

Islamic Education in the Era of Digital Transformation: Opportunities and Challenges

Syaiful Anwar¹

¹ Universitas Islam Negeri Raden Intan Lampung

*email: syaifulanwar@radenintan.ac.id



Copyright: © 2025. Muhammad Nasikh, et.al, This work is licensed under [Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)

Submission: 02-08-2025

Revised: 16-10-2025

Accepted: 20-12-2025

Published: 31-12-2025

Abstract

The development of the digital era has brought significant changes to the lives of Muslims, affecting social, religious, and educational aspects. Advances in information technology, on the one hand, enable the wider dissemination of Islamic teachings; on the other hand, they also present major challenges such as misinformation, the spread of hoaxes, and shifts in Islamic values. In the digital era, education is no longer confined to physical classrooms and conventional teaching methods. Technology has opened opportunities for education to evolve in a more dynamic, rapid, and accessible manner. However, as in other sectors, digital transformation in Islamic education also brings challenges that require serious attention. With the internet, various educational resources—ranging from digital books, academic articles, learning videos, to religious lectures by prominent scholars—can be accessed by anyone, anytime, and anywhere. This enables a more flexible learning process that is accessible to diverse audiences. Moreover, digital platforms facilitate communication and collaboration among Muslims worldwide, allowing for broader and deeper exchanges of knowledge regarding Islamic teachings. This article explores the challenges and opportunities of Islamic education in the digital era, focusing on strategies that educators can adopt to adapt to technological advancements through social media while maintaining Islamic values.

Keywords: Islamic Education, Technology, Digital Transformation

INTRODUCTION

Digital transformation has brought structural and cultural changes to the education system, including Islamic education. The development of information technology, digital media, and online-based learning platforms has not only influenced teaching methods and learning media but has also shaped new ways of internalizing values, transmitting Islamic knowledge, and facilitating pedagogical communication between educators and learners. According to Dogaru, one of the defining characteristics

of this era is the rapid advancement of technology, which has ushered humanity into a new phase by shifting from the physical to the virtual realm and integrating technologies that bring the physical world closer to the biological and digital worlds.¹ In a similar vein, Bal and Erkan argue that this era has brought about massive changes, affecting not only labor structures but also significant factors influencing competitiveness, such as institutions, financial systems, infrastructure, innovation skills, health, education, and macroeconomic variables.² Therefore, substantial changes in competitiveness factors and the creation of quality and competitive advantages in an increasingly dynamic global economy necessitate that education, including Islamic education, embrace and integrate digital technologies.

Educational transformation toward digitalization is a process aimed at enhancing institutions by triggering significant changes in tools through the integration of information technology, computing, communication, and connectivity.³ This transformation generally occurs across all areas of life. Today, individuals are highly dependent on digital technology in reshaping approaches, offerings, and solutions to address and manage various structural and cultural changes and challenges. Consequently, technology has become a key instrument for sustaining human activities, including the continuity of educational practices. Therefore, Islamic education institutions must inevitably pursue digitalization to enhance efficiency and to support the overall quality and competitiveness of Islamic higher education institutions on a broad scale.

Scholarly collaboration between Islamic Religious Education, Communication Studies, and Da'wah has become an unavoidable epistemological necessity in the era of digital transformation.⁴ From the perspective of Islamic Religious Education, the primary objective of education is the formation of individuals who are faithful, knowledgeable, and possess noble character. However, this objective can only be optimally achieved if learning processes and the transmission of Islamic values are adapted to the characteristics of learners in the digital era, who tend to be visual, interactive, and media-oriented. Communication studies provide a conceptual framework for understanding message delivery processes, communicator-communicant relationships, and the effectiveness of digital media in Islamic religious learning. Meanwhile, da'wah serves as a value-oriented and practical framework for Islamic communication, emphasizing persuasive, ethical, and transformational dimensions.⁵

¹ Lucreția Dogaru, "The Main Goals of the Fourth Industrial Revolution. Renewable Energy Perspectives," *Procedia Manufacturing* 46 (2020): 397-401

² Hasan Çebi Bal and Çisil Erkan, "Industry 4.0 and Competitiveness," *Procedia Computer Science* 158 (2019): 625-631.

³ Gregory Vial, "Understanding Digital Transformation: A Review and a Research Agenda," *The Journal of Strategic Information Systems* 28, no. 2 (June 2019): 118.

⁴ Akhli Nur Mubiarto, "Tantangan dan Peluan Pendidikan Islam di Era Digital Challengs and Opportunities for Islamic Education In The Digital", *Jurnal Multidisiplin*, Vol. 1 No. 2 Desember 2024 page 123-128.

⁵ Habibah, A. F. (2021) Era masyarakat informasi sebagai dampak media baru. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 3(2), 350-363.

In practice, digital transformation opens significant opportunities for Islamic Religious Education to develop innovative learning models based on digital media, such as Islamic audiovisual content, online platform-based learning, and educational da'wah through social media.⁶ However, on the other hand, the challenges faced are increasingly complex, including low levels of religious digital literacy, the fragmentation of scholarly authority, the proliferation of instant Islamic content with minimal scientific validation, and the potential erosion of values related to adab and ethics in learning communication.⁷ These challenges require a strategic role from Islamic Religious Education educators and da'wah practitioners as communicators who not only master Islamic knowledge but also possess digital communication competencies and strong pedagogical sensitivity.

Based on this reality, this study focuses on Islamic education in the era of digital transformation through a collaborative approach integrating Islamic Religious Education, communication studies, and da'wah. The research specifically aims to analyze how digital transformation influences patterns of pedagogical communication in Islamic Religious Education. Accordingly, the research questions are structured to examine the characteristics of digital transformation within Islamic Religious Education, the opportunities and challenges it presents for strengthening learning communication and da'wah, and its implications for the formation of students' religious attitudes, Islamic literacy, and character development in the digital era.

A. Islamic Religious Education from the Perspective of Digital Transformation

The role of digital technology in the transformation of Islamic education can be associated with the theory of digital literacy first introduced by Gilster in the 1990s. Digital literacy refers to the ability to understand and use information from various digital sources and includes critical thinking skills when evaluating information obtained through digital media. Digital transformation in Islamic Religious Education (IRE) should not be understood merely as a technical shift in the use of instructional media, but rather as a paradigm shift in pedagogical and communicative practices.

Fundamentally, Islamic Religious Education aims to shape a holistic Muslim personality through the internalization of faith, moral values, and Islamic knowledge. In the digital context, this process takes place within increasingly complex communication spaces, where learners receive messages not only from educators but also from diverse and often uncontrolled digital sources.⁸

⁶ Syawaludin, M. (2025). Dimensi Sosial Agama: Analisis Dalam Perspektif Sosiologi. *EDUCATE Journal of Education and Culture*, 3(01), 481-487.

⁷ Syifa, A., & Ridwan, A. (2024). Pendidikan Karakter Islami Di Era Digital: Tantangan Dan Solusi Berdasarkan Pemikiran Sosial Imam Al-Ghazali. *Social Studies in Education*, 2(2), 107-122.

⁸ Fauzan Ismael, Supratman, Strategi Pendidikan Islam Di Era Digital: Peluang Dan Tantangan, *Jurnal Of Sosial Scienc Reserch*, Vol. 3 No. 3 Tahun 2023 Page 4526-4533 E-ISSN 2807-4246.

From the pedagogical perspective of Islamic Religious Education, digital transformation necessitates strengthening student-centered, contextual, and reflective learning approaches. Digital media enable the presentation of Islamic Religious Education materials in more diverse formats, such as instructional videos, Islamic infographics, da'wah podcasts, and interactive discussions based on online platforms. However, the effectiveness of these media is largely determined by the ability of Islamic Religious Education educators to manage learning messages so that they do not lose depth of meaning, scientific substance, and value orientation, which are the defining characteristics of Islamic education.

B. Educational Communication and Digital Da'wah in Islamic Religious Education

Within the framework of communication studies, Islamic Religious Education in the digital era constitutes a form of educational communication practice that involves several key elements: communicators (educators and da'wah practitioners), messages (Islamic materials and values), media (digital platforms), communicants (students and the broader public), and effects (changes in knowledge, attitudes, and behavior). Digital transformation reshapes the relationships among these elements, particularly in terms of media and communicants, who have become more active, critical, and selective in receiving messages.

Digital da'wah in the context of Islamic Religious Education functions as a persuasive communication strategy oriented toward learning and character formation. Digital media enable educational da'wah to be conducted in more creative ways and to adapt to the culture of the digital generation. Nevertheless, digital da'wah also faces challenges such as the commodification of religious messages, the dominance of shallow popular content, and the tendency to oversimplify Islamic teachings to satisfy algorithmic demands and viral dynamics. Therefore, collaboration between da'wah approaches and educational communication is essential to ensure that Islamic Religious Education messages remain value-laden, scientifically grounded, and transformative.

C. Challenges and Opportunities of Islamic Education in the Digital Era

1. Challenges

One of the major challenges faced by Muslims in the digital era is the widespread dissemination of unverified information. Social media, video-sharing platforms, and instant messaging applications are often used as channels for spreading information that lacks factual accuracy. Various religious, political, and social issues are frequently presented in appealing narratives without being supported by credible sources. As a result, many individuals are easily provoked, draw incorrect conclusions, or even become involved in conflicts simply by consuming inaccurate information.

Low levels of digital awareness in responding to circulating information make Muslims particularly vulnerable to information manipulation that can undermine social cohesion. In such circumstances, it is crucial for individuals to adopt a selective attitude toward information consumption by prioritizing *tabayyun*, or verification, before believing and disseminating news. Insufficient digital awareness may lead Muslims into opinion polarization, which ultimately weakens solidarity and *ukhuwah Islamiyah*. Therefore, fostering digital awareness is not merely a technical skill but also a moral responsibility in preserving truth and harmony in social life.⁹

Digitalization not only affects the way Muslims access information but also influences their patterns of thinking and understanding of religious teachings. Previously, Islamic knowledge was largely acquired through direct interaction with scholars, *majelis ta'lim*, and learning based on classical texts that possessed clear scholarly authority. However, with the increasing volume of Islamic content in cyberspace, the process of religious learning has undergone significant changes. Many individuals now rely more on searching for information on the internet than on learning directly from scholars with well-established chains of knowledge (*sanad*).

Although digitalization offers convenience in accessing religious knowledge, without sufficient depth of understanding it poses the risk of distortion in interpreting Islamic teachings. Various unverified ideas, subjective interpretations, and politicized narratives circulate widely in the digital sphere, which may ultimately influence how Muslims perceive and understand their religion. This phenomenon constitutes a major challenge that must be addressed wisely, requiring individuals to develop critical awareness to distinguish between knowledge derived from trustworthy authorities and information that is merely speculative or even misleading.

As digitalization increasingly shapes the lives of Muslims, digital awareness must become part of a collective effort to preserve harmony and ensure the sustainability of Islamic teachings amid rapid societal change. Digital awareness not only plays a role in shaping individuals who are intelligent and critical in responding to information, but also in safeguarding Islamic values so that they remain relevant and are not distorted by the uncontrolled flow of information.

Islamic education holds a central role in fostering value-based digital awareness grounded in Islamic principles, both through formal education in schools and madrasahs and through broader Islamic learning forums. Strengthening digital literacy based on Islamic values has become an urgent necessity to enable Muslims to confront the challenges of the information era with

⁹ Saca Suhendi, Peran Pendidikan Islam Dalam Penguatan Kesadaran Digital Di Era Informasi, *Jurnal Ilmu Sosial*, Vol. 7 No. 2 Tahun 2024.

adequate preparedness. With strong digital awareness, Muslims are not merely passive consumers of information but are also capable of becoming agents of change who disseminate goodness, strengthen brotherhood, and preserve the authenticity of Islamic teachings within an increasingly complex digital environment.

Challenges in the digital era can be viewed as a foundation for exploring existing strengths while simultaneously assessing the limitations of traditional Islamic education. At present, among the major opportunities for the development and advancement of Islamic education are the widespread availability of information that enables public access to educational resources and programs, greater opportunities for optimal participation across various fields, and increasing openness, including opportunities to strengthen cooperation among institutions and organizations.¹⁰

2. Opportunities

The digital era also presents challenges that must be addressed, one of which is the persistent digital divide, particularly in developing countries. Not all members of society have equal access to technology, which may create disparities in the quality of education. In addition, social media and the internet can serve as sources of information that are not always aligned with Islamic values, posing the risk of disseminating incorrect or even harmful religious interpretations.

Despite these significant challenges, the digital era also offers numerous opportunities for the further development of Islamic education, including the following:

a. Broader Accessibility

Digital technology enables Islamic education to reach various segments of society, including those living in remote or underserved areas. Through e-learning platforms or educational applications, individuals can access religious education more easily and efficiently.

b. More Effective Dissemination of Islamic Teachings

Digital technology allows da'wah and the dissemination of Islamic teachings to extend more widely. Through various media such as YouTube, podcasts, and blogs, Islamic educational materials can be accessed by audiences across the globe.

¹⁰ Fauzan Ismael, Supratman, Strategi Pendidikan Islam Di Era Digital: Peluang Dan Tantangan, *Jurnal Of Sosial Scienc Reserch*, Vol. 3 No. 3 Tahun 2023 Page 4526-4533 E-ISSN 2807-4246.

c. Interactive and Engaging Learning

By utilizing digital technology, Islamic education materials can be delivered in more engaging formats, such as videos, animations, or interactive applications. This approach can make learning more enjoyable and easier to understand for younger generations who are more familiar with digital technologies.

d. Global Collaboration

Digital platforms enable students and educators around the world to collaborate in learning and studying Islamic knowledge. Cross-national and cross-cultural discussions and exchanges of knowledge can enrich understanding and provide deeper and more comprehensive insights into Islamic teachings.¹¹

D. Strategies of Islamic Education in Responding to the Digital Era

In today's digital age, the internalization of Islamic values has become increasingly crucial to ensure that future generations grow with noble character (*akhlaq al-karimah*). The quality of a young generation reflects the quality of a nation. When future generations possess excellence in both cognitive and moral aspects, national progress can be achieved. Therefore, families, schools, and the broader community play vital roles in shaping a generation with strong character and commendable moral conduct.¹²

Based on the discussion above, strategies to address the challenges of Islamic education in the digital era cannot be implemented unilaterally; rather, they require close collaboration between teachers and parents. Teachers play a crucial role in instilling and teaching Islamic values through structured, goal-oriented, and contextually relevant learning processes that align with contemporary developments. Meanwhile, parents serve as the primary supervisors of children's activities outside the school environment, particularly in the use of technology and digital media. Without consistent supervision and guidance at home, the character values cultivated at school will be difficult to firmly embed in students' daily behavior.

This collaboration becomes essential to ensure that educational strategies do not remain merely theoretical but are practically applied in students' everyday lives. Especially in the digital era, where external influences are pervasive and intensive, synergy between schools and families is an urgent necessity. Through such collaboration, strategies for Islamic character education can be implemented more effectively, fostering a generation that is not only intellectually capable but also morally upright and responsible.

¹¹ Tanjung, M. (2021). Peluang dan Tantangan Pembelajaran Islam di Era Digital. *Jurnal Pendidikan Islam*, 20(4), 455-470.

¹² Laka, L., dkk. (2024). Pendidikan karakter Gen Z di era digital. Sondpeia.

Furthermore, in the current digital era, society must possess digital literacy skills in order to respond positively to the rapid development of information technology. The concept of digital literacy was first introduced by Paul Gilster in 1997. According to Gilster, digital literacy refers to an individual's ability to understand and utilize information from various digital sources effectively and efficiently across multiple formats. Meanwhile, Eshet emphasizes that digital literacy focuses more on the skills required to optimally use diverse digital.¹³

Martin provides a more comprehensive explanation by defining digital literacy as an individual's competence in using digital tools appropriately, enabling them to access, manage, integrate, evaluate, and analyze digital resources. These competencies aim to support the construction of new knowledge, the creation of expressive media, and communication with others within specific life contexts in order to promote social development.¹⁴ Based on these fundamental literacy skills, Martin formulates several dimensions of digital literacy, including the following:

1. Digital literacy encompasses the skills required to perform various digital activities related to work, learning, entertainment, and other aspects of everyday life.¹⁵
2. An individual's level of digital literacy is dynamic and varies depending on life experiences and lifelong learning.¹⁶
3. Digital literacy involves the ability to acquire and apply knowledge, technical skills, attitudes, and personal qualities. Individuals must also be capable of designing, implementing, and evaluating digital actions as part of task completion or problem-solving processes.¹⁷
4. Digital literacy includes individuals' awareness of their own level of digital literacy and continuous efforts to develop and enhance these competencies.¹⁸

The concept of digital literacy is essentially part of media literacy and does not represent an entirely new idea. Prior to digital literacy, the concept of computer literacy emerged in the 1980s. However, computer literacy is limited in scope, as it refers primarily to the ability to operate computers. Therefore, digital literacy was developed

¹³ Faizin, M. F. M., Yudi, U., & Zainiyati, H. S. (2023) Upaya Peningkatan Kemampuan Literasi Digital melalui Pengenalan Lingkungan Persekolahan (PLP) Mahasiswa Program Studi Pendidikan Agama Islam Fakultas Tarbiyah dan Keguruan Universitas Islam Negeri Sunan Ampel Surabaya. *Jurnal Kependidikan Islam*, 13(2), 36-55.

¹⁴ Pratiwi, H., Ariyani, M., Elisa, M., & Harahap, M. (2024). Literasi Digital Sebagai Inovasi Pembelajaran Dalam Pendidikan Agama Islam. *Jurnal Pendidikan Islam Muta'allimin*, 1(2), 79-92.

¹⁵ Rokhman, F., & Pristiwiati, R. (2023). Dari dunia offline ke dunia online: Merangkul literasi digital. *Jurnal Pembahsi (Pembelajaran Bahasa Dan Sastra Indonesia)*, 13(1), 44-54.

¹⁶ Lim, Z. Y., Yap, J. H., Lai, J. W., Mokhtar, L. A., Yeo, D. J., & Cheong, K. H (2024) Advancing lifelong learning in the digital age A narrative review of Singapore's Skills Future programme. *Social Sciences*, 13(2), 73.

¹⁷ Agrini, M., & Agustin, F. T. (2022). Membangun Karakter Bangsa Melalui Literasi Digital. *Jurnal Tonggak Pendidikan Dasar Jurnal Kajian Teori Dan Hasil Pendidikan Dusar*, 1(2), 153-163.

¹⁸ Rifad, M., Alhabisy, F., & Nadirah, S. (2023). Kepemimpinan Transformatif Kepala Sekolah Dalam Meningkatkan Kemampuan Literasi Digital Tenaga Pendidik di SD Alkhairaat 1 Palu. *Jurnal Integrasi Manajemen Pendidikan*, 2(1), 49-58.

with a broader scope, encompassing not only technological proficiency but also cognitive and emotional aspects involved in the use of digital media and devices.

Being digitally literate means possessing the ability to process information and communicate effectively with others across various formats. This includes skills in creating, developing, and conveying information while upholding ethical standards. Furthermore, individuals must be able to understand when and how technology can be used optimally to achieve specific objectives.

Based on the various perspectives discussed above, it can be concluded that digital literacy is not merely a technical skill related to operating technological devices, but also encompasses the ability to read, interpret, and critically understand information conveyed through digital media. The wise, intelligent, and appropriate utilization of digital literacy not only supports communication and interaction in everyday life but also contributes to the development of innovative solutions in the learning process, enabling teaching and learning activities to become more dynamic and less monotonous.¹⁹

RESEARCH METHODE

This study employs a qualitative approach using a descriptive-analytical research design. This approach is selected because the phenomenon of Islamic education in the era of digital transformation requires an in-depth understanding of meanings, dynamics, opportunities, and challenges that emerge in educational practices, rather than merely numerical measurement. A qualitative approach enables the researcher to explore the experiences, perceptions, and interpretations of Islamic education stakeholders who are directly engaged with digital technology. Data were collected using three primary techniques: in-depth interviews, documentation studies, and observation.

RESULT AND DISCUSSION

The findings of this study indicate that Islamic educational institutions have entered a phase of digital transformation, characterized by several significant changes:

1. Utilization of Digital Learning Platforms

Madrasahs, Islamic boarding schools (*pesantren*), and Islamic higher education institutions have begun to utilize various digital learning platforms, such as Learning Management Systems (LMS), Google Classroom, campus-based e-learning applications, as well as instant messaging platforms to support learning activities and assessment processes.

¹⁹ Cynthia, R. E., & Sihotang, H. (2023). Melangkah bersama di era digital: pentingnya literasi digital untuk meningkatkan kemampuan berpikir kritis dan kemampuan pemecahan masalah peserta didik. *Jurnal Pendidikan Tambusai*, 7(3), 31712-31723.

Educators have increasingly integrated digital media into instructional delivery, including learning videos, digital Islamic texts, *tahfiz* applications, and web-based interactive simulations.

2. Digitalization of Administration and Management

Institutional management processes—such as attendance recording, tuition payment systems, activity reporting, and official correspondence—have been shifted to digital systems, thereby enhancing efficiency and transparency.

3. Expansion of Access to Islamic Learning Resources

Learners gain access to new learning resources through digital Qur'an applications, digital versions of *kitab kuning*, Islamic study podcasts, and scholars' YouTube channels. This development broadens and flexibilizes learning access.

These findings indicate that Islamic education is not merely following the trend of digitalization but is undergoing a transformation toward hybrid and adaptive learning models. This aligns with the Technology Integration Theory, which emphasizes the importance of technological adaptation to enhance the quality of learning.

4. Opportunities of Digital Transformation for Islamic Education

a. Enhancing Learning Quality

Technology enables learning to become more interactive, visual, and responsive to the needs of the digital generation. Islamic subjects such as *tajwid*, Islamic history, and *fiqh* can be delivered through videos, infographics, and simulations that enrich learning experiences.

b. Expanding the Reach of Da'wah and Education

Islamic educational institutions can reach learners beyond geographical boundaries through online classes. Online-based *pesantren* have begun to emerge, offering *tahfiz* programs, classical text studies, and religious mentoring through digital platforms.

c. Promoting Islamic Digital Literacy

Digital transformation provides opportunities for Islamic institutions to cultivate an ethical digital literacy culture grounded in Islamic values such as honesty, *adab*, and responsibility.

e. Opportunities for Collaboration and Innovation

The findings reveal collaboration between educators and developers of Islamic educational applications. This collaboration has led to innovations such as *dhikr* applications, 3D learning modules, and virtual libraries.

These opportunities are in line with the concept of Education 4.0, which views technology as a means of empowerment rather than a replacement for the role of educators in guiding learners toward achieving spiritual, social, and academic competencies.

Challenges and Opportunities of Islamic Education in the Digital Era

1. Challenges

One of the major challenges faced by Muslims in the digital era is the widespread dissemination of unverified information. Social media, video-sharing platforms, and instant messaging applications often function as channels for spreading news that lacks a solid factual basis. Various religious, political, and social issues are frequently packaged in appealing narratives without being supported by valid and credible sources. This situation causes many individuals to be easily provoked, draw incorrect conclusions, or even become involved in conflicts simply due to consuming inaccurate information.

The lack of digital awareness in responding to circulating information makes Muslims vulnerable to information manipulation that can undermine unity. In such circumstances, it is essential for individuals to adopt a selective approach to information consumption by prioritizing *tabayyun* – verification – before believing and disseminating any news. Low levels of digital awareness may lead Muslims into opinion polarization, which ultimately weakens solidarity and *ukhuwah Islamiyah*. Therefore, fostering digital awareness is not merely a matter of technical competence, but also a moral responsibility in maintaining truth, unity, and social harmony moral responsibility in safeguarding truth and maintaining harmony in social life.²⁰

Digitalization not only affects how Muslims access information but also influences their mindset and understanding of religious teachings. In the past, Islamic knowledge was largely acquired through direct interaction with scholars (*ulama*), religious study circles (*majelis taklim*), and learning based on classical texts that possessed clear scholarly authority. However, with the growing abundance of Islamic content in cyberspace, the process of religious learning has undergone significant transformation.

Many individuals increasingly rely on online information searches rather than learning directly from scholars who possess well-established scholarly chains (*sanad*). Although digitalization facilitates easier access to knowledge, without deep and critical understanding there is a risk of distortion in interpreting Islamic teachings. Unverified ideas, subjective interpretations, and politicized narratives are increasingly circulating in the digital sphere, which ultimately influence how Muslims understand their religion. This phenomenon constitutes a major challenge that must be addressed wisely,

²⁰ Saca Suhendi, Peran Pendidikan Islam Dalam Penguanan Kesadaran Digital Di Era Informasi, *Jurnal Ilmu Sosial*, Vol. 7 No. 2 Tahun 2024.

requiring individuals to develop critical digital awareness in order to distinguish between knowledge derived from credible religious authorities and information that is merely speculative or even misleading.

The importance of media ethics and the preservation of digital morality is an aspect that cannot be overlooked in confronting the information age. Islam, as a religion that teaches *adab* (proper conduct) and moral integrity, strongly emphasizes the importance of safeguarding speech and behavior, including in the digital sphere. Unfortunately, many Muslims pay insufficient attention to these ethical aspects in their interactions on social media.

Unproductive debates, hate speech, and the dissemination of provocative information often become part of digital dynamics which, if left unchecked, may inadvertently damage the image of Islam itself. The freedom of expression facilitated by digital technology is frequently misused without adequate consideration of its social and moral consequences. In Islam, guarding one's speech is an essential component of noble character (*akhlaq al-karimah*), and this principle should likewise be applied in digital spaces. Every individual bears the responsibility to ensure that the content they share on social media does not contain falsehoods, slander, or expressions that may harm others. Awareness of digital morality is therefore not merely about using technology responsibly, but also about preserving and embodying Islamic values in every form of interaction in the virtual world.

As digitalization increasingly influences the lives of Muslims, digital awareness must become part of a collective effort to maintain harmony and ensure the continuity of Islamic teachings amid the dynamics of contemporary change. Digital awareness not only plays a role in shaping individuals who are intelligent and critical in responding to information, but also in safeguarding Islamic values so that they remain relevant and are not distorted by the uncontrolled flow of information. Islamic education holds a central role in fostering digital awareness grounded in Islamic values, both through formal education in schools and madrasahs and through broader Islamic learning forums. Strengthening digital literacy based on Islamic principles has become an urgent necessity so that Muslims are well prepared to confront the challenges of the information age. With strong digital awareness, Muslims are not merely passive consumers of information, but can also become agents of change who disseminate goodness, strengthen brotherhood, and preserve the purity of Islamic teachings in an increasingly complex digital world.

Challenges in the digital era can be viewed as a foundation for exploring existing strengths while also evaluating the various shortcomings of traditional Islamic education. At present, among the major opportunities for the development and advancement of Islamic education are the availability of information that enables public access to educational resources and programs, opportunities for optimal participation across various fields, and greater openness, including opportunities to strengthen cooperation

among institutions.²¹

2. Opportunities

The digital era also presents challenges that must be addressed, one of which is the persistent digital divide, particularly in developing countries. Not all communities have equal access to technology, which has the potential to create disparities in the quality of education. In addition, social media and the internet can serve as sources of information that are not always aligned with Islamic values, posing the risk of spreading misleading or even harmful religious understandings.

Despite these significant challenges, the digital era also offers numerous opportunities for the further development of Islamic education, including the following:

a. Broader Accessibility

Digital technology enables Islamic education to be accessed by various segments of society, including those living in remote or hard-to-reach areas. Through e-learning platforms or applications, individuals can obtain religious education easily and efficiently.

b. More Effective Dissemination of Islamic Teachings

Digital technology facilitates wider da'wah activities and the dissemination of Islamic teachings. Through various media such as YouTube, podcasts, and blogs, Islamic educational content can be easily accessed by people around the world.

c. Interactive and Engaging Learning

By utilizing technology, Islamic educational materials can be delivered in a more engaging manner through videos, animations, or interactive applications. This approach makes learning more enjoyable and easier to understand, particularly for younger generations who are more familiar with digital technology.

d. Global

Collaboration

Digital platforms enable students and educators around the world to collaborate in studying Islamic knowledge. Discussions and exchanges of knowledge across countries and cultures can enrich understanding and provide deeper insights into Islamic teachings.²²

²¹ Fauzan Ismael, Supratman, Strategi Pendidikan Islam Di Era Digital: Peluang Dan Tantangan, *Jurnal Of Sosial Scienc Reserch*, Vol. 3 No. 3 Tahun 2023 Page 4526-4533 E-ISSN 2807-4246.

²² Tanjung, M. (2021). Peluang dan Tantangan Pembelajaran Islam di Era Digital. *Jurnal Pendidikan Islam*, 20(4), 455-470.

Based on these considerations, Islamic education must promptly reform and prepare itself to actively engage in the digital era. Numerous opportunities and challenges have emerged in this period. The opportunities offered can serve as valuable capital and strategic momentum for Islamic education to position itself as a distinctive strength amid diverse global civilizations.

Strategies of Islamic Education in Responding to the Digital Era
In the contemporary digital age, the internalization of Islamic values is crucial to ensure that the younger generation grows with noble character and moral integrity. The quality of a nation's future generation reflects the overall quality of the nation itself. When future generations possess excellence in both cognitive and moral aspects, national progress can be achieved. Therefore, families, schools, and the broader community play vital roles in shaping a generation with strong character and commendable moral conduct.²³

Based on the discussion above, strategies to address the challenges of Islamic education in the digital era cannot be implemented unilaterally; rather, they require close collaboration between teachers and parents. Teachers play a significant role in instilling and teaching Islamic values through structured, well-directed, and contextually relevant learning processes that align with contemporary developments. Meanwhile, parents serve as the primary supervisors of children's activities outside the school environment, particularly in the use of digital technology and media. Without consistent supervision and guidance at home, the character values instilled at school will be difficult to firmly embed in students' daily behavior. This collaboration is essential to ensure that educational strategies extend beyond theory and are practically applied in students' everyday lives. Moreover, in today's digital era, external influences are particularly strong and massive, making synergy between school and home an urgent necessity. Consequently, strategies for Islamic character education will be more effective and capable of producing a generation that is not only intellectually competent but also morally upright and responsible.

In addition, in the current digital era, society needs to possess digital literacy skills in order to respond positively to developments in information technology. The concept of digital literacy was first introduced by Paul Gilster in 1997. According to Gilster, digital literacy refers to an individual's ability to understand and utilize information from various digital sources effectively and efficiently in diverse formats. Meanwhile, Eshet emphasizes that digital literacy is more focused on the skills required to optimally use various digital resources.²⁴ Martin provides a more in-depth explanation, stating that digital literacy is an individual's competence in using digital tools appropriately, thereby facilitating access to, management of, integration, evaluation of, and analysis of various

²³ Laka, L., dkk. (2024). Pendidikan karakter Gen Z di era digital. Sondpeia.

²⁴ Faizin, M. F. M., Yudi, U., & Zainiyati, H. S. (2023) Upaya Peningkatan Kemampuan Literasi Digital melalui Pengenalan Lingkungan Persekolahan (PLP) Mahasiswa Program Studi Pendidikan Agama Islam Fakultas Tarbiyah dan Keguruan Universitas Islam Negeri Sunan Ampel Surabaya. *Jurnal Kependidikan Islam*, 13(2), 36-55.

digital resources.²⁵ These abilities aim to build new knowledge, create media for expression, and communicate with others within specific life contexts in order to support social development. Based on these six core literacy skills, Martin formulates several dimensions of digital literacy as follows:

- a. Digital literacy encompasses the skills required to perform various digital activities related to work, learning, entertainment, and other aspects of everyday life.²⁶
- b. An individual's level of digital literacy is dynamic and varies depending on their life experiences as well as the lifelong learning processes they undergo.²⁷
- c. Digital literacy involves the ability to acquire and apply knowledge, technical skills, attitudes, and personal qualities. In addition, individuals must be able to design, implement, and evaluate digital actions as part of task completion or problem-solving processes.²⁸
- d. Digital literacy includes an individual's awareness of their own level of digital literacy as well as continuous efforts to develop and enhance these skills.²⁹

The concept of digital literacy is essentially part of media literacy and is not an entirely new idea. In addition to digital literacy, there is also the concept of computer literacy, which emerged in the 1980s. However, the term computer literacy is limited because it refers only to the ability to operate computers. Therefore, digital literacy was developed with a broader scope, not only focusing on technological proficiency but also encompassing cognitive and emotional aspects in the use of media and digital devices.

Becoming an individual with digital literacy means having the ability to process information and communicate effectively with others in various formats. This includes skills in creating, developing, and conveying information, as well as working while upholding ethical principles. Furthermore, individuals must be able to understand when and how technology can be used optimally to achieve specific goals.

²⁵ Pratiwi, H., Ariyani, M., Elisa, M., & Harahap, M. (2024). Literasi Digital Sebagai Inovasi Pembelajaran Dalam Pendidikan Agama Islam. *Jurnal Pendidikan Islam Muta'allimin*, 1(2), 79-92.

²⁶ Rokhman, F., & Pristiwiati, R. (2023). Dari dunia offline ke dunia online: Merangkul literasi digital. *Jurnal Pembahsi (Pembelajaran Bahasa Dan Sastra Indonesia)*, 13(1), 44-54.

²⁷ Lim, Z. Y., Yap, J. H., Lai, J. W., Mokhtar, L. A., Yeo, D. J., & Cheong, K. H (2024) Advancing lifelong learning in the digital age A narrative review of Singapore's Skills Future programme. *Social Sciences*, 13(2), 73.

²⁸ Agrini, M., & Agustin, F. T. (2022). Membangun Karakter Bangsa Melalui Literasi Digital. *Jurnal Tonggak Pendidikan Dasar Jurnal Kajian Teori Dan Hasil Pendidikan Dusar*, 1(2), 153-163.

²⁹ Rifad, M., Alhabisy, F., & Nadirah, S. (2023). Kepemimpinan Transformatif Kepala Sekolah Dalam Meningkatkan Kemampuan Literasi Digital Tenaga Pendidik di SD Alkhairaat 1 Palu. *Jurnal Integrasi Manajemen Pendidikan*, 2(1), 49-58.

From the various perspectives presented above, it can be concluded that digital literacy is not merely a technical skill in operating technological devices, but also includes the ability to read and understand information conveyed through digital media. The wise, intelligent, and appropriate use of digital literacy not only supports communication and interaction in everyday life, but also contributes to the creation of innovative solutions in the learning process, making teaching and learning activities more dynamic and less monotonous.³⁰

CONCLUSION

The conclusion of this paper indicates that Islamic education in the digital era faces complex challenges that arise not only from technological developments themselves, but also from the lack of readiness of educational environments, families, and society in responding to these changes. Challenges such as digital distraction, cyberbullying, dependence on technology, and exposure to negative content become obstacles to the formation of a holistic Islamic character among the younger generation. In addition, the lack of digital ethics education as well as weak supervision and guidance from parents and teachers further exacerbates these conditions. To address these issues, comprehensive and collaborative strategies are required. These strategies include integrating Islamic values into the digital curriculum, enhancing ethical digital literacy, encouraging active involvement of parents and teachers in the use of technology, and strengthening communication between home and school.

Technology provides opportunities for everyone, without exception, to access religious knowledge anytime and anywhere. Moreover, international collaboration that enables the exchange of knowledge between students and educators from different countries can enrich understanding and learning experiences in Islamic education. Overall, despite the challenges that must be addressed, Islamic education in the digital era holds significant potential to develop further, reach a wider audience, and facilitate the dissemination of accurate and moderate Islamic teachings.

REFERENCES

Agrini, M., & Agustin, F. T. (2022). Membangun Karakter Bangsa Melalui Literasi Digital. *Jurnal Tonggak Pendidikan Dasar Jurnal Kajian Teori Dan Hasil Pendidikan Dusar*, 1(2), 153-163.

Akhli Nur Mubiarto, "Tantangan dan Peluan Pendidikan Islam di Era Digital Challengs and Opportunities for Islamic Education In The Digital", *Jurnal Multidisiplin*, Vol. 1 No. 2 Desember 2024 page 123-128.

³⁰ Cynthia, R. E., & Sihotang, H. (2023). Melangkah bersama di era digital: pentingnya literasi digital untuk meningkatkan kemampuan berpikir kritis dan kemampuan pemecahan masalah peserta didik. *Jurnal Pendidikan Tambusai*, 7(3), 31712-31723.

Astutik, I. D., & Yaqin, H. (2024). Optimalisasi Strategi Kolaborasi Influencer Dalam Dakwah Digital Studi Kasus Ustadz Hanan Attaki Dalam Meningkatkan Kesadaran Keagamaan. *Religi: Jurnal Studi Agama-Agama*, 20(2), 227-247.

Cynthia, R. E., & Sihotang, H. (2023). Melangkah bersama di era digital: pentingnya literasi digital untuk meningkatkan kemampuan berpikir kritis dan kemampuan pemecahan masalah peserta didik. *Jurnal Pendidikan Tambusai*, 7(3), 31712-31723.

Faizin, M. F. M., Yudi, U., & Zainiyati, H. S. (2023) Upaya Peningkatan Kemampuan Literasi Digital melalui Pengenalan Lingkungan Persekolahan (PLP) Mahasiswa Program Studi Pendidikan Agama Islam Fakultas Tarbiyah dan Keguruan Universitas Islam Negeri Sunan Ampel Surabaya. *Jurnal Kependidikan Islam*, 13(2), 36-55.

Fauzan Ismael, Supratman, Strategi Pendidikan Islam Di Era Digital: Peluang Dan Tantangan, *Jurnal Of Sosial Scienc Reserch*, Vol. 3 No. 3 Tahun 2023 Page 4526-4533 E-ISSN 2807-4246.

Gregory Vial, "Understanding Digital Transformation: A Review and a Research Agenda," *The Journal of Strategic Information Systems* 28, no. 2 (June 2019): 118.

Habibah, A. F. (2021) Era masyarakat informasi sebagai dampak media baru. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 3(2), 350-363.

Hasan Çebi Bal and Çisil Erkan, "Industry 4.0 and Competitiveness," *Procedia Computer Science* 158 (2019): 625-631.

Laka, L., dkk. (2024). Pendidikan karakter Gen Z di era digital. Sondpeia.

Lim, Z. Y., Yap, J. H., Lai, J. W., Mokhtar, L. A., Yeo, D. J., & Cheong, K. H (2024) Advancing lifelong learning in the digital age A narrative review of Singapore's Skills Future programme. *Social Sciences*, 13(2), 73.

Lucreția Dogaru, "The Main Goals of the Fourth Industrial Revolution. Renewable Energy Perspectives," *Procedia Manufacturing* 46 (2020): 397-401

Marino, E. B., Benitez-Baleato, J. M., & Ribeiro, A. S. (2024). The polarization loop How emotions drive propagation of disinformation in online media-The case of conspiracy theories and extreme right movements in southern Europe. *Social Sciences*, 13(11), 603.

Pratiwi, H., Ariyani, M., Elisa, M., & Harahap, M. (2024). Literasi Digital Sebagai Inovasi Pembelajaran Dalam Pendidikan Agama Islam. *Jurnal Pendidikan Islam Muta'allimin*, 1(2), 79-92.

Rifad, M., Alhabsyi, F., & Nadirah, S. (2023). Kepemimpinan Transformatif Kepala Sekolah Dalam Meningkatkan Kemampuan Literasi Digital Tenaga Pendidik di SD Alkhairaat 1 Palu. *Jurnal Integrasi Manajemen Pendidikan*, 2(1), 49-58.

Rokhman, F., & Pristiwiati, R. (2023). Dari dunia offline ke dunia online: Merangkul literasi digital. *Jurnal Pembahsi (Pembelajaran Bahasa Dan Sastra Indonesia)*, 13(1), 44-54.

Saca Suhendi, Peran Pendidikan Islam Dalam Penguatan Kesadaran Digital Di Era

Informasi, *Jurnal Ilmu Sosial*, Vol. 7 No. 2 Tahun 2024.

Syawaludin, M. (2025). Dimensi Sosial Agama: Analisis Dalam Perspektif Sosiologi. *EDUCATE Journal of Education and Culture*, 3(01), 481-487.

Syifa, A., & Ridwan, A. (2024). Pendidikan Karakter Islami Di Era Digital: Tantangan Dan Solusi Berdasarkan Pemikiran Sosial Imam Al-Ghazali. *Social Studies in Education*, 2(2), 107-122.

Tanjung, M. (2021). Peluang dan Tantangan Pembelajaran Islam di Era Digital. *Jurnal Pendidikan Islam*, 20(4), 455-470.