



## DIGITAL LITERACY: STRENGTHENING GEN Z'S CHARACTER BASED ON MODERATE ISLAM

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DOI : [10.30983/islam\\_realitas.v1i1.9239](https://doi.org/10.30983/islam_realitas.v1i1.9239)

Submission: February 24, 2025	Revised: June 11, 2025	Accepted: June 11, 2025	Published: July 30, 2025
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### Abstract

Digital transformation has shaped Gen Z's behavior in accessing information. Behind this pattern, they face serious challenges, including the rise of disinformation, misinformation, and malinformation, as well as the degradation of values due to harmful digital culture. This article aims to propose a paradigm of digital literacy based on moderate Islam for Generation Z, integrating critical awareness of information, digital ethics grounded in spiritual values, and the use of technology as a means of religious and character transformation in the digital age. This study employed a qualitative approach, incorporating literature review and analysis of digital literacy survey data. The findings reveal that Gen Z remains vulnerable to being trapped in echo chambers and filter bubbles due to low awareness of verification, confirmation, and comparison of information. Gen Z increasingly relies on social media as their primary source of academic information without adequate filtering mechanisms. This poses a risk to their well-being, necessitating strategies to strengthen digital literacy character as a defense against the negative impacts of digital transformation. This research proposes moderate Islam-based digital literacy as a new paradigm for Gen Z's digital literacy, which includes Islamic Epistemic Vigilance, Critical awareness in filtering information to counter hoaxes, fake news, and hate speech. Islamic Ethical Digital, the internalization of internet ethics aligned with spiritual values that foster civilized digital behavior. Spiritual-Tech Integration, the use of digital technology as a means of spiritual transformation that is adaptive to the times. These findings emphasize that moderate Islam-based digital literacy strategy to empower Gen Z as agents of change.

**Keywords:** Digital Literacy, Gen Z, Moderate Islam, Social Media

### Abstrak

Transformasi digital telah membentuk perilaku Gen Z dalam mengakses informasi. Di balik pola tersebut, mereka dihadapkan pada tantangan serius, maraknya disinformasi, misinformasi, malinformasi dan degradasi nilai akibat budaya digital yang buruk. Penelitian ini bertujuan untuk menawarkan paradigma literasi digital berbasis Islam moderat bagi Generasi Z, yang mengintegrasikan kesadaran kritis terhadap informasi, etika digital berlandaskan nilai spiritual, dan pemanfaatan teknologi sebagai sarana transformasi karakter religius di era digital. Penelitian ini menggunakan pendekatan kualitatif dengan metode analisis data survei literasi digital. Hasil penelitian menunjukkan, Gen Z masih rentan terperangkap dalam echo chamber dan filter bubble karena rendahnya tingkat kesadaran akan verifikasi, konfirmasi dan komparasi informasi. Gen Z telah menjadikan media sosial sebagai sumber utama informasi akademik tanpa mekanisme penyaringan memadai. Hal ini membahayakan diri mereka, sebab itu diperlukan strategi penguatan karakter literasi digital sebagai benteng dari dampak negatif transformasi digital. Penelitian ini menawarkan, literasi digital berbasis Islam moderat sebagai paradigma baru literasi digital Gen Z, yang mencakup: (1) Islamic Epistemic Vigilance, kesadaran kritis dalam memilah informasi guna menangkal hoaks, fake news dan hatespeech; (2) Islamic Ethical Digital, internalisasi etika berinternet yang selaras dengan nilai-nilai spiritual yang membentuk perilaku digital beradab; serta (3) Spiritual-Tech Integration, pemanfaatan teknologi digital sebagai sarana transformasi spiritual yang adaptif terhadap perkembangan zaman. Temuan ini menegaskan, literasi digital berbasis Islam moderat strategi dalam mengarabkan Gen Z menjadi aktor perubahan.

**Kata Kunci:** Literasi Digital, Gen Z, Islam Moderat, Media Sosial

### Background

The development of digital technology has transformed the patterns of social and religious interactions among people worldwide. Its roles and functions have begun to resemble those of traditional religion in contemporary society.

Explicitly, Greg Epstein (2024) states that technology has surpassed the role of religion in social life.<sup>1</sup> This view aligns with the massive use

<sup>1</sup>Greg Epstein, *Tech Agnostic: How Technology Became the World's Most Powerful Religion, and Why It Desperately Needs a Reformation* (MIT Press, 2024).



of digital technology globally, which has reached 5 billion users out of a total population of 8.08 billion. At the beginning of 2024, there were 5.61 billion smartphone users, meaning that 69.4 percent of the world's population has used information technology devices.<sup>2</sup> Meanwhile, in the Indonesian context, there are 221,563,479 internet users out of a total population of 282,477,584, equivalent to 79.5% of the total population.<sup>3</sup> The majority of this population consists of Muslims, reaching 245.93 million people (87.08%).<sup>4</sup> This indicates that the majority of Muslims are also part of the transformation in social and religious interactions brought about by the advancement of information technology.

Epstein's statement also correlates with the findings of a recent study, which indicates that digital media has shifted the religious literacy landscape for Indonesian Muslims in the post-truth era. The study reveals that Muslims tend to move away from consulting religious scholars (*ulama*) when facing religious issues, instead turning to the internet and social media to seek answers to their concerns. Digitalization has led Indonesian Muslims to become more pragmatic in their search for religious meaning and messages.<sup>5</sup> Meanwhile, an important issue that Gen Z must recognize is that the internet and social media are not free from false information (hoaxes) and fake news, as well as hate speech. Information available in digital spaces is highly susceptible to containing disinformation,

misinformation, and malinformation.<sup>6</sup> Therefore, any information found in digital media requires verification, confirmation, and comparison, following academic procedures for source criticism in research.

In fact, the Ministry of Communication and Digital (*Komdig*) of the Republic of Indonesia handled 2,882 hoax-related contents in 2024<sup>7</sup> some of which were related to religion, particularly surrounding issues of radicalism and intolerance. These were often directly or indirectly connected to the discourse of political power contests,<sup>8</sup> such as the presidential election (*Pilpres*), legislative election (*Pileg*), and simultaneous regional elections (*Pilkada Serentak*). Clips of religious sermons containing hate speech against certain political candidates were frequently spread by interested parties. A hoax is false information—whether intentionally or unintentionally misleading—presented as if it was true.<sup>9</sup> Fake news refers to deliberately misleading information created with specific political agendas.<sup>10</sup> Both hoaxes and fake news are designed to generate anxiety, hatred, suspicion, distrust, and even hostility.<sup>11</sup> Content often exploits fanaticism based on ethnicity, religion, race, and intergroup relations (SARA). Messages

<sup>2</sup>Kai Shu and others, 'Mining Disinformation and Fake News: Concepts, Methods, and Recent Advancements', *Disinformation, Misinformation, and Fake News in Social Media: Emerging Research Challenges and Opportunities*, 2020, 1–19.

<sup>3</sup>Husna Hanifah Triari, 'Sampai Mei 2023, Kominfo Identifikasi 11.642 Konten Hoaks', *Aptatika.Kominfo.Go.Id*, 2023 <<https://aptatika.kominfo.go.id/2023/06/sampai-mei-2023-kominfo-identifikasi-11-642-konten-hoaks/>> [accessed 22 February 2025].

<sup>4</sup>Ross Tapsell, *Media Power in Indonesia: Oligarchs, Citizens and the Digital Revolution* (Rowman & Littlefield, 2017).

<sup>5</sup>Eli Pariser, *The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think* (Penguin, 2011).

<sup>6</sup>Miguel Risco, 'Digital Platforms and Social Networks Three Essays in Microeconomic Theory' (Universität Bonn, 2025).

<sup>7</sup>Abdullah Khusairi and Icol Dianto, 'Ruang Percakapan Digital Sebagai Limbah Informasi: Analisis Terhadap Pengalaman di Media WhatsApp Group', *Ittishol*, 2 (2024), 174–201. Lihat juga pada, Tapsell. Ross, *Media Power in Indonesia: Oligarchs, Citizens and the Digital Revolution* (Rowman & Littlefield, 2017).

<sup>2</sup>Tim Report, 'Digital 2024: 5 Billion Social Media Users', *Wearesocial.Com*, 2024 <<https://wearesocial.com/id/blog/2024/01/digital-2024-5-billion-social-media-users/>> [accessed 11 February 2025].

<sup>3</sup>Haryanto Agus Tri, 'Jumlah Pengguna Internet Indonesia Tembus 221 Juta Orang', *Detik.Com*, 2024 <<https://apjii.or.id/berita/d/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang>> [accessed 12 February 2025].

<sup>4</sup>BPS Indonesia Tim Report, *Statistik Indonesia, 2024*, *Badan Pusat Statistik Indonesia* (Jakarta, 2024), LII, MMXXIV.

<sup>5</sup>Moh Nor Ichwan and others, 'Digitalization and the Shifting Religious Literature of Indonesian Muslims in the Era of Society 5.0', *Islamic Communication Journal*, 9.2 (2024), 245–65.



tend to be incomplete, provoke differing opinions, and are often inconsistent with common sense. They use provocative and exaggerated language, frequently accompanied by capital letters and exclamation marks, and often urge immediate sharing or going viral. The characteristics of hoaxes, fake news, and hate speech include unclear sources of information or media identity. The spread of hoaxes, fake news, and hate speech can lead to various negative impacts, such as wasting time and money, diverting public attention, deceiving the public, and triggering widespread panic.<sup>12</sup>

The phenomenon of the politicization of religious narratives becomes increasingly complex when netizens share common digital agreements and similarities, leading to cyberbullying and polarization among religious communities—conditions highly susceptible to the emergence and escalation of social conflicts. A key lesson from the rise of the Arab Spring<sup>13</sup> and the 212 Movement in Indonesia is that both were sparked by the virality within digital spaces.<sup>14</sup> The ease of access to religious information, when not accompanied by digital ethics, has proven that social harmony can be threatened and may even result in conflict or war. In light of this discourse, as the country with the largest Muslim population in the world, strengthening digital literacy based on Islamic values has become an urgent necessity

<sup>12</sup>Perangin Angin dkk Loina Lalolo Krina, 'Survei Literasi Hoaks Terhadap Partisipasi Politik Masyarakat di Pilkada 2024', *Mapindo.or.Id*, 2024 <<https://mafindo.or.id/publikasi-riset/riset/temuan-awal-survei-literasi-hoaks-terhadap-partisipasi-politik-masyarakat-di-pilkada-2024/>> [accessed 15 February 2025].

<sup>13</sup>Gadi Wolfsfeld, Elad Segev, and Tamir Shefer, 'Social Media and the Arab Spring: Politics Comes First', *The International Journal of Press/Politics*, 18.2 (2013), 115–37. See also, Ahmad Sahide and others, 'The Arab Spring: Membaca Kronologi Dan Faktor Penyebabnya', *Jurnal Hubungan Internasional*, 4.2 (2016), 118–29.

<sup>14</sup>Nibrosu Rohid and others, 'Digital Activism in Contemporary Islamic Politics: A Critical Analysis of Social Media's Impact on Islamic Movements', *MILRev: Metro Islamic Law Review*, 4.1 (2025), 208–32 <<https://doi.org/10.32332/milrev.v4i1.10159>>; See also, Burhanuddin Muhtadi, 'Politik Identitas Dan Mitos Pemilih Rasional', *Maarif*, 13.2 (2018), 68–86 <<https://doi.org/10.47651/mrf.v13i2.23>>.

in Indonesia. This form of digital literacy should not only focus on the ability to access information but also encompass a critical understanding of the content, sources, and the potential impacts and dangers of the information circulating online.<sup>15</sup>

Direct studies on Generation Z (Gen Z) specifically within the framework of moderate Islamic values are still limited, although numerous studies have been conducted from various perspectives. Existing research suggests that, as digital natives,<sup>16</sup> Gen Z is assumed to be highly proficient in the technical aspects of digital technology. However, in terms of ethics, security, and digital culture, they require a deeper understanding beyond mere digital skills. Several studies have described this generation as the "strawberry generation",<sup>17</sup> term used to characterize individuals with weak resilience,<sup>18</sup> a tendency to give up easily, individualism, difficulty in collaboration, and a perceived lack of loyalty toward group goals and interests.<sup>19</sup> When faced with an era of information overload,<sup>20</sup> they can easily be swayed and influenced by the mainstreaming of negative narratives, often without realizing it. This poses a threat to the resilience, harmony, and unity of the nation-state in the future. This research aims to fill the existing academic gap by offering new ideas that are recommended for the development of knowledge

<sup>15</sup>David Bawden, 'Origins and Concepts of Digital Literacy', *Digital Literacies - Concepts, Policies, and Practices*, 2008, 17–32.

<sup>16</sup>M Prensky, 'Digital Natives, Digital Immigrants, Part II. Do They Really Think Differently? OntheHorizon9 (6). 1-6', 2001.

<sup>17</sup>Dyva Clareta, Farikha Rachmawati, and Atjih Sukaesih, 'Communication Pattern Family and Adolescent Mental Health for Strawberry Generation', *International Journal of Science and Society*, 4.3 (2022), 73–93.

<sup>18</sup>Umi Martuti and Abu Dharin, 'The Urgency of Character Education in Nashih Ulwan's Perspective for the "Strawberry Generation"', *International Journal of Multidisciplinary Research and Analysis*, 06.09 (2023), 4415–20 <<https://doi.org/10.47191/ijmra.v6.i9-59>>.

<sup>19</sup>Angga Nur Rohman and others, 'Da'wah Approach to the Strawberry Generation: A Study on Yuk Ngaji TV Channel', *Islamic Communication Journal*, 8.2 (2023) <<https://doi.org/10.21580/icj.2023.8.2.16331>>.

<sup>20</sup>Bill Kovach and Tom Rosenstiel, *Blur: How to Know What's True in the Age of Information Overload* (USA: Bloomsbury Publishing USA, 2011).

and public policy. The key issues to be discussed are: How proficient is Gen Z in utilizing digital media through smartphones? How dependent is Gen Z on digital media as a source of academic information, and what is the impact on the quality of their understanding of the information they obtain? Furthermore, how can a paradigm of digital literacy character based on moderate Islamic values be developed for Gen Z in today's information technology era?

The purpose of this study is to analyze the dynamics of Gen Z's digital proficiency in using digital media, particularly through smartphones, for academic purposes, and to identify Gen Z's dependence on digital media as a source of academic information, as well as its impact on their understanding of the information obtained. Furthermore, this research aims to formulate a paradigm for strengthening Gen Z's digital literacy character based on moderate Islamic values, which can serve as a recommendation for the development of knowledge and public policy. This study employs a descriptive qualitative approach, with data collection methods including interviews, survey data analysis, and literature reviews on digital literacy and moderate Islam. The article is based on survey data collected from 1,350 recipients of the Indonesia Smart Card (KIP) scholarship from all academic cohorts—2021, 2022, 2023, and 2024—on Friday, November 8, 2024. These students come from across the Sumatra archipelago and are currently enrolled in various study programs at the State Islamic University of Imam Bonjol Padang, West Sumatra.<sup>21</sup> They represent Gen Z, the generation of Indonesia Emas 2045, who have grown up immersed in and are familiar with a fully digital lifestyle. The analysis is conducted by reducing the data and organizing it into a systematic descriptive presentation using a moderate Islamic approach. Interviews were also conducted with Gen Z participants from media literacy classes, while

<sup>21</sup> Zulfadli and others, 'From Islamic Modernism to Islamic Conservatism: The Case of West Sumatra Provinces, Indonesia', *Cogent Social Sciences*, 10.1 (2024) <<https://doi.org/10.1080/23311886.2024.2406297>>.

survey data was gathered from students who had received digital literacy training.

### **Digital Literacy, Gen Z Character, and the Concept of Moderate Islam**

Digital literacy is the ability of individuals to understand, use, and evaluate information available in the digital world in various formats from diverse sources effectively and responsibly.<sup>22</sup> Digital literacy has become an essential aspect of everyday life, especially for generations that have grown up with broad access to the internet. It encompasses four key aspects, technical skills (digital skill), the ability to operate digital devices, understand and filter information,<sup>23</sup> and be aware of ethical considerations (digital ethic) when interacting in digital spaces. Productive and wise use (digital culture),<sup>24</sup> this involves not only knowing how to use technology but also utilizing it in a productive and responsible manner, particularly when facing the overwhelming flow of information that is often unverified. Digital safety, the adoption of attitudes and actions that ensure personal security in digital spaces, including the protection of important data, the use of strong and layered passwords, and other security measures.<sup>25</sup>

Media digital literacy also encompasses critical thinking skills, which include the ability to access, analyze, create content, reflect on the impact of information technology, and actively participate in digital spaces.<sup>26</sup> More comprehensively, digital literacy encompasses a

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<sup>22</sup>Pritika Reddy, Bibhya Sharma, and Kaylash Chaudhary, 'Digital Literacy: A Review of Literature', *International Journal of Technoethics (IJT)*, 11.2 (2020), 65–94.

<sup>23</sup>Hobbs Renee, *Digital and Media Literacy: A Plan of Action* (Washington, 2010) <<https://doi.org/10.1097/SCS.0b013e31824e27c7>>.

<sup>24</sup>Lennie Barblett and Fiona Boylan, *Digital Literacy: A Review of Literature* (Australia: State Library Western Australia, 2023).

<sup>25</sup>Wei Zhou, Jennifer Whyte, and Rafael Sacks, 'Construction Safety and Digital Design: A Review', *Automation in Construction*, 22 (2012), 102–11.; Łukasz Tomczyk, 'What Do Teachers Know about Digital Safety?', *Computers in the Schools*, 36.3 (2019), 167–87.

<sup>26</sup>Renee Hobbs, 'News Literacy: What Works and What Doesn't', in *Association for Education in Journalism and Mass Communication Conference*, Denver, CO, 2010.

range of skills that go beyond basic technical abilities. Finally, social-emotional literacy is essential for engaging in healthy and constructive interactions within digital environments, fostering positive communication and emotional awareness in online spaces.<sup>27</sup> As a skill, digital literacy also involves the capacity for personal character in digital spaces.

Personal character is an inherent trait related to morals, ethics, and personality. Many studies suggest that character strengthening must be carried out to prepare ideal human resources<sup>28</sup> for the future. For Gen Z, strengthening digital literacy character is considered highly urgent to prepare for the future in an information-saturated digital era. The ability to filter information, think critically, and uphold strong digital ethics are fundamental skills for Gen Z today.

Gen Z is a group born between 1997-2012 and is known as the digital native generation,<sup>29</sup> meaning they grew up with the internet, social media, and digital technology as part of their daily lives. Unlike previous generations, Gen Z has a higher proficiency in accessing and managing digital information<sup>30</sup> compared to digital immigrants.<sup>31</sup> Gen Z is accustomed to digital multitasking, using various platforms simultaneously for learning, socializing, and entertainment. This ability makes them more adaptive to rapid technological changes.<sup>32</sup>

<sup>27</sup>Aharon Aviram and Yoram Eshet-Alkalai, 'Towards a Theory of Digital Literacy: Three Scenarios for the next Steps', *European Journal of Open, Distance and E-Learning*, 9.1 (2006).

<sup>28</sup>José F. Molina-Azorin and others, 'Environmental Management, Human Resource Management and Green Human Resource Management: A Literature Review', *Administrative Sciences*, 2021 <<https://doi.org/10.3390/ADMSCI11020048>>.

<sup>29</sup>Prenksy.

<sup>30</sup>Sue Bennett, Karl Maton, and Lisa Kervin, 'The "Digital Natives" Debate: A Critical Review of the Evidence', *British Journal of Educational Technology*, 39.5 (2008), 775-86.

<sup>31</sup>Jacqueline McGinty, Jess Oest, and Jared Divido, 'Digital Immigrants: Leveraging the Technology Acceptance Model to Increase Digital Literacy in Older Adults', *New Directions for Adult and Continuing Education*, 2024.181 (2024), 9-18.

<sup>32</sup>Simon Haines, Simon Haines, and Simon Haines, *Student's Book Student's Book*, 2014, II.

However, some studies reveal that Gen Z has many weaknesses in perseverance, including a lack of loyalty, individualism,<sup>33</sup> and other shortcomings. Nevertheless, there is optimism that Gen Z is a generation that still holds firmly to its Indonesian<sup>34</sup> roots, demonstrating greater inclusivity and concern for social issues such as gender equality, climate change, and human rights. They use social media as a tool to voice their opinions and advocate for social change. With their digital skills, Gen Z has great potential to become agents of change in society. However, not all members of Gen Z have received adequate digital literacy education, let alone embraced moderate Islamic values, making them vulnerable to intolerance, exclusivism, and radicalism.<sup>35</sup>

Moderate Islam<sup>36</sup> is a school of thought in understanding Islamic teachings that emphasizes balance (*wasathiyah*). Derived from the words moderate (English) and *wasathiyah* (Arabic), its main characteristics include *Tawassuth* (Middle Path), *Tawazun* (Balance), *I'tidal* (Justice), *Tasamuh* (Tolerance), *Musawah* (Egalitarianism), *Syura* (Consultation), *Islah* (Reform and Innovation), *La Unf* (Non-Violence), and *Ukhawah* (Brotherhood).<sup>37</sup> In Indonesia, key figures known

<sup>33</sup>Chandra Apriyansyah, Sri Sukatmi, and Lily Muliana Mustafa, 'Mitigating Strawberry Generation Risks through Multiple Learning Strategies in Kindergarten', *Child Education Journal*, 5.2 (2023), 120-32; see also, Claretta, Rachmawati, and Sukaesih.

<sup>34</sup>Muhammad Faisal, *Generasi Kembali Ke Akar: Upaya Generasi Muda Meneruskan Imajinasi Indonesia* (Jakarta: Kompas Penerbit Buku, 2020).

<sup>35</sup>Margaretha A. van Es, 'Norwegian Muslims Denouncing Terrorism: Beyond "Moderate" versus "Radical"?' *Religion*, 51.2 (2021), 169-89 <<https://doi.org/10.1080/0048721X.2021.1865600>>.

<sup>36</sup>Hasse Jubba and others, 'The Contestation between Conservative and Moderate Muslims in Promoting Islamic Moderatism in Indonesia', *Cogent Social Sciences*, 8.1 (2022) <<https://doi.org/10.1080/23311886.2022.2116162>>.

<sup>37</sup>Yusuf Rahman, Kholid Al Walid, and Humaidi, 'Critical Thinking and Religious Moderat. Instilling Religiously Moderate Values through the Teaching of Islamic Philosophy in Indonesia', *Journal of Indonesian Islam*, 16.1 (2022), 49-74 <<https://doi.org/10.15642/JIIS.2022.16.1.49-74>>; see also, Zulkifli and others, 'The Construction of Religious Moderation Among Indonesian Muslim Academics', *Teosofi*:



for promoting this school of thought include Abdurrahman Wahid (Gus Dur) and Syaifi Maarif (Buya Syaifi'i).<sup>38</sup> This ideology emerges as a response to the extremes of radicalism, extremism, and liberalism within Islam.<sup>39</sup> Moderate Islam also prioritizes dialogue and tolerance in religious life to achieve the ideal of Islam *rahmatan lil alamin* (Islam as a mercy for all creation).

The intellectual roots of moderate Islam trace back to the Battle of Siffin (657 CE), which occurred between the forces of Caliph Ali ibn Abi Talib and Muawiyah ibn Abi Sufyan.<sup>40</sup> A faction from Ali's camp broke away, rejecting the arbitration decision between the two sides and labeling both parties as disbelievers for not judging according to God's law. This extreme stance marked the emergence of a far-right theological view that prioritized revelation (text) above all, with reason subordinated beneath it. This belief developed into the theological views of the *Khawarij*, followed by *Jabariyah*, while the middle ground was represented by *Ash'ariyah* and *Maturidiyah* (from Samarkand and Bukhara). On the liberal side stood the *Mu'tazilah*.<sup>41</sup> The emergence of moderate Islamic discourse responds to transnational ultra-conservative movements that actively spread radical and intolerant ideologies. These groups were among the first to utilize digital spaces to build propaganda and wage ideological warfare against

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Jurnal Tasawuf Dan Pemikiran Islam, 13.2 (2023), 337–66  
<<https://doi.org/10.15642/teosofi.2023.13.2.337-366>>.

<sup>38</sup>Wahyudi Akmaliah, Priyambudi Sulistiyanto, and Sukendar, "Making Moderate Islam in Indonesia," *Studies in Conflict & Terrorism* 47, o. 11 (November 1, 2024):1495–1509, <https://doi.org/10.1080/1057610X.2022.2034224>.

<sup>39</sup>Zainal; et al., 'Pesantren Community Paradigma toward the Practice of Religious Moderation in West Sumatra', *Islam Realitas*, 10.1 (2024), 106–16.

<sup>40</sup>Masduqi Irwan, 'Kritik Syaik Wahbah Az-Zuhaili Dan Syaik Ahmad At-Tayyib Terhadap Sistem Khilafah' (International Indonesia Islamic University, 2022).

<sup>41</sup>Vahid Farhadi and Mohammad Zahedi, 'Explanation and Examination of the Necessity of Obtaining Certitude or the Sufficiency of Suspicion in Belief, According to Basics of Theological Belief Imamiyyah, Mu'tazilah, Ash'ari and Matridiyyah Schools', *Kalam Pajouhi*, 2025.

groups they deem as enemies of Islam—including fellow Muslims. Terrorist movements<sup>42</sup> often stem from radical and revivalist religious ideologies that can be found across various faith traditions.<sup>43</sup> Moderate Islam, digital literacy, and Gen Z are theoretical discussions that continue to be debated in various contexts. However, in this article, they are integrated into a single theoretical framework for studying the strengthening of character in the nation's next generation.

### Analysis of Gen Z's Digital Literacy in Utilizing Digital Media

Survey data from 1,210 participants out of 1,350 Gen Z recipients of the KIP Kuliah scholarship showed that 656 individuals (54.29%) were willing to complete the survey. The respondents consisted of 42.4% males and 27.6% females, with the following breakdown: 7% from the 2021 cohort (eighth semester, nearing graduation, thus fewer participants attended), 17% from the 2022 cohort (sixth semester, currently undergoing field practice), 28.8% from the 2023 cohort (actively attending classes), and 47% from the 2024 cohort (new students required to attend career development and scholarship recipient orientation at their university). This survey was conducted under the general theme of Digital Literacy among Students of the 2021-2024 Cohorts in Using Smartphones for Information, Academic Purposes, Entertainment, and Understanding False Information and Its Spread. The results serve as the initial data foundation for this article.

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<sup>42</sup> Miron Lakomy, 'Danse Macabre : Gore Images in the Islamic State's "Dabiq" Magazine as a Propaganda Device', *International Journal of Intelligence, Security, and Public Affairs*, 21.2 (2019), 143–61 <<https://doi.org/10.1080/23800992.2019.1649138>>; see also, Jacky Li Chun-Leung and others, 'Islamic Law and Its Application as Penal Code by the Islamic State of Iraq and Sham (ISIS)', *Cogent Arts and Humanities*, 11.1 (2024) <<https://doi.org/10.1080/23311983.2024.2382519>>.

<sup>43</sup>Hamidulloh Ibda and others, 'Islamic Moderation in Elementary School: Strengthening the Aswaja Annadhiyyah Curriculum in Preventing Religious Radicalism.', *Journal of Education and Learning (EduLearn)*, 18.4 (2024), 1246–53.



Among the 656 respondents, 53% (363 individuals) reported frequently using smartphones to seek academic information, 38.6% (253) stated they used them very frequently, 6.1% (40) used them occasionally, and none reported using them rarely or never. These figures highlight that digital literacy is an urgent need. According to interview results, Gen Z students tend to complete their academic assignments not on laptops but on smartphones. Survey data revealed that 38.7% (254 respondents) found using smartphones effective for completing academic tasks, 36.1% (237) considered them very effective, 23.8% (156) deemed them moderately effective, and 1.4% (9) found them less effective. This suggests that they are more adept at typing with two fingers on a smartphone than on a laptop or PC keyboard. This also demonstrates that, as digital natives, Gen Z's digital skills are undeniable—they are highly proficient in the technical use of digital devices. This competence is an essential asset for their future; however, it remains important for them to also master operating laptops.

The most frequently used applications by Gen Z in their activities show that 66% (439) use the Google search engine, 13% (88) use digital libraries, 8.4% (55) use ChatGPT, 4.7% (31) use YouTube, 1.1% (7) use the social media platform Instagram, and 0.2% (4) use TikTok. This indicates that Gen Z is not yet well-accustomed to referring to open-access journals when seeking authoritative sources of knowledge.<sup>44</sup> Instead, they tend to rely on search engines, which do not always lead to credible sources. This raise concerns that Gen Z could become susceptible to consuming misinformation, hoaxes, and hate speech. Moreover, since academic information searches are often conducted alongside entertainment on smartphones, their algorithms

are likely to divert them toward content unrelated to the knowledge they should be acquiring.<sup>45</sup>

When they were asked about using smartphones for entertainment, 55% (361) responded often, 16.3% (107) very often, 25% (169) sometimes, and 2.9% (19) rarely. The most dominant entertainment applications used were TikTok at 52.6% (345), Instagram social media at 27% (183), YouTube at 9.3% (61), Spotify at 7.2% (47), and WhatsApp, Mobile Legends game, etc., at 0.2% (1). Interestingly, the respondents admitted that using smartphones for entertainment actually disrupted their academic activities, with 46.2% (303) answering sometimes, 21.2% (139) rarely, 20.1% (132) never, 9.9% (65) often, and 2.6% (17) very often. According to those who felt disturbed by the temptation and distraction of smartphones, there was a very high level of dependency.<sup>46</sup> For every needs and necessity of digital natives, smartphones are always required.<sup>47</sup> The dominance of TikTok (52.6%) and Instagram (27%) is a significant note because the freedom in the digital space is highly vulnerable to scams and can provoke lust. Prolonged negative effects can lead Gen Z to experience impaired reasoning and mental health, leading to stress, depression, anxiety, social isolation, and reduced physical activity.<sup>48</sup>

Respondents admitted that there is a lot of false information on social media and the internet whose truth is questionable. They have encountered it with 49.1% (322) experiencing it often, 33.8% (222) sometimes, 13% (85) very often, 3.4% (22) rarely, and 0.8% (5) never. A key takeaway from this data is that determining whether information is false requires verification,

<sup>44</sup>Rossalyn Ayu Asmarantika, Albertus Magnus Prestianta, and Nona Evita, 'Pola Konsumsi Media Digital Dan Berita Online Gen Z Indonesia', *Jurnal Kajian Media*, 6.1 (2022).

<sup>45</sup>Lambèr Royakkers and Rinie van Est, 'The New Digital Wave of Rationalization: A Loss of Autonomy', *International Journal of Technoethics (IJT)*, 11.1 (2020), 59–74.

<sup>47</sup>Prenksy.

<sup>48</sup>Kaza Mojtahe, 'How Social Media Affecting the Mental Health of Gen-Z: A Mixed Method Study', *Revista de Psiquiatria Clinica*, 49.1 (2022), 114–18 <<https://doi.org/10.15761/0101-6083000000345>>.

<sup>44</sup>Fera Andriani Djakfar Musthafa, 'Penggunaan Artificial Intelligence (AI) Dalam Pembelajaran: Fenomena Transformasi Otoritas Pengetahuan Di Kalangan Mahasiswa', *Journal of Contemporary Islamic Education*, 4.1 (2024), 125–36 <<https://doi.org/10.25217/jcie.v4i1.4386>>.



confirmation, and comparison. These skills can be developed through digital literacy training. Allowing fake news, hoaxes, and hate speech to consistently appear on smartphones can influence perspectives. According to mass communication theory, something that is repeatedly heard and practiced can eventually be perceived as truth.<sup>49</sup> Meanwhile, many Gen Z individuals still lack digital literacy skills both before and after acquiring smartphones. In this context, Gen Z's algorithms are essentially revolving around their social media accounts based on their behavior on smartphones. In other words, referring to the theories of echo chamber<sup>50</sup> dan filter bubble<sup>51</sup> and filter bubble (see Table 8), Gen Z rarely realizes the danger of being trapped in this cycle, as they do not perceive it as a threat.

Regarding how they verify information found on the internet, 56.3% (417) seek trustworthy sources, 26.2% (172) read comments or reviews, 7.8% (51) ask someone more knowledgeable, and only 1.5% (10) use fact-checking applications. Respondents also understand whether smartphones play a role in spreading false information: 38.9% (255) believe they play a role, 28.7% (186) believe they play a significant role, 28.4% (188) think they play a moderate role, 2.7% (18) feel they play a minor role, and 1.4% (9) believe smartphones play no role at all. This indicates an awareness of the Islamic teaching that spreading news without certainty can lead to slander (QS. An-Nur: 15-16).<sup>52</sup>

<sup>49</sup>Lynn Hasher, David Goldstein, and Thomas Toppino, 'Frequency and the Conference of Referential Validity', *Journal of Verbal Learning and Verbal Behavior*, 16.1 (1977), 107-12.

<sup>50</sup>Matteo Cinelli and others, 'The Echo Chamber Effect on Social Media', *Proceedings of the National Academy of Sciences*, 118.9 (2021) <<https://doi.org/10.1073/pnas.2023301118>>.

<sup>51</sup> Eli Pariser, *The Filter Bubble: What the Internet Is Hiding from You* (Penguin Press, 2011).

<sup>52</sup>(Remember) when you received it (the false news) by word of mouth, you spoke with your mouths what you did not know at all, and you regarded it lightly, whereas in the sight of Allah it is a grave matter (Q.S. An Nur: 15); Why, when you heard it (the false news), did you not say, It is not proper for us to speak of this. Exalted are You; this is a great falsehood? (Q.S. An Nur: 16).

The majority of respondents stated that they verify information by seeking sources from trusted media, with 56.3% (417) looking for reliable sources and 26.2% (172) reading comments or reviews. This approach is still less than ideal if not accompanied by an understanding of what constitutes trusted media. It requires media literacy skills, particularly regarding officially verified online media recognized by the Press Council, rather than unreliable or unprofessional outlets.<sup>53</sup> In the academic world, scholarly literature is essential, while in Islamic studies, it is necessary to refer to scholars whose works are publicly recognized. Islam teaches the importance of consulting experts when one lacks knowledge about something (QS. An-Nahl: 43),<sup>54</sup> which, in the digital context, means following experts or institutions with authoritative knowledge.

Gen Z acknowledges the importance of digital literacy in using smartphones, with 50.8% (333) considering it very important, 37.7% (247) stating it is important, 11.1% (73) considering it fairly important, and only 0.5% (3) stating it is not important. This correlates with their confidence in having digital literacy skills to use smartphones wisely. A total of 461 Gen Z (70.3%) feel they are fairly competent, 111 (16.9%) feel less competent, and only 82 (12.5%) feel very competent. None reported feeling completely incompetent. This reality suggests that Gen Z acknowledges the need for more in-depth media literacy insights beyond basic introductions, requiring longer workshops. Gen Z views digital literacy as an essential aspect of their lives.

In reality, it is not only Gen Z but all smartphone users with an email linked to social media accounts who remain subject to the filter bubble effect on social media, where users tend to

<sup>53</sup>Kuwado Fabian Januarius, 'Kemenkominfo Sebut Ada 43.000 Media Abal-Abal', *Kompas.Com*, 2017 <<https://nasional.kompas.com/read/2017/01/07/16533201/kemenkominfo.sebut.ada.43.000.media.abal-abal>> [accessed 23 February 2025].

<sup>54</sup>We did not send before you (O Muhammad) any messenger except men to whom We revealed. So ask the people of knowledge if you do not know (Q.S. An Nahlu: 43).



interact within groups that share similar views, reinforcing information bias. News feed algorithms strengthen exposure to information that aligns with users' preferences, in line with the power of platform design and content recommendation mechanisms. Therefore, a deeper understanding is needed of how social media dynamics shape public opinion and the spread of information<sup>55</sup> to explore the impact of current dependence on digital media.

### The Impact of Gen Z's Digital Media Dependence

Gen Z's culture, which is closely intertwined with smartphones in their daily lives, has both positive and negative impacts that need to be considered and addressed wisely. The positive impact of this phenomenon is the open and rapid access to information. However, what must be emphasized is the skill to trace authoritative sources, rather than relying on general sources from social media, especially applications like TikTok<sup>56</sup> and Instagram.<sup>57</sup> While these platforms do have accounts that provide authoritative information, they are not primarily designed for academic or scientific information but rather serve as community communication tools, mainly focused on entertainment content. TikTok, initially known for short videos and live streaming, has now evolved similarly to other applications. Likewise, Instagram, which initially relied on photography, has also developed like other platforms. On the positive side, Gen Z should be guided to obtain valid and accurate information relevant to academic purposes and skills development. This can be found in journals, e-books, and specific educational videos. Among

<sup>55</sup>Cinelli and others. See also, Subhan et. al. Amir Andi, *Pengantar Media Sosial Dan Opini Publik, Peran Media Sosial Dalam Pembentukan Opini Publik* (Prambanan: Nas Media Pustaka, 2024).

<sup>56</sup>Elfina Elfina and others, 'Motif Penggunaan Aplikasi Tik Tok Oleh Siswa Madrasah Aliyah Negeri (MAN), Kota Pariaman', *Jurnal Komunikasi Dan Penyiaran Islam*, 13.2 (2022), 230–42.

<sup>57</sup>Julia Vassey and others, 'Worldwide Connections of Influencers Who Promote E-Cigarettes on Instagram and TikTok: A Social Network Analysis', *Computers in Human Behavior*, 165 (2025), 108545.

Gen Z respondents, 53% (363) stated that they often find this positive, and 38.6% (253) believe it is a beneficial aspect that should be utilized for seeking information from authoritative sources.

The positive impact of Gen Z's digital life with smartphones is the ease of building group communication networks online, serving as a platform for *syura* (consultation), which aligns with one of the principles of Islamic moderation. Information related to the academic world can be discussed within these platforms, such as WhatsApp Groups (WAG). However, some studies have shown that such groups can become dumping grounds for irrelevant information, leading to communication chaos and the loss of the group's original purpose. In this context, what is needed in a group is a moderator who manages the flow of discussion topics, fostering *ukhuwah* (brotherhood) and building solidarity for various interests.<sup>58</sup> This becomes a significant social capital for Gen Z. As the majority in Indonesia, they represent a tremendous digital force that, when united in the digital space, can drive movements of *amar ma'ruf nahi munkar* (enjoining good and forbidding evil).<sup>59</sup> This is closely related to the integration of spiritual values in the use of technology, representing a form of spiritual transformation (Spiritual-Tech Integration) in the digital era.

Dependence on digital media can naturally enhance critical thinking skills if approached with awareness and a continuous willingness to learn digital literacy, alongside broadening global perspectives and connections. Conversely, it can diminish these skills when users become trapped in algorithms based on their preferences, forming an echo chamber that resonates within their social media engagement circles. This means Gen Z must move beyond merely following algorithm-driven content. A persistent desire to learn will open opportunities for creativity and

<sup>58</sup>Abdullah Khusairi, 'The Meaning of Information Accumulation in Digital Conversation Spaces: Study on WhatsApp Application Group Communication Medium', *IJoRIS: International Journal of Religious and Interdisciplinary Studies*, 1.1 (2024), 21–46.

<sup>59</sup>Mojtahe.



collaboration with various parties, freeing them from the filter bubble and allowing for a broader and deeper acquisition of knowledge.

Gen Z also has great potential to initiate *islah* (reform) and innovation in the use of information technology. They can create more engaging social media content and quickly attract engagement. However, the next challenge is to develop creative thinking alongside critical thinking.<sup>60</sup> This dependency can ultimately serve as a means to spread messages of peace and non-violence (*la 'unf*), countering hate speech by continuously promoting content that fosters peace and humanity. Moreover, maintaining courtesy on social media can help prevent the spread of slander (QS. An-Nur: 15-16). Gen Z needs to understand that every post they share reflects their character and morality as Muslims. Therefore, it is essential to practice digital management that balances the real and virtual worlds.<sup>61</sup>

Data shows that 55% (361) of Gen Z frequently use smartphones for entertainment, yet 46.2% (303) admit to occasionally being distracted by digital interruptions. Islam teaches the importance of time management to avoid falling into digital addiction and to remain productive (HR. Ahmad).<sup>62</sup> The negative impact of excessive dependence includes mental, spiritual, and even physical health issues. Psychological and spiritual symptoms found in many studies on technology addiction include stress, depression, disturbances in inner peace, flawed and disturbed reasoning, and potentially more severe conditions.<sup>63</sup> Especially for those who lack mental and spiritual

<sup>60</sup>Luke Tredinnick and Claire Laybats, 'Contagion: The Chaos of the Digital Ether', *Business Information Review* (SAGE Publications Sage UK: London, England, 2025), p. 02663821251322568.

<sup>61</sup> Hamdy A. HASSAN, "Islamic State" and the Transformation of Islamic Discourse in the Middle East, *Journal of Middle Eastern and Islamic Studies (in Asia)*, 10.4 (2016), 1–19  
<<https://doi.org/10.1080/19370679.2016.12023290>>

<sup>62</sup>Musthafa Dib Al-Bugha, *Al-Wafi: Syarah Hadits Arba'in Imam An-Nawawi* (Jakarta: Hikmah, 2007).

<sup>63</sup>Jeffrey A Hall, 'Loneliness and Social Media', *Annals of the New York Academy of Sciences*, 1543.1 (2025), 5–16.

strength, facing issues such as cyberbullying can be very dangerous. Suicide cases in China have originated from depression caused by cyberbullying.<sup>64</sup> The mental health of Gen Z is indeed severely tested when they become consumers of information in digital media. Case studies of users with excessive dependence are very detrimental as they cause anxiety and FOMO (fear of missing out)<sup>65</sup> which ultimately disrupts academic performance.

The negative impact also manifests as the superficiality of knowledge—being aware of many things but lacking depth and breadth, including academic material relevant to their field of study. Gen Z tends to prefer information that aligns with their personal preferences, which can be seen from the dominant applications they use. Data reveals that the most commonly used entertainment platforms are TikTok at 52.6% (345), Instagram at 27% (183), YouTube at 9.3% (61), Spotify at 7.2% (47), and WhatsApp and Mobile Legends at 0.2% (1) each. While these applications could potentially be used to explore knowledge relevant to their major, they are generally unsuitable for academic purposes. In fact, they tend to have a negative influence if not accompanied by digital ethics skills and a creative attitude toward producing meaningful content. The use of these platforms should be encouraged to foster the creation of academic works, rather than serving merely as passive entertainment. On any social media platform, amidst the flood of both academic and entertainment content, it is essential to develop the ability to differentiate between signal and noise to make the experience more positive or the benefit<sup>66</sup> of Gen Z, this

<sup>64</sup>Zhihao Ma, Tzu-Hsuan Liu, and Yiwei Xia, 'Individual Stress, Contextual Stress, and Network Attributes on Cyberbullying Perpetration among Young Adults during the COVID-19 Lockdown', *Deviant Behavior*, 45.7 (2024), 1065–80.

<sup>65</sup>Larry Dossey, 'FOMO, Digital Dementia, and Our Dangerous Experiment', *Explore: The Journal of Science and Healing*, 10.2 (2014), 69–73  
<<https://doi.org/10.1016/j.explore.2013.12.008>>.

<sup>66</sup>John A Swets, *Signal Detection Theory and ROC Analysis in Psychology and Diagnostics: Collected Papers* (Psychology Press, 2014). See also, Tredinnick and Laybats.



selective ability is an essential part of urgent digital literacy. Several studies reveal that Gen Z is often exposed to fake news, false information, and hate speech.<sup>67</sup> These three factors can lead to dangerous consequences when making decisions, potentially resulting in mistakes and misguided actions. The subsequent risks include a loss of focus, whereas the primary need in the academic world is a high level of concentration to absorb knowledge effectively. Both, the positive and negative impacts of Gen Z's dependence on digital media provide an opportunity to shape a moderate generation in the digital space.<sup>68</sup>

Based on survey data, Gen Z has not yet taken a middle path (*tawassuth*) in using smartphones. They tend to use smartphones more for academic information rather than tracing authoritative sources from required books and the latest journals. While using smartphones for academic purposes offers convenience, it distances them from required readings that should be engaged with manually. Gen Z's approach to using smartphones is a quick and easy path but is prone to retrieving academic information that may not align with the intended course material. In addition to not taking a middle path in using smartphones for academic needs, their usage is also not balanced. More often used for entertainment than for self-development (see tables 7-8). This indicates an unfair attitude in selecting and filtering information. Gen Z tends to passively accept what appears on their smartphone screens rather than actively seeking serious and in-depth information that they actually need for self-development. Islam emphasizes that spreading information without certainty can lead to *fitnah* (slander) (QS. An-Nur: 15-16). By understanding digital ethics based on moderate Islamic values, Gen Z can avoid

<sup>67</sup>Kemkominfo dan Katadata Insight Center, *Status Literasi Digital Indonesia Survei Di 34 Provinsi*, Katadata Insight Center, 2020.

<sup>68</sup>M. H.M.Wildan Bin Yahya and Munawar Rahmat, 'Building Moderate Islamic Thoughts in Indonesian Students through Dialogue-Argumentative Methods', *Academic Journal of Interdisciplinary Studies*, 10.3 (2021), 288-300 <<https://doi.org/10.36941/AJIS-2021-0084>>.m

spreading hoaxes, hate speech, and social division caused by misinformation. Islam teaches balance in all aspects of life (QS. Al-Baqarah: 143).<sup>69</sup> The most concerning issue for Gen Z regarding their future is the narrowing of their perspective by digital media and social media algorithms, which could potentially foster intolerance toward differing discourses. Therefore, a moderate Islamic understanding is necessary in Gen Z's digital literacy. Even though they have equal opportunities for information access, this equality may not be realized due to the influence of algorithmic preferences. This also calls for an understanding of equal sources rather than relying solely on general search engines. Islam teaches the principle of *tabayyun*, meaning one must verify the truth of information before believing or spreading it.<sup>70</sup> This is what must be offered as a paradigm for strengthening Gen Z's digital literacy character based on moderate Islam.

### The Paradigm of Digital Literacy Character Based on Moderate Islam

The principles of moderate Islamic<sup>71</sup> thought are relevant as a paradigm for the lives of Muslim Gen Z in the digital era. This principle will create a new harmony and become a new strength for the Muslim community in shaping a discourse ecosystem in the digital space, representing the face of Islam that is friendly and peaceful, in line with the ideal of Islam as *rahmatan lil 'alamin* (a mercy to all creation). Moderate Islam is the face of Islam in the Nusantara,<sup>72</sup> which has historically

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<sup>69</sup>And thus We have made you (the Muslim community) a 'middle nation' so that you may be witnesses over the people, and so that the Messenger may be a witness over you... (Q.S. Al Baqarah: 143).

<sup>70</sup>Abdulah Khusairi, 'Diskursus Islam Kontemporer Di Media Cetak: Kajian Terhadap Radikalisme Dalam Artikel Populer Surat Kabar Harian Kompas Dan Republika 2013 – 2017', Dissertation, UIN Syarif Hidayatullah, 2019.

<sup>71</sup> Minako Sakai and Amelia Fauzia, 'Performing Muslim Womanhood: Muslim Business Women Moderating Islamic Practices in Contemporary Indonesia', *Islam and Christian-Muslim Relations*, 27.3 (2016), 229–49 <<https://doi.org/10.1080/09596410.2015.1114243>>.

<sup>72</sup>Azyumardi Azra, *Historiografi Islam Kontemporer: Wacana, Aktualitas, Dan Aktor Sejarah*, Gramedia Pustaka Utama (Jakarta: Gramedia Pustaka Utama, 2002).



contributed to social and religious movements, creating harmony in multicultural life.<sup>73</sup>

The analysis of survey data on Gen Z's digital literacy reveals that the challenges faced by this generation extend far beyond technical capabilities, such as accessing or operating technology. At the core of the issue lies a more profound challenge: how individuals cultivate critical awareness, uphold ethical standards, and integrate spiritual values into their digital experiences. In this increasingly interconnected and fast-paced digital landscape, digital literacy must evolve into a comprehensive paradigm—one that not only equips individuals with technical proficiency but also fosters intellectual depth, moral responsibility, and spiritual growth. In this regard, a digital literacy framework rooted in the principles of moderate Islam presents a meaningful and holistic approach. This concept goes beyond simply mastering technological skills—it focuses on shaping well-rounded individuals who possess not just digital competence but also spiritual resilience and ethical consciousness. This paradigm is built on three interconnected pillars: First, Islamic Epistemic Vigilance, this element emphasizes the importance of developing critical thinking skills, enabling Gen Z to discern credible information and challenge narratives of extremism and exclusive ideologies. By fostering a mindset of discernment, this principle empowers young people to navigate the vast ocean of digital information with clarity and wisdom; Second, Islamic Ethical Digital Citizenship, rooted in the moral teachings of Islam, this principle focuses on internalizing ethical behavior in the digital space. It promotes responsible engagement online, encouraging Gen Z to embody respect, civility, and constructive communication in their digital interactions; Three, Spiritual-Tech Integration, this pillar highlights the potential of digital technology as a tool for spiritual reflection and

transformation. It encourages individuals to use technology in ways that nurture personal growth, deepen spiritual awareness, and remain adaptable to the evolving demands of the digital age. Through this comprehensive and balanced framework, Gen Z can be empowered to become not just tech-savvy individuals, but also ethical and spiritually grounded digital citizens, capable of shaping a digital ecosystem that reflects harmony, tolerance, and the core values of a peaceful and inclusive Islam.

More clearly, epistemic vigilance<sup>74</sup> is a concept in the field of epistemology (the study of knowledge) that refers to an individual's ability to evaluate the reliability of information received from others. This includes the capacity to detect false, misleading, or biased information, whether consciously or unconsciously. This concept is highly relevant in the context of communication, media literacy, and the dissemination of information in the digital era.<sup>75</sup> Sperber and Mercier argue that humans have evolutionarily developed this mechanism as a means of protecting themselves from misinformation. This is crucial because, as social beings, humans often rely on information from others—who may have their own personal interests.<sup>76</sup> This is where the function of critical thinking becomes essential for Gen Z.

Critical thinking can only grow if Gen Z is made aware of the dangers that threaten them through their smartphones. Gen Z needs to understand the Islamic values that teach the

<sup>74</sup>Dan Sperber and others, 'Epistemic Vigilance', *Mind and Language*, 25.4 (2010) <<https://doi.org/10.1111/j.1468-0017.2010.01394.x>>. see also, Marisa Diez-Arroyo, 'Epistemic Vigilance and Persuasion: The Construction of Trust in Online Marketing', *Journal of Pragmatics*, 215 (2023) <<https://doi.org/10.1016/j.pragma.2023.07.007>>.

<sup>75</sup>Sperber and others. see also, Tomoko Matsui, 'Component Processes of Irony Comprehension in Children: Epistemic Vigilance, Mind-Reading and the Search for Relevance', in *Relevance, Pragmatics and Interpretation*, 2019 <<https://doi.org/10.1017/9781108290593.020>>.

<sup>76</sup>Sperber and others. see also, Ákos Szegőfi and Christophe Heintz, 'Institutions of Epistemic Vigilance: The Case of the Newspaper Press', *Social Epistemology*, 36.5 (2022) <<https://doi.org/10.1080/02691728.2022.2109532>>.;

<sup>73</sup>Ahmad Faisal and others, 'Strengthening Religious Moderatism through the Traditional Authority of Kiai in Indonesia', *Cogent Social Sciences*, 8.1 (2022) <<https://doi.org/10.1080/23311886.2022.2150450>>.



importance of *tabayyun* (clarification) when receiving information, as emphasized in (QS. Al-Hujurat: 6).<sup>77</sup> It is essential to trace information until both factual and substantive truths are obtained.

Islamic ethical digital citizenship<sup>78</sup> is a set of norms and values that govern individual behavior in the digital world, based on the principles found in the Qur'an and Hadith as the foundation of faith for the Muslim community. This includes how individuals interact, communicate, and use technology responsibly and ethically. Understanding and applying digital citizenship ethics is essential to creating a safe and harmonious digital environment. Digital ethics encompass a set of principles and values that regulate how individuals behave when using technology, the internet, and digital media. Proper implementation of digital ethics can help individuals avoid negative behaviors such as spreading false news (hoaxes), cyberbullying, and cybercrime. Islam teaches balance between worldly life and the hereafter (QS. Al-Qashash: 77)<sup>79</sup>, which also means acting fairly and objectively, placing things in their proper context. In this regard, digital ethics are crucial for Gen Z, encouraging fairness and responsibility in online interactions. This involves avoiding cyberbullying, hate speech, and the spread of slander, as well as respecting others' privacy and understanding the boundaries of sharing personal information.

Islam advocates for justice (*i'tidal*), tolerance (*tasamuh*), and consultation (*syura*). It rejects all forms of violence (*la 'unf*) and promotes reform and innovation (*islah*) for the progress of the ummah while embracing cosmopolitan values.

<sup>77</sup>O you who have believed, if a disobedient one brings you information, investigate, lest you harm a people out of ignorance and become regretful over what you have done (Q.S. Al Hujurat: 6).

<sup>78</sup>Fernanda Vicente and Manuel Meirinhos, 'Digital Citizenship: The Cyber-Plagiarism Dilemma in Compulsory School', in *Springer Series in Design and Innovation*, 2024, XXXV <[https://doi.org/10.1007/978-3-031-47281-7\\_25](https://doi.org/10.1007/978-3-031-47281-7_25)>.

<sup>79</sup>And seek, through what Allah has given you, the Hereafter, but do not neglect your share of this world. Do good to others as Allah has done good to you, and do not cause corruption on the earth. Indeed, Allah does not like those who spread corruption (QS. Al-Qashash: 77).

Islam also instills the values of brotherhood (*ukhuwah*), harmony, and inclusiveness. This ideal framework will nurture Gen Z to become responsible, noble in character, and truthful in speech (QS. Al-Ahzab: 70),<sup>80</sup> encouraging honesty and precision. This concept becomes complete when supported by the attitude of spiritual-tech integration.

Spiritual-Tech Integration is a concept that merges spiritual values with the advancement of digital technology, creating harmony between technological development and the personal growth of Gen Z individuals.<sup>81</sup> For Gen Z, who are deeply connected to technology, this integration becomes essential in establishing a balance between virtual life and spiritual well-being. Through the use of technology, Gen Z can transform the digital world into a medium for self-reflection, strengthening faith, and developing character. Essentially, humans should be the center of technological development—not the other way around. The paradigm of moderate digital<sup>82</sup> literacy for Gen Z places technology as a tool that serves humanity in achieving a meaningful and dignified life. Critical thinking becomes the key for Gen Z not to be subjugated by information technology but to master it according to the purpose of utilizing digital technology as a means of spiritual transformation that adapts to the times. These findings affirm that digital literacy based on moderate Islam is not merely about digital skills but also a cultural strategy to guide Gen Z into becoming agents of change—individuals who possess critical

<sup>80</sup>O you who have believed, fear Allah and speak words of truth (Q.S. Al Ahzab: 70).

<sup>81</sup>Svitlana Zakharivna Romaniuk, 'Media Literacy in Modern Education: Problems and Achievements of Scholars', *Studia Gdańskie. Wizje i Rzeczywistość*, XVIII (2022) <<https://doi.org/10.5604/01.3001.0015.8649>>.

<sup>82</sup>Hakan Çakmak, Valentin Mang, and Feiteng Long, "Who Islamises Us?": Does Political Ideology Moderate the Effects of Exposure to Different Great Replacement Conspiracy Explanations on Radical Collective Action against Different Targets?, *The British Journal of Social Psychology*, 64.2 (2025), e12852 <<https://doi.org/10.1111/bjso.12852>>.



awareness, digital ethics, and ideological resilience in the era of information disruption.<sup>83</sup>

The principle of moderate Islam refers to a community that stands in the middle ground (*ummatan wasathan*), symbolizing unity and harmony among people while rejecting all forms of extremism and violence. In line with this, digital literacy can be utilized to guide Gen Z in using the internet to spread messages of peace and mitigate social conflicts. Its implementation involves encouraging participation in digital campaigns that promote tolerance, interfaith dialogue, and social solidarity.<sup>84</sup> It also teaches how to respond wisely to hate speech on social media through counter-narratives based on data and empathy (Q.S. Ali Imran: 159).<sup>85</sup> The theoretical implications of this article's discussion contribute to the development of digital literacy theory based on moderate Islam, particularly in the context of Gen Z. Moreover, it provides a new conceptual framework for strengthening digital literacy character based on the values of moderate Islam. Practically, it offers guidance for various institutions and organizations in designing effective digital skill development programs for Gen Z students.

## Conclusion

Gen Z's digital proficiency in utilizing digital media through smartphones is considered high, marked by their ability to access, process, and disseminate information quickly. However, the strong dependence on digital media as a source of academic information often compromises the quality of understanding due to a lack of verification and the dominance of shallow, instant content. Amid these challenges, building a

<sup>83</sup>M Nawa Syarif Fajar Sakti, *Moslem Social Media 4.0* (Jakarta: Elex Media Komputindo, 2020).

<sup>84</sup>Mohammad Fuad Al Amin Rosyidi, 'Konsep Toleransi Dalam Islam Dan Implementasinya Di Masyarakat Indonesia', *Jurnal Madaniyah*, 9.2 (2019).

<sup>85</sup>*So by mercy from Allah, you were lenient with them. And if you had been harsh and hard-hearted, they would have dispersed from around you. Therefore, pardon them, ask forgiveness for them, and consult them in the matter. And when you have decided, then rely upon Allah. Indeed, Allah loves those who rely upon Him.* (Q.S. Ali Imran: 159).

paradigm of digital literacy character based on moderate Islamic values becomes crucial. This approach emphasizes a balance between digital intelligence and spiritual values through epistemic vigilance to critically filter information, ethical digital citizenship to interact with ethics, and spiritual-tech integration to use technology as a means of self-reflection. Through this paradigm, Gen Z is guided to become a digitally literate, ethical, and ideologically resilient generation, grounded in a moderate understanding of Islamic teachings in the era of information disruption.

It should be noted that this study is still based on empirical evidence regarding the general patterns of Generation Z in using digital media and has not yet investigated or explored the implementation of moderate Islamic values among Generation Z. Developing a more detailed methodological framework and examining the practical application of this paradigm remain important directions for future research.

## References

### Books

Azra, Azyumardi, \**Historiografi Islam Kontemporer: Wacana, Aktualitas, dan Aktor Sejarah\** (Jakarta: Gramedia Pustaka Utama, 2002).

Kovach, Bill and Tom Rosenstiel, \**Blur: How to Know What's True in the Age of Information Overload\** (USA: Bloomsbury Publishing USA, 2011).

Pariser, Eli, \**The Filter Bubble: What the Internet Is Hiding from You\** (Penguin Press, 2011).

Sakti, M. Nawa Syarif Fajar, \**Moslem Social Media 4.0\** (Jakarta: Elex Media Komputindo, 2020).

Swets, John A., \**Signal Detection Theory and ROC Analysis in Psychology and Diagnostics: Collected Papers\** (Psychology Press, 2014).

Amir Andi, Subhan, et al., \**Pengantar Media Sosial dan Opini Publik: Peran Media Sosial Dalam Pembentukan Opini Publik\** (Prambanan: Nas Media Pustaka, 2024).



Al-Bugha, Musthafa Dib, \*Al-Wafi: Syarah Hadits Arbain Imam An-Nawawi\* (Jakarta: Hikmah, 2007).

Haines, Simon, \*Student's Book Student's Book\* (2014).

Barblett, Lennie and Fiona Boylan, \*Digital Literacy: A Review of Literature\* (Australia: State Library Western Australia, 2023).

### Journals

Akmaliah, Wahyudi, Priyambudi Sulistiyanto and Sukendar, 'Making Moderate Islam in Indonesia', *Studies in Conflict & Terrorism*, 47.11 (2024), 1495–1509. DOI: <https://doi.org/10.1080/1057610X.2022.2034224>

Apriyansyah, Chandra, Sri Sukatmi and Lily Muliana Mustafa, 'Mitigating Strawberry Generation Risks through Multiple Learning Strategies in Kindergarten', *Child Education Journal*, 5.2 (2023), 120–32.

Asmarantika, Rossalyn Ayu, Albertus Magnus Prestianta and Nona Evita, 'Pola Konsumsi Media Digital dan Berita Online Gen Z Indonesia', *Jurnal Kajian Media*, 6.1 (2022)

Aviram, Aharon and Yoram Eshet-Alkalai, 'Towards a Theory of Digital Literacy: Three Scenarios for the Next Steps', *European Journal of Open, Distance and E-Learning*, 9.1 (2006)

Bennett, Sue, Karl Maton and Lisa Kervin, 'The "Digital Natives" Debate: A Critical Review of the Evidence', *British Journal of Educational Technology*, 39.5 (2008), 775–86

Çakmak, Hakan, Valentin Mang and Feiteng Long, "Who Islamises Us?": Does Political Ideology Moderate the Effects of Exposure to Different Great Replacement Conspiracy Explanations on Radical Collective Action against Different Targets?', *The British Journal of Social Psychology*, 64.2 (2025), e12852. DOI: <https://doi.org/10.1111/bjso.12852>

Chun-Leung, Jacky Li, Mohd Roslan Mohd Nor, Khairul Anuwar Mustaffa and Khalid bin Isa, 'Islamic Law and Its Application as Penal Code by the Islamic State of Iraq and Sham (ISIS)', *Cogent Arts and Humanities*, 11.1 (2024). DOI: <https://doi.org/10.1080/23311983.2024.2382519>

Cinelli, Matteo, Gianmarco De Francisci Morales, Alessandro Galeazzi, Walter Quattrociocchi and Michele Starnini, 'The Echo Chamber Effect on Social Media', *Proceedings of the National Academy of Sciences*, 118.9 (2021). DOI: <https://doi.org/10.1073/pnas.2023301118>

Diez-Arroyo, Marisa, 'Epistemic Vigilance and Persuasion: The Construction of Trust in Online Marketing', *Journal of Pragmatics*, 215 (2023). DOI: <https://doi.org/10.1016/j.pragma.2023.07.007>

Djakfar Musthafa, Fera Andriani, 'Penggunaan Artificial Intelligence (AI) Dalam Pembelajaran: Fenomena Transformasi Otoritas Pengetahuan di Kalangan Mahasiswa', *Journal of Contemporary Islamic Education*, 4.1 (2024), 125–36. DOI: <https://doi.org/10.25217/jcie.v4i1.4386>

Dossey, Larry, 'FOMO, Digital Dementia, and Our Dangerous Experiment', *Explore: The Journal of Science and Healing*, 10.2 (2014), 69–73. DOI: <https://doi.org/10.1016/j.explore.2013.12.008>

van Es, Margaretha A., 'Norwegian Muslims Denouncing Terrorism: Beyond "Moderate" versus "Radical"?'?, *Religion*, 51.2 (2021), 169–89.

Faisal, Ahmad, Mustaqim Pabbajah, Irwan Abdullah, Nova Effenty Muhammad and Muh Rusli, 'Strengthening Religious Moderatism through the Traditional Authority of Kiai in Indonesia', *Cogent Social Sciences*, 8.1 (2022). DOI: <https://doi.org/10.1080/23311886.2022.2150450>

Ichwan, Moh Nor, Faizal Amin, Abdullah Khusairi and Bob Andrian, 'Digitalization and the Shifting Religious Literature of



Indonesian Muslims in the Era of Society 5.0', *Islamic Communication Journal*, 9.2 (2024), 245–65

Jubba, Hasse, Jaffary Awang, Zuly Qodir, Hannani and Mustaqim Pabbajah, 'The Contestation between Conservative and Moderate Muslims in Promoting Islamic Moderatism in Indonesia', *Cogent Social Sciences*, 8.1 (2022). DOI: <https://doi.org/10.1080/23311886.2022.2116162>

Lakomy, Miron, 'Danse Macabre: Gore Images in the Islamic State's "Dabiq" Magazine as a Propaganda Device', *International Journal of Intelligence, Security, and Public Affairs*, 21.2 (2019), 143–61. DOI: <https://doi.org/10.1080/23800992.2019.1649138>

Martuti, Umi and Abu Dharin, 'The Urgency of Character Education in Nashih Ulwan's Perspective for the "Strawberry Generation"', *International Journal of Multidisciplinary Research and Analysis*, 06.09 (2023), 4415–20. DOI: <https://doi.org/10.47191/ijmra/v6-i9-59>

Ma, Zhihao, Tzu-Hsuan Liu and Yiwei Xia, 'Individual Stress, Contextual Stress, and Network Attributes on Cyberbullying Perpetration among Young Adults during the COVID-19 Lockdown', *Deviant Behavior*, 45.7 (2024), 1065–80

Molina-Azorin, José F., María D. López-Gamero, Juan José Tarí, Jorge Pereira-Moliner and Eva M. Pertusa-Ortega, 'Environmental Management, Human Resource Management and Green Human Resource Management: A Literature Review', *Administrative Sciences* (2021). DOI: <https://doi.org/10.3390/ADMSCI11020048>

Rahman, Yusuf, Kholid Al Walid and Humaidi, 'Critical Thinking and Religious Moderation: Instilling Religiously Moderate Values through the Teaching of Islamic Philosophy in Indonesia', *Journal of Indonesian Islam*, 16.1 (2022), 49–74. DOI: <https://doi.org/10.15642/JIIS.2022.16.1.4974>

Romanuk, Svitlana Zakharivna, 'Media Literacy in Modern Education: Problems and Achievements of Scholars', *Studia Gdańskie. Wizje i Rzeczywistość*, XVIII (2022). DOI: <https://doi.org/10.5604/01.3001.0015.8649>

Tredinnick, Luke and Claire Laybats, 'Contagion: The Chaos of the Digital Ether', *Business Information Review*, (2025), p. 02663821251322568

Vassey, Julia, Ho-Chun Herbert Chang, Tom Valente and Jennifer B. Unger, 'Worldwide Connections of Influencers Who Promote E-Cigarettes on Instagram and TikTok: A Social Network Analysis', *Computers in Human Behavior*, 165 (2025), 108545

Zulfadli, Jamhari Makruf, Zulkifli and Jajang Jahroni, 'From Islamic Modernism to Islamic Conservatism: The Case of West Sumatra Provinces, Indonesia', *Cogent Social Sciences*, 10.1 (2024). DOI: <https://doi.org/10.1080/23311886.2024.2406297>

Zulkifli, Nur Kafid, Herlino Nanang and Muhamad Fahri, 'The Construction of Religious Moderation Among Indonesian Muslim Academics', *Teosofi: Jurnal Tasawuf dan Pemikiran Islam*, 13.2 (2023), 337–66. DOI: <https://doi.org/10.15642/teosofi.2023.13.2.337-366>

### Online References

Agus Tri Haryanto, 'Jumlah Pengguna Internet Indonesia Tembus 221 Juta Orang', *Detik.com*, 2024 <https://apjii.or.id/berita/d/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang>

Fabian Januarius Kuwado, 'Kemenkominfo Sebut Ada 43.000 Media Abal-Abal', *Kompas.com*, 2017 <https://nasional.kompas.com/read/2017/0>



[1/07/16533201/kemenkominfo.sebut.ada.43.000.media.abal-abal](https://16533201/kemenkominfo.sebut.ada.43.000.media.abal-abal)

Hanifah Triari Husna, 'Sampai Mei 2023, Kominfo Identifikasi 11.642 Konten Hoaks', *Aptatika.Kominfo.go.id*, 2023 <https://aptika.kominfo.go.id/2023/06/sampai-mei-2023-kominfo-identifikasi-11-642-konten-hoaks/>

Report, Tim, 'Digital 2024: 5 Billion Social Media Users', *WeAreSocial.com*, 2024 <https://wearesocial.com/id/blog/2024/01/digital-2024-5-billion-social-media-users/> [accessed 11 February 2025].

Loina Lalolo Krina et al., 'Survei Literasi Hoaks Terhadap Partisipasi Politik Masyarakat di Pilkada 2024', *MAFINDO.org*, 2024 <https://mafindo.or.id/publikasi-riset/riset/temuan-awal-survei-literasi-hoaks-terhadap-partisipasi-politik-masyarakat-di-pilkada-2024/> [accessed 15 February 2025].

Kemkominfo and Katadata Insight Center, *Status Literasi Digital Indonesia: Survei di 34 Provinsi*, Katadata Insight Center, 2020.