traditional experiences as having greater spiritual value (Sanusi, 2024; Zaid et al., 2022).

The use of digital technology in religious practices among Generation Z reflects a significant shift in how they perform worship. By leveraging digital applications such as electronic Qur'ans and prayer reminders and participating in online religious studies, Generation Z can carry out their spiritual activities more flexibly and efficiently (Chanifah et al., 2021; Gultom et al., 2022). These findings align with previous studies (Luqmana et al., 2023), which identified religious applications as one of young Muslims' most popular digital innovations.

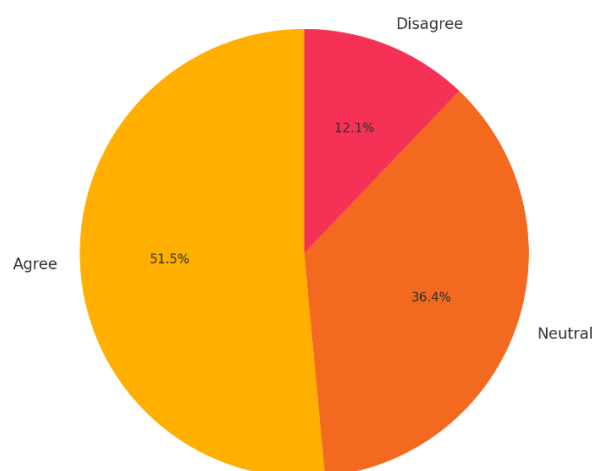


Nevertheless, challenges remain regarding the depth of spirituality perceived in technology-based practices. Some respondents felt that digital worship experiences, while practical, could not fully replace the emotional and spiritual closeness found in traditional worship. Thus, education and guidance integrating technology with traditional religious values are essential to ensure that digital technology supports the technical aspects of worship and enhances its spiritual essence.

### 3. Implications of Digital Technology's Influence on the Religious Thought and Practices of Generation Z

The findings of this study indicate that digital technology has an overall positive influence of 51.5% on the religious thought and practices of Generation Z. Quantitative data reveal that Generation Z utilizes technology not only to enrich their understanding of core Islamic values but also to support the performance of daily worship activities. One of the questionnaire indicators, which asked whether digital technology facilitated their understanding of Islamic teachings and the practice of worship, received significant approval levels. Most respondents agreed that applications such as digital Qur'ans and online forums greatly assisted them in their religious observances. Detailed responses to this third indicator are illustrated in Figure 3 below.

**Figure 3. Diagram of Questionnaire Results on the Implications of Digital Technology's Influence on the Religious Thought and Practices of Generation Z**



In-depth interviews provide additional insights into how digital technology influences the integration of religious thought and practices among Generation Z. Respondent S1 stated that digital technology enriches their understanding of core Islamic values. However, some aspects still raise concerns about the depth of spirituality experienced. Respondent S3 emphasized that digital technology allows them to access new perspectives, such as the intersection between Islamic teachings and modern social issues. Additionally, respondents reported that applications and online platforms like Zoom and YouTube motivate them to engage in charitable activities, interfaith discussions, and religious study forums.

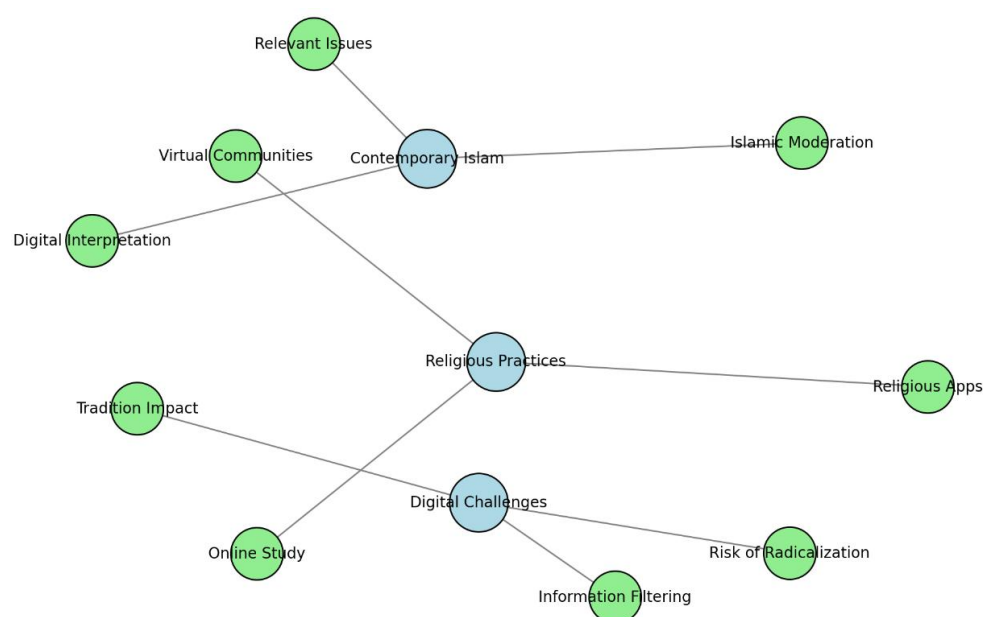
However, several challenges were also highlighted. Respondent S4 pointed out that while digital technology is highly beneficial for enhancing religious understanding, it risks influencing local

traditions and religious customs. Generation Z, accustomed to accessing global information, tends to abandon certain traditional practices they perceive as less relevant in a modern context (Buhalis & Karatay, 2022; Katz et al., 2021; Szymkowiak et al., 2021).

## 4. Contemporary Islam, Religious Practices, and Digital Challenges

The following thematic diagram was developed to provide a clearer understanding of the relationship between contemporary Islamic thought, religious practices, and the challenges faced by Generation Z in the digital era. This diagram illustrates the key themes identified in the study, including how digital technology influences Generation Z's understanding of Islamic teachings, their practice of worship, and the risks and constraints associated with using technology for spiritual purposes. Each main theme is connected to specific subthemes, reflecting critical dimensions of the interaction between digital technology and the religious life of Generation Z. This visualization aims to present the findings comprehensively while facilitating the analysis of relationships among the primary elements in the study.

**Figure 4. Relationship Between Themes and Subthemes from Qualitative Data Results**



The thematic diagram in Figure 4 illustrates the relationship between the main themes and subthemes identified from the qualitative data analysis in the study on the influence of digital technology on the religious thought and practices of Generation Z (Gen-Z). The diagram highlights three main themes: Contemporary Islam, Religious Practices, and Digital Challenges, each supported by several relevant subthemes.

Contemporary Islam reflects how Generation Z utilizes digital technology to understand Islamic teachings in a modern context (Diana et al., 2024; Mustapa et al., 2023; Rasit & Osman, 2024). Subthemes such as Digital Interpretation indicate that digital media has become a primary means of deepening religious knowledge. Furthermore, the subtheme of Islamic Moderation underscores how technology facilitates the dissemination of moderate Islamic values that resonate with



contemporary challenges. Additionally, the subtheme Relevant Issues encompasses discussions on contemporary topics, such as the relationship between religion and the state, human rights, and pluralism, which are increasingly facilitated by technological access.

The theme of Religious Practices highlights how Generation Z incorporates technology into their spiritual lives. The subtheme Religious Applications covers digital tools such as electronic Qur'an applications and prayer reminders to support daily worship. Online Studies' subtheme describes their participation in online religious lectures and learning via platforms like YouTube, Zoom, and other social media (Djazilan & Hariani, 2022; Yumnah, 2021; Yusrita, 2023). Moreover, the subtheme, Virtual Communities, demonstrates how Generation Z builds connections with religious communities virtually, fostering a sense of spiritual togetherness.

The final theme, Digital Challenges, reveals the risks and obstacles faced by Generation Z in using technology for religious purposes. The subtheme of Information Filtering highlights the need for caution in selecting credible sources to avoid inaccurate or misleading content. The subtheme Radicalization Risks points to the threat of exposure to extremist ideologies that could distort religious understanding. Meanwhile, the subtheme Impact on Tradition reflects the potential effects of technology on local customs and traditional values, including the risk of moral degradation due to unwise usage (Annur et al., 2023).

This visualization captures the complexity of digital technology's influence on the religious thought and practices of Generation Z. By wisely integrating technology through religious-based digital literacy education, oversight by religious leaders and parents, and the development of relevant outreach strategies, the potential of digital technology can be optimized to strengthen an authentic, moderate, and inclusive understanding of religion among the younger generation. This visualization is an essential foundation for designing strategic interventions that leverage technology to reinforce Islamic values in the digital era.

## CONCLUSION

This study reveals that digital technology has a significant impact on Generation Z's religious thought and practices. Quantitatively, a positive influence of 56.4% was found on contemporary Islamic thought, while a 50.2% impact was recorded on religious practices. The combined influence on both religious thought and practices reached 51.5%. These findings reflect how Generation Z leverages digital technology to broaden their understanding of Islam and perform daily worship more flexibly.

Generation Z utilizes various digital platforms, such as social media, religious applications, and online forums, to understand Islamic teachings in a modern context. These technologies enable them to explore contemporary issues such as moderation, pluralism, and the relationship between religion and the state. Additionally, applications like digital Qur'ans and prayer reminders have become essential tools supporting their spiritual practices. However, qualitative findings also indicate that Generation Z faces challenges such as the risks of inaccurate information, radicalization, and the impact on local religious traditions.

The findings of this study underscore the importance of religious-based digital literacy education to help Generation Z use technology wisely, both in understanding and practicing Islamic teachings. Strategic approaches involving the supervision of religious leaders and parents, as well as the development of relevant religious applications, can maximize the benefits of technology while mitigating its risks. Consequently, digital technology can become an effective tool to strengthen a moderate, inclusive, and contextual understanding of religion among Generation Z, while addressing contemporary challenges.

This study provides an essential foundation for developing relevant religious outreach and education strategies in the digital era. The results are expected to guide educators, religious leaders, and policymakers in designing appropriate interventions to support young people in their spiritual lives amid the wave of digitalization.

The authors extend their deepest gratitude to the Directorate of Islamic Higher Education, Directorate General of Islamic Education, Ministry of Religious Affairs of the Republic of Indonesia, and the Indonesia Endowment Fund for Education (LPDP) for their generous financial support in funding this research. Their contributions have been invaluable in facilitating the successful completion of this study.

## REFERENCE

- Adiyono, A., & Anshor, A. M. (2024). Islamic character education in the era of Industry 5.0: Navigating challenges and embracing opportunities. *Al-Hayat: Journal of Islamic Education*, 8(1), 287–304. <https://doi.org/10.35723/ajie.v8i1.493>
- Al Fajar, A. H., Kahfi, A., & Jaya, P. H. I. (2024). Da'wah Through Animation Media in the Perspective of Da'wah Verses. *Jurnal Dakwah Dan Komunikasi*, 9(2), 87–98.
- Al Lily, A. E., Ismail, A. F., Abunasser, F. M., & Alqahtani, R. H. A. (2020). Distance education as a response to pandemics: Coronavirus and Arab culture. *Technology in Society*, 63, 101317. <https://doi.org/10.1016/j.techsoc.2020.101317>
- Alabdulhadi, M. M. J., & Alkandari, K. M. (2024). Practices of Islamic education teachers in promoting moderation (wasatiyyah) values among high school students in Kuwait: challenges and obstacles. *Cogent Education*, 11(1), 2365577. <https://doi.org/10.1080/2331186X.2024.2365577>
- Amani, N., Prasetya, R. Y., Elmira, A., & Rahman, A. H. (2024). Dinamika Pluralisme Agama Dalam Masyarakat Kontemporer. *Religi: Jurnal Studi Agama-Agama*, 20(1), 54–70. <https://doi.org/10.14421/rejusta.v120i1.5301>
- Annur, P. A., Susanti, E., & Gera, I. G. (2023). Urgensi Pendidikan Moral Sekolah Dasar dalam Membentuk Karakter Religius di Era Digital menurut Henry Alexis Rudolf Tilaar. *Jurnal Edukasi*, 1(3), 271–287. <https://doi.org/10.60132/edu.v1i3.182>

- Bhalla, R., Tiwari, P., & Chowdhary, N. (2021). Digital natives leading the world: paragons and values of Generation Z. In *Generation Z marketing and management in tourism and hospitality: The industry's future* (pp. 3–23). Springer. [https://doi.org/10.1007/978-3-030-70695-1\\_1](https://doi.org/10.1007/978-3-030-70695-1_1)
- Broo, D. G., Bravo-Haro, M., & Schooling, J. (2022). Design and implementation of a smart infrastructure digital twin. *Automation in Construction*, 136, 104171. <https://doi.org/10.1016/j.autcon.2022.104171>
- Buhalis, D., & Karatay, N. (2022). Mixed reality (MR) for generation Z in cultural heritage tourism towards metaverse. *Information and Communication Technologies in Tourism 2022: Proceedings of the ENTER 2022 ETourism Conference, January 11–14, 2022*, 16–27. [https://doi.org/10.1007/978-3-030-94751-4\\_2](https://doi.org/10.1007/978-3-030-94751-4_2)
- Chanifah, N., Hanafi, Y., Mahfud, C., & Samsudin, A. (2021). Designing a spirituality-based Islamic education framework for young muslim generations: a case study from two Indonesian universities. *Higher Education Pedagogies*, 6(1), 195–211. <https://doi.org/10.1080/23752696.2021.1960879>
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
- Dennis, T., & Sobari, N. (2022). Conspicuous consumption on gen Z in Indonesia. *Brawijaya International Conference on Economics, Business and Finance 2021 (BICEBF 2021)*, 136–142. <https://doi.org/10.2991/aebmr.k.220128.018>
- Diana, A., Azani, M. Z., & Mahmudulhassan, M. (2024). The Concept and Context of Islamic Education Learning in the Digital Era: Relevance and Integrative Studies. *Profetika: Jurnal Studi Islam*, 25(01), 33–44. <https://doi.org/10.23917/profetika.v25i01.4239>
- Djazilan, M. S., & Hariani, M. (2022). Implementation of E-Learning-Based Islamic Religious Education. *Bulletin of Science, Technology and Society*, 1(2), 14–21.
- Evans, C., & Robertson, W. (2020). The four phases of the digital natives debate. *Human Behavior and Emerging Technologies*, 2(3), 269–277. <https://doi.org/10.1002/hbe2.196>
- Faqih, A., Akhyak, I. N., & Maftukhin, A. R. K. (2022). Reasoning Fiqh Generation Z in Indonesia. *Science and Education*, 2(12), 879–888. <https://doi.org/https://doi.org/10.55677/ijssers/V02I12Y2022-23>
- Gultom, J. M. P., Widjaja, F. I., Novalina, M., Situmorang, E. L., & Natassha, Y. (2022). Pastoral Strategy in Developing the Dimension of Understanding Generation Z. *Evangelical*, 6, 47–58. <https://doi.org/10.46445/ejti.v6i1.472>
- Haque, A., Khan, F., Keshavarzi, H., & Rothman, A. E. (2016). Integrating Islamic traditions in modern psychology: Research trends in last ten years. *Journal of Muslim Mental Health*, 10(1). <https://doi.org/10.3998/jmmh.10381607.0010.107>

- Henschke, A., & Reed, A. (2021). Toward an ethical framework for countering extremist propaganda online. *Studies in Conflict & Terrorism*, 1–18. <https://doi.org/10.1080/1057610X.2020.1866744>
- Heryanto, S. H., Aprianti, S., Pelani, R. R., & Irvani, A. I. (2023). Penggunaan E-learning Madrasah dalam Proses Pembelajaran Fisika di MAN 2 Garut. *Jurnal Pendidikan Dan Ilmu Fisika*, 3(1), 172–178. <https://doi.org/10.52434/jpif.v3i1.1962>
- Irvani, A. I., Warliani, R., & Amarulloh, R. R. (2020). Pelatihan Pemanfaatan Teknologi Informasi Komunikasi Sebagai Media Pembelajaran. *Jurnal PkM MIFTEK*, 1(1), 35–41.
- Juhaidi, A., Fitria, A., Hidayati, N., Aseri, A. F., Umar, M., Aseri, M., & Riza, M. (2023). Digital Citizenship of Generation Z in Indonesia: Does Islamic Higher Education Matter? *Journal of Higher Education Theory and Practice*, 23(13), 165–181. <https://doi.org/10.33423/jhetp.v23i13.6325>
- Katz, R., Ogilvie, S., Shaw, J., & Woodhead, L. (2021). Gen Z, explained: The art of living in a digital age. In *Gen Z, Explained*. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226814988>
- Kim, J., Lee, H., & Cho, Y. H. (2022). Learning design to support student-AI collaboration: Perspectives of leading teachers for AI in education. *Education and Information Technologies*, 27(5), 6069–6104. <https://doi.org/10.1007/s10639-021-10831-6>
- Kurniawan, Y., Santoso, S. I., Wibowo, R. R., Anwar, N., Bhutkar, G., & Halim, E. (2023). Analysis of Higher Education Students' Awareness in Indonesia on Personal Data Security in Social Media. *Sustainability*, 15(4), 3814. <https://doi.org/10.3390/su15043814>
- Lal, A., & Harbridge-Yong, L. (2023). Gen Z Attitudes Towards American Democracy and Reform. *Journal of Student Research*, 12(3). <https://doi.org/10.47611/jsrhs.v12i3.4824>
- Laufer, M., Leiser, A., Deacon, B., Perrin de Brichambaut, P., Fecher, B., Kobsda, C., & Hesse, F. (2021). Digital higher education: a divider or bridge builder? Leadership perspectives on edtech in a COVID-19 reality. *International Journal of Educational Technology in Higher Education*, 18, 1–17. <https://doi.org/10.1186/s41239-021-00287-6>
- Lestari, D. (2019). Measuring e-commerce adoption behaviour among gen-Z in Jakarta, Indonesia. *Economic Analysis and Policy*, 64, 103–115. <https://doi.org/10.1016/j.eap.2019.08.004>
- Luqmana, M. A. T., Putro, F. W., & Sholik, M. (2023). Desain Dan Implementasi Aplikasi Penghafal Al-Quran Android Di Rumah Tahfidz Rabbunalloh Surabaya. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 5(2), 84–89. <https://doi.org/10.47233/jteksis.v5i2.777>
- Maharani, D. P., Suryaningrum, A. S., Nuraini, D. A., Anggraini, O. W. N., Yuliani, D. A., Prahesti, A., & Nurrohim, A. (2025). Integrasi Nilai-nilai Islam dalam Pemanfaatan Teknologi Digital oleh Generasi Z di Era Modern: Integration of Islamic Values in the Use of Digital Technology by Generation Z in the Modern Era. *DIRASAH: Jurnal Kajian Islam*, 2(1), 93–109.

- Marion, T. J., & Fixson, S. K. (2021). The transformation of the innovation process: How digital tools change work, collaboration, and organizations in new product development. *Journal of Product Innovation Management*, 38(1), 192–215. <https://doi.org/10.1111/jpim.12547>
- Mujahid, I. (2021). Islamic orthodoxy-based character education: creating moderate Muslim in a modern pesantren in Indonesia. *Indonesian Journal of Islam and Muslim Societies*, 11(2), 185–212. <https://doi.org/10.18326/ijims.v11i2.185-212>
- Mustapa, K., Gagaramusu, Y. B. M., Palandi, E. H., Syakhrani, A. W., & Towpek, H. (2023). TECHNOLOGY-ENHANCED EDUCATION: NURTURING THE DIGITAL GENERATION-EXPERIENCES IN ISLAMIC SCHOOLS IN INDONESIA. *International Journal of Teaching and Learning*, 1(1), 16–40.
- Nurhaeni, T., Lutfiani, N., Singh, A., Febriani, W., & Hardini, M. (2021). The value of technological developments is based on an Islamic perspective. *International Journal of Cyber and IT Service Management*, 1(1), 1–13. <https://doi.org/10.34306/ijcitsm.v1i1.4>
- Rafsanjani, T. A., Abdurrozaq, M., & Inayati, F. (2024). Islamic Religious Learning in the Digital Age: An Interactive Method for Generation Z. *Solo International Collaboration and Publication of Social Sciences and Humanities*, 2(03), 304–315. <https://doi.org/10.61455/sicopus.v2i03.222>
- Ramadina, I. N. A. (2021). *Perancangan Informasi Pembelajaran Fiqih Shalat Untuk Anak Melalui Media Buku Ilustrasi*. Univeristas Komputer Indonesia.
- Rasit, M. R., & Osman, K. (2024). Heutagogy Approach In Islamic Media Course Learning For Muslim Gen-Z Students In Malaysia. *Educational Administration: Theory and Practice*, 30(5), 6470–6478.
- Sanusi, M. (2024). Transforming Islamic Education in the Digital Age: Challenges and Opportunities for the Young Generation. *Attractive: Innovative Education Journal*, 6(3), 206–215. <https://doi.org/10.51278/aj.v6i3.1479>
- Shaikh, A. R. M. (2024). *EXPLORING ONLINE RADICALIZATION IN BANGLADESH: STRATEGIES AND EVOLVING DYNAMICS*. © University of Dhaka.
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 101565. <https://doi.org/10.1016/j.techsoc.2021.101565>
- Usman, A. H., Abdullah, M. F. R., Kadir, M. N. A., & Iskandar, A. (2022). The Concept of an Ideal Society: A Review of Fazlur Rahman's Perspective. *International Journal of Islamic Thought*, 21, 1–12. <https://doi.org/10.24035/ijit.21.2022.220>
- Uyuni, B., & Soraya, S. (2023). The potential of daiyah (woman religious preachers) to harness the power of religious preaching on social media. *Jurnal Bina Ummat: Membina Dan Membentengi Ummat*, 6(2), 167–182. <https://doi.org/10.38214/jurnalbinaummatstdnatsir.v6i2.256>

- Valentini, D., Lorusso, A. M., & Stephan, A. (2020). Onlife extremism: Dynamic integration of digital and physical spaces in radicalization. *Frontiers in Psychology*, 11, 524. <https://doi.org/10.3389/fpsyg.2020.00524>
- Wachidah, S. N. (2021). Konstruksi Pendidikan Islam Di Era Global Menurut Azyumardi Azra. *CENDEKIA: Jurnal Ilmu Pengetahuan*, 1(3), 177–186. <https://doi.org/10.51878/cendekia.v1i3.404>
- Yumna, Y., Jaili, H., Tupas, P. B., Azima, N. F., Minsih, M., Dahliana, D., & Fransiska, N. (2024). Transformative Learning Media for Generation Z: Integrating Moral Values through Interactive E-Books in Islamic Education. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, 6(3), 403–422. <https://doi.org/10.23917/ijolae.v6i3.23814>
- Yumnah, S. (2021). E-Learning Based Islamic Religious Education of Learning Media: Alternative Solutions for Online Learning During Covid-19. *Nazḥruna: Jurnal Pendidikan Islam*, 4(2), 249–260. <https://doi.org/10.31538/nzh.v4i2.1209>
- Yusrita, T. (2023). Efektifitas Penerapan Pembelajaran Daring di Prodi Bimbingan dan Konseling Islam Fakultas Dakwah dan Komunikasi UIN Ar-Raniry. UIN Ar-Raniry.
- Zaid, B., Fedtke, J., Shin, D. D., El Kadoussi, A., & Ibahrine, M. (2022). Digital Islam and Muslim millennials: How social media influencers reimagine religious authority and Islamic practices. *Religions*, 13(4), 335. <https://doi.org/10.3390/rel13040335>