# THE ROLE OF PESANTREN AS TRADITIONAL ISLAMIC EDUCATION INSTITUTIONS IN THE DIGITAL ERA

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Abstract: Pesantren is a traditional Islamic educational institution that has been established since ancient times in Indonesia. In facing the challenges of modern times, pesantren play an important role in maintaining the identity and sustainability of Islamic values. However, with the advent of the digital era, pesantren are faced with various changes and new challenges.. The method used in this study is library research through a qualitative research approach. Theoretically, this study traces various literature, books and scientific articles in accordance with the theme of the study, then interpreted with existing conditions. The result of this study is that the role of pesantren as traditional Islamic educational institutions in the digital era contains challenges and opportunities. By blending traditional values and technological advancements, pesantren can continue to contribute effectively in teaching and maintaining Islamic values in modern life. The wise use of technology will have a positive impact on Islamic education in pesantren and ensure the continuity of this institution in spreading pure Islamic values in the increasingly advanced digital era.

keyword: Pesantren, Islamic Education, Digital Era

#### INTRODUCTION

Entering the industrial revolution 4.0 which is characterized by an all-digital communication pattern (Internet of Things) with an entrepreneurial taste, requires Islamic education (pesantren) to reorient, re-study or metamorphosis<sup>3</sup>. Because whether we realize it or not, the readiness and role of generations as the successors of civilization must occupy a strategic position to achieve goals. If not, it is not impossible that it will slowly lag far behind and find it difficult to compete with other educational products that have accelerated following the development of the era. These demands and anxieties are certainly not a form of criticism or doubting the existence of pesantren. However, more on the epistemological offer sees the position of pesantren which became the forerunner of education in Indonesia.

Pesantren are traditional Islamic educational institutions in Indonesia and several other countries in the Muslim world<sup>4</sup>. Pesantren is a place where santri (students) learn and explore the teachings of Islam, including studying the Quran, hadith, tafsir, fiqh, and other religious

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<sup>&</sup>lt;sup>3</sup> Munifah Munifah, "Antara Tradisi Dan Modernitas: Metamorfosis Pesantren Di Era Digital," *Prosiding Nasional* 2 (2019): 1–24.

<sup>&</sup>lt;sup>4</sup> Imam Syafe'i, "Pondok Pesantren: Lembaga Pendidikan Pembentukan Karakter," Al-Tadzkiyyah: Jurnal Pendidikan Islam 8, no. 1 (2017): 61–82.

sciences. In addition, pesantren also provide character and moral development to students, teaching the values of honesty, discipline, simplicity, and independence.

Pesantren are usually run by a kyai (caretaker of the pesantren) who is a religious figure and academic. Life in the world of pesantren there are four very important elements, namely Kiyai or the caretaker of the Islamic boarding school as the owner of the Islamic boarding school<sup>5</sup>. Kyai has an important role in providing spiritual teaching and guidance to the students. Boarding. Santri, which is a person who studies in pesantren. In addition, pesantren also have references or references to science as teaching materials that usually use the yellow book. An element that is no less important in the life of pesantren is the dormitory, or the residence of the students in it. They are often located in rural areas, although some are located in urban areas <sup>6</sup>. Pesantren have a strong oral tradition, where knowledge and religious teachings are conveyed directly from teachers to students. Dormitories are an integral part of pesantren, where students live and live their daily lives. The pesantren environment creates an Islamic atmosphere and provides opportunities for students to explore religious teachings and practice them in daily life<sup>7</sup>.

Pesantren is also the oldest educational institution that has legitimacy and is inherent in the course of life in Indonesia since hundreds of years ago <sup>8</sup>. It is an educational institution that can be categorized as a unique institution and has its own distinctive characteristics so that it currently shows brilliant capabilities through as an episode of the times with the prularity of the polemics it faces<sup>9</sup>. Even the existence of pesantren as the oldest institution of Islamic education of the archipelago is recognized to have had a great contribution and role in the history of the struggle of the Indonesian nation. In addition, pesantren also have an important role in the national education system. Pesantren have an important role in producing scholars and religious figures who play an active role in society. In this modern era, pesantren continue to adapt to technological developments and the demands of the times, but still maintain the distinctive Islamic religious values and traditions.

<sup>&</sup>lt;sup>5</sup> Siti Badi'ah, Luthfi Salim, and Muhammad Candra Syahputra, "Pesantren Dan Perubahan Sosial Pada Era Digital," Analisis: Jurnal Studi Keislaman 21, no. 2 (2021): 349–64.

<sup>&</sup>lt;sup>6</sup> Amiruddin Amiruddin and others, "Pemetaan Kapasitas Pondok Pesantren Di Kabupaten Jeneponto Dan Takalar," Pusaka 5, no. 2 (2017): 219–34.

<sup>&</sup>lt;sup>7</sup> Akmal Mundiri and Reni Uswatun Hasanah, "Inovasi Pengembangan Kurikulum Pai Di SMP Nurul Jadid," Tadrib 4, no. 1 (2018): 40–68.

<sup>&</sup>lt;sup>8</sup> Zulkifli Nelson and Dardiri Dardiri, "Inklusivisme Dan Humanisme Pesantren," Toleransi: Media Ilmiah Komunikasi Umat Beragama 8, no. 2 (2016): 134–51.

<sup>&</sup>lt;sup>9</sup> Abdul Muid, "Peranan Pondok Pesantren Di Era Digital," At-Tahdzib: Jurnal Studi Islam Dan Muamalah 7, no. 2 (2019): 62–79.

In the sea of technology and the rapid development of the digital era, pesantren as traditional Islamic educational institutions play a central role in maintaining the roots of Islamic values<sup>10</sup>. As a center of learning that has been established for centuries, pesantren carry a rich heritage of local wisdom and values that are upheld in the Islamic world. Although the journey to the digital era has accelerated changes in social, cultural, and learning ways, pesantren remain relevant in producing the next generation with noble character and integrity.

The role of pesantren as traditional Islamic educational institutions does not only focus on teaching religious aspects, but also in forming a strong character, personality, and care for others<sup>11</sup>. In the digital era that is all connected, pesantren must face various new challenges and opportunities in maintaining and strengthening its identity as a quality educational institution. The digital era demands adaptation and innovation from every educational institution, including pesantren.

In this article, we will dive deeper into the role of pesantren in facing the digital era. We will explore how pesantren can integrate technology into the learning process to enhance educational effectiveness, while still upholding the underlying Islamic values. Not only that, we will also see how pesantren play an important role in building bridges between tradition and progress, enabling the younger generation to stay rooted in noble values and face the demands of the times wisely.

#### **METHODS**

Research approach in the form of Library Research. Literature research is a research method carried out by collecting and analyzing various relevant literature sources, such as books, scientific journals, articles, and other documents, in order to answer research questions or gain a deeper understanding of a particular topic or issue <sup>12</sup>. Literature research is carried out by reading, reviewing, and analyzing existing literature on the topic that is the focus of research.

The stages carried out in conducting this literature research go through the PRISMA stages, namely identifying eligibility criteria, defining information sources, literature selection, data collection and selection of data items. The data analysis technique used in this research is

Abas Abas and Hilyatul Auliya, "Romantisme Pendidikan Pesantren Di Era Milenial Dan Revolusi Industri 4.0," SETYAKI: Jurnal Studi Keagamaan Islam 1, no. 2 (2023): 25–34.

<sup>&</sup>lt;sup>11</sup> Rahmat Effendi, "Studi Islam Indonesia: Pendidikan Islam Modern (Kajian Historis Perspektif Karel A Steenbrink)," Alhamra Jurnal Studi Islam 2, no. 1 (2021): 36–48.

<sup>&</sup>lt;sup>12</sup> Evanirosa Andan et al., Metode Penelitian Kepustakaan (Library Research), Cet. I (Bandung: Media Sains Indonesia, 2022).

a descriptive method, which is research that seeks to describe and interpret what exists, growing opinions, ongoing processes, consequences or effects that occur or trends that develop<sup>13</sup>.

## RESULT AND DISCUSSION

# A. The Role of Pesantren in Maintaining Islamic Traditions and Values

Maintaining Islamic traditions and values means maintaining, preserving, and practicing the teachings of the Islamic religion and practices that have been passed down from generation to generation in Muslim societies<sup>14</sup>. It involves preserving and continuing religious traditions, while appreciating and reinforcing Islamic values in daily life. The role of pesantren in maintaining Islamic traditions and values is very important and extensive. As a traditional Islamic educational institution, pesantren have a crucial role in preserving, spreading, and developing Islamic teachings and the values contained therein<sup>15</sup>. Here are some details regarding the role of pesantren in maintaining Islamic traditions and values:

# 1. Teaching Religious and Islamic Teachings

Pesantren is a center of religious learning that teaches Islamic teachings deeply and thoroughly <sup>16</sup>. Students are taught about the basics of religion, such as Quranic exegesis, hadith, aqidah (belief), fiqh (Islamic law), Islamic history, and noble morals. In the pesantren environment, students also learn to memorize the Quran, recite, and worship with high discipline.

## 2. Development of Islamic Life

In addition to formal religious teaching, pesantren also place emphasis on developing Islamic life that is integrated in daily activities. Students are taught about Islamic ethics, humility, tolerance, social care, and mutual help. Pesantren encourages students to live in accordance with Islamic values in interacting with the surrounding environment.

#### 3. Maintenance of Islamic Local Customs and Culture

Pesantren are often in neighborhoods rich with traditional culture and customs. Pesantren play a role in preserving local culture in accordance with Islamic values, as well as discarding cultural elements that are contrary to religious teachings. This allows

<sup>&</sup>lt;sup>13</sup> Sumanto, Teori Dan Metode Penelitian (Yogyakarta: CAPS (center of Academic Publishing Service, 2014).

<sup>&</sup>lt;sup>14</sup> Budiarti Budiarti, "Ritual Massuro Baca Pada Masyarakat Bugis Tinco Bone Perspektif Maqashid Al-Syari'ah," Al-Mizan (e-Journal) 17, no. 2 (2021): 201–18.

<sup>&</sup>lt;sup>15</sup> Liza Aprilia and Harun Lubis, "Gaya Kepemimpinan Transformatif Dalam Membangun Budaya Organisasi Pesantren," PESANTREN: Studies in Islamic School and Social Education 1, no. 1 (2023): 1–16.

<sup>&</sup>lt;sup>16</sup> Muhammad Najihul Huda, "Menantang Disintegrasi Moral Di Era Revolusi Industri 4.0: Peran Revolusioner Pondok Pesantren," Journal of Islamic Education 9, no. 1 (2023): 1–13.

pesantren to become agents of unification between religion and local culture, thus forming a strong Islamic identity in the santri.

# 4. Practice of Islamic Leadership Values

Pesantren also play an important role in shaping future Islamic leaders. Santri is encouraged to learn and practice Islamic leadership values, such as honesty, integrity, fairness, responsibility, and a forward-looking attitude<sup>17</sup>. The ustadz and kyai as leaders of pesantren are examples of the role of models for students in recognizing Islamic character and leadership qualities.

# 5. Conservation of Islamic Scientific and Cultural Heritage

Pesantren is a repository of Islamic knowledge and culture that has developed since centuries. In pesantren, ancient manuscripts, classical books, and Islamic scholarly traditions are preserved and conserved. This allows pesantren to act as guardians of Islamic scientific and cultural heritage from time to time.

## 6. Defending Arabic Language and Islamic Literature

As a center of religious instruction, pesantren also play a vital role in maintaining Arabic as the main language for understanding and accessing Islamic resources<sup>18</sup>. Arabic is key to understanding the Quran and hadith, as well as classical works in Islamic literature.

## 7. Fostering the Spirit of Worship and Spirituality

Pesantren helps revive the spirit of worship and spirituality in students. A solemn environment full of religious values helps direct students to explore religion more and improve their relationship with Allah SWT.

By carrying out the above roles, pesantren can serve as the frontline in maintaining and passing on Islamic traditions and values for the younger generation. In addition, pesantren also play an important role in maintaining Islamic identity, developing superior student character, and contributing positively to society and the nation as a whole.

# B. Challenges of pesantren in the digital era

Pesantren is a traditional Islamic educational institution in Indonesia that has an important role in fostering the character and religious understanding of santri (students)

<sup>18</sup> Shokhibul Mighfar, "Menggagas Pendidikan Humanis Religius: Belajar Dari Model Pendidikan Pesantren," Jurnal Pendidikan Islam Indonesia 2, no. 2 (2018): 159–80.

<sup>&</sup>lt;sup>17</sup> Rz Ricky Satria Wiranata, "Tantangan, Prospek Dan Peran Pesantren Dalam Pendidikan Karakter Di Era Revolusi Industri 4.0," AL-MANAR: Jurnal Komunikasi Dan Pendidikan Islam 8, no. 1 (2019): 61–92.

known as women and man<sup>19</sup>. Pesantren is one form of Islamic education that has existed for a long time and has become a characteristic of Indonesian culture and life. The development of pesantren in the digital era has shown various significant transformations and adaptations as a result of the development of information and communication technology (ICT). The digital era has a major impact on the learning, management, communication, and da'wah systems of pesantren. As for the challenges of pesantren in the digital era, as follows:

# 1. Intermingling Global Cultures and Values

The digital age has a major impact on the intermingling of global cultures and values <sup>20</sup>. Easy access to information from around the world allows for the entry of foreign cultural influences that are not always aligned with the traditional values of pesantren. This challenge requires greater efforts in teaching and strengthening authentic Islamic values to the younger generation.

The intermingling of cultures and global values refers to the process by which cultures of different groups or societies interact and influence each other <sup>21</sup>. It occurs when people from diverse cultural backgrounds interact, communicate, and share aspects of culture, such as language, food, traditions, values, and social practices.

Global values, on the other hand, are principles that are considered universally important and applicable to all of humanity <sup>22</sup>. These values include equality, human rights, peace, justice, tolerance, respect for the environment, and so on. Global values emphasize the importance of unity and respect for differences to achieve agreement and balance in an increasingly connected global society.

#### 2. Unwise Use of Technology

Unwise use of technology in pesantren refers to the use of technology inappropriately, irresponsibly, or not in accordance with the values and objectives of pesantren education<sup>23</sup>. Pesantren is a traditional Islamic educational institution in

<sup>&</sup>lt;sup>19</sup> Luthfi Salim, "Kontruksi Sosial Gender Di Pesantren Studi Kesenjangan Antara Laki-Laki Dengan Perempuan," Socio Religia 1, no. 2 (2020).

<sup>&</sup>lt;sup>20</sup> Umma Farida, "Radikalisme, Moderatisme, Dan Liberalisme Pesantren: Melacak Pemikiran Dan Gerakan Keagamaan Pesantren Di Era Globalisasi," Edukasia: Jurnal Penelitian Pendidikan Islam 10, no. 1 (2015).

<sup>&</sup>lt;sup>21</sup> Mashudi Mashudi, "Perilaku Dan Budaya Konsumen Madura Dalam Dinamika Etika Bisnis Syariah," Al-Insyiroh: Jurnal Studi Keislaman 2, no. 2 (2018): 133–49.

<sup>&</sup>lt;sup>22</sup> sahri, "Membangun Nilai Karakter Religius Melalui Aktivitas Keagamaan Di MTs Al Yakin Pungpungan," Paramurobi: Jurnal Pendidikan Agama Islam 5, no. 2 (2022): 83–92.

<sup>&</sup>lt;sup>23</sup> Dedi Ardiansyah and Basuki Basuki, "Implementasi Nilai-Nilai Kesalehan Sosial Di Pondok Pesantren Dalam Menghadapi Era Society 5.0," Jurnal Inovasi Pendidikan 1, no. 2 (2023): 64–81.

Indonesia that focuses on deepening Islamic religious teachings and building Islamic character for santri (pesantren residents)<sup>24</sup>.

Unwise use of technology refers to the use of technology irresponsibly or not in accordance with applicable social, ethical, and legal norms<sup>25</sup>. This includes actions that may cause a negative impact on oneself, others, or the surrounding environment due to a lack of supervision, awareness, or consideration of the consequences of using technology. Pesantren need to deal with the unwise use of technology among students. The use of gadgets, social media, and negative digital content can interfere with the educational process and endanger the moral and spiritual development of students.

## 3. Technology Gap

Technology gap in pesantren refers to the difference or disparity that occurs in the use and access to information and communication technology among existing pesantren. These disparities can include differences in the level of technology adoption, availability of devices and infrastructure, human resource proficiency in dealing with technological change, and awareness of the benefits and relevance of technology in the context of education and pesantren activities. Not all pesantren have adequate access and means to adopt technology in the learning process. The technology gap between pesantren can lead to educational disparities between them. Some factors that can cause technology gaps in pesantren include:

- a) Geographical Location: Islamic boarding schools located in urban areas or with good internet access tend to be more advanced in the use of technology compared to Islamic boarding schools located in rural or remote areas.
- b) Financial Resources: Limited funds or budgets can be an obstacle for pesantren in adopting and integrating technology widely.
- c) Awareness and Willingness to Adapt: Islamic boarding schools that have a high awareness of the importance of technology and willingness to adapt to technological developments will be more advanced in the use of technology.
- d) Availability of Trained Instructors and Teachers: Pesantren that have instructors and teachers who are trained and master technology will be better able to integrate technology in the learning process and other activities.

<sup>25</sup> Wahyuni Choiriyati and others, "Etika Media Dalam Kultur New Technology (Mengkaji Etika Internet Versus Undang-Undang Informasi Dan Transaksi Elektronik)," Jurnal Masyarakat Dan Budaya, 2019, 247–62.

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<sup>&</sup>lt;sup>24</sup> Sahri Sahri, Asrof Syafi'i, and Sokip Sokip, "Direction and Strategy of Islamic Education Ministry of Religious Affairs of Indonesia," Tarbawi: Jurnal Pendidikan Islam 20, no. 1 (2023).

e) Internet Infrastructure and Access: The quality and availability of technological infrastructure, such as internet networks, can affect the level of technology utilization in pesantren.

# C. Efforts to integrate technology in pesantren

## 1. Thoughtful Technology Education

Technology Education is a field of education that focuses on learning, understanding, and applying information and communication technology (ICT) in an educational context. The primary goal of technology education is to equip students with the skills, knowledge, and understanding necessary to effectively utilize and integrate technology in everyday life, work environments, and learning processes. Technology Education involves various aspects, including an introduction to computer hardware and software, programming, internet use, multimedia technology, cybersecurity, and the use of technology in various fields such as education, business, art, and so on.

Prudent Technology Education refers to the approach in teaching and utilizing information and communication technology responsibly, ethically, and in accordance with learning needs and objectives<sup>26</sup>. Thoughtful Technology Education aims to equip students with relevant and useful technological skills, while raising awareness about the social, environmental, and humanitarian impacts of technology use.

Prudent technology education in pesantren refers to a responsible approach and in accordance with Islamic values in teaching and utilizing information and communication technology. In the context of pesantren, wise Technology Education aims to align technological advances with Islamic religious teachings and traditional values taught in pesantren. Pesantren must teach students about the wise and responsible use of technology. This can be done by providing an understanding of digital ethics, the dangers of negative content, and how to use technology to gain positive benefits.

# 2. Strengthening Islamic Identity

In the era of globalization and advances in information and communication technology (ICT), Islamic identity is faced with various complex dynamics and challenges <sup>27</sup>. Technology has become an integral part of modern human life, and its influence spans many aspects, including the way Muslims exercise and strengthen their

<sup>27</sup> Muhammad Alhada Fuadilah Habib and others, "Dinamika Pengarusutamaan Moderasi Beragama Dalam Perkembangan Masyarakat Digital," Asketik: Jurnal Agama Dan Perubahan Sosial 6, no. 1 (2022): 1–15.

<sup>&</sup>lt;sup>26</sup> Elya Umi Hanik, "Self Directed Learning Berbasis Literasi Digital Pada Masa Pandemi Covid-19 Di Madrasah Ibtidaiyah," *ELEMENTARY: Islamic Teacher Journal* 8, no. 1 (2020): 183.

Islamic identity. Wise and appropriate technology can be an effective means of strengthening understanding of religious teachings, connections with Muslim communities, and participating in the spread of tolerant Islamic messages.

Islamic identity is an identity that characterizes and guides Muslims in practicing Islam. This identity includes an understanding of the beliefs, worship practices, and moral norms established in religious teachings. In the midst of modernization and social change, the challenges in maintaining Islamic identity are increasingly complex.

In this context, information and communication technology (ICT) is present as a tool that can strengthen and deepen Islamic identity <sup>28</sup>. The wise use of technology can help Muslims draw closer to the teachings of Islam, increase understanding of the religion, and strengthen connectivity with the wider Muslim community. Strengthening Islamic identity is an important step in dealing with global cultural influences. Pesantren need to integrate strong Islamic values in the curriculum and daily activities to build strong beliefs and strong Islamic identity in students.

# 3. Use of Technology in the Learning Process

The use of technology in the learning process in pesantren has become increasingly relevant and important to enrich the learning experience of students<sup>29</sup>. Although pesantren are traditional Islamic educational institutions, adaptation to the development of information and communication technology (ICT) is important so that pesantren remain relevant and effective in equipping students to face future challenges. Pesantren can utilize technology to enrich the learning process. The use of educational applications, online learning platforms, and interactive materials can help improve the efficiency and effectiveness of education in pesantren<sup>30</sup>. Here are some examples of the use of technology in the learning process in pesantren:

a. Access to Information: Technology provides easy and quick access to a variety of information sources, including religious texts, hadiths, and yellow books. With this access, students can learn more deeply about religious teachings and develop a broader understanding of Islam.

Teologi 7, no. 1 (2021): 146–72.

<sup>29</sup> Ahmad Fauzi et al., "E-Learning in Pesantren: Learning Transformation Based on the Value of Pesantren," in *Journal of Physics: Conference Series*, vol. 1114 (IOP Publishing, 2018), 012062.

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<sup>&</sup>lt;sup>28</sup> Rumondang Lumban Gaol and Resmi Hutasoit, "Media Sosial Sebagai Ruang Sakral: Gereja Yang Bertransformasi Bagi Perkembangan Spiritualitas Generasi Z Dalam Era Digital," KENOSIS: Jurnal Kajian Teologi 7, no. 1 (2021): 146–72

<sup>&</sup>lt;sup>30</sup> Mochammad Syafiuddin Shobirin, Mujamil Qomar, and Abd Aziz, "Kebijakan Transformasi Digital Madrasah Aliyah Unggulan KH. Abd Wahab Hasbulloh Bahrul'Ulum Tambakberas Jombang," JoEMS (Journal of Education and Management Studies) 6, no. 3 (2023): 9–15.

- b. Interactive Learning Materials: The use of multimedia, videos, and interactive applications allows teachers to deliver learning materials in a more engaging and interactive way. Santri can be more interested and involved in the learning process through visual and audio media.
- c. Distance Learning: In certain situations, such as pandemics or other constraints, technology allows for remote or online learning<sup>31</sup>. Pesantren can adopt online learning platforms that allow students to continue learning remotely. Online Study and Discussion: The use of technology facilitates the implementation of yellow book studies and religious discussions online. Students can participate in discussions with fellow students from various regions or even countries.
- d. Learning Applications: Special learning applications for religious or Arabic lessons make it easier for students to practice reading the Quran or understanding Arabic<sup>32</sup>.
- e. Data and Value Management: Technology allows pesantren to manage student data, lesson schedules, and grades more efficiently by using information systems or special applications.
- f. Teacher Training and Development: Technology also facilitates teacher training and development through online platforms, webinars, and digital learning resources.

Although the use of technology in the learning process in pesantren provides many benefits, keep in mind that its implementation must be wise and in accordance with Islamic religious values. The wise use of technology must always prioritize the development of Islamic character and not replace the traditional values of pesantren, but on the contrary, strengthen and complement existing learning methods. In addition, supervision and assistance from teachers and Islamic boarding school managers remain important to ensure the proper and responsible use of technology by students.

#### 4. Training for Ustadz and Educators

Ustadz and educators in pesantren need to receive training in the use of technology in the learning process <sup>33</sup>. That way, they can present the subject matter in a more interesting and relevant way for the younger generation growing up in the digital era.

<sup>&</sup>lt;sup>31</sup> Darren Turnbull, Ritesh Chugh, and Jo Luck, "Transitioning to E-Learning during the COVID-19 Pandemic: How Have Higher Education Institutions Responded to the Challenge?," *Education and Information Technologies* 26, no. 5 (2021): 6401–19.

<sup>&</sup>lt;sup>32</sup> Amrina Amrina et al., "The Contribution of Arabic Learning To Improve Religious Materials for Students," *Ijaz Arabi Journal of Arabic Learning* 5, no. 1 (2022).

<sup>&</sup>lt;sup>33</sup> Lyly Bayu Aji and Marhaeni Dwi Setyarini, "Modernisasi Pendidikan Di Pondok Pesantren Miftahul 'Amal Jiken, Blora," Journal of Economic Education and Entrepreneurship 1, no. 1 (2020): 1–10.

Training for Ustadz (religious teachers) and educators on technology is an important step in improving their ability to utilize information and communication technology (ICT) in the process of learning and delivering religious materials<sup>34</sup>. This training aims to equip teachers with skills and knowledge on the appropriate and effective use of technology in the context of religious education. Some of the main objectives of technology training for ustadz and educators are:

- a. Understanding the Potential and Benefits of Technology: This training helps scholars and educators understand the potential and benefits of technology in improving the quality of learning<sup>35</sup>. They will learn about various technological tools and platforms that can be used in the learning process, such as computer hardware and software, smartphone applications, and online learning platforms.
- b. Integration of Technology in Religious Learning: This training teaches how to integrate technology in religious learning to make teaching materials more interesting, interactive, and relevant for students. Ustadz and educators will be taught how to use multimedia, video, images, and interactive applications to increase the attractiveness and effectiveness of learning.
- c. Use of the Internet as a Learning Resource: This training will teach scholars and educators on how to use the Internet as a useful learning resource. They will be taught how to find, assess, and use accurate and reliable sources of information from the internet.
- d. Digital Literacy and Communication Ethics: This training also covers digital literacy and communication ethics in the digital world. Ustadz and educators will learn about how to communicate with good ethics on social media and other digital platforms.
- e. Digital Classroom Management: This training assists scholars and educators in managing digital classrooms and ensuring that all students can access and use technology properly. They will learn about how to deal with the challenges and technical issues of managing a digital classroom.

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<sup>&</sup>lt;sup>34</sup> Oos M Anwas, "Pemanfaatan Teknologi Informasi Dan Komunikasi Pada Pesantren Rakyat Sumber Pucung Malang," Jurnal Pendidikan Dan Kebudayaan 21, no. 3 (2015): 207–20.

<sup>&</sup>lt;sup>35</sup> Abbas Pourhosein Gilakjani, "A Review of the Literature on the Integration of Technology into the Learning and Teaching of English Language Skills," *International Journal of English Linguistics* 7, no. 5 (2017): 95–106.

f. Cybersecurity and Privacy: The training also includes an understanding of cybersecurity and privacy. Ustadz and educators will learn how to protect themselves and students from digital security threats<sup>36</sup>.

Technology training for scholars and educators can be organized by educational institutions, government agencies, or organizations that focus on professional development of teachers. With this training, it is hoped that ustadz and educators can be better prepared and confident in utilizing technology as an effective tool in religious education.

#### **CONCLUSION**

Pesantren as traditional Islamic educational institutions have an important role in preserving and developing Islamic values. However, in the digital age, pesantren are faced with various challenges, including global cultural intermingling and unwise use of technology. Efforts to integrate technology with pesantren values are an important step in facing this challenge. By strengthening Islamic identity, wise technology education, and the use of technology in the learning process, pesantren can remain relevant and play a role in educating future generations of Muslims.

#### REFERENCES

- Abas, Abas, and Hilyatul Auliya. "Romantisme Pendidikan Pesantren Di Era Milenial Dan Revolusi Industri 4.0." *SETYAKI: Jurnal Studi Keagamaan Islam* 1, no. 2 (2023): 25–34.
- Aji, Lyly Bayu, and Marhaeni Dwi Setyarini. "Modernisasi Pendidikan Di Pondok Pesantren Miftahul 'Amal Jiken, Blora." *Journal of Economic Education and Entrepreneurship* 1, no. 1 (2020): 1–10.
- Amiruddin, Amiruddin and others. "Pemetaan Kapasitas Pondok Pesantren Di Kabupaten Jeneponto Dan Takalar." *Pusaka* 5, no. 2 (2017): 219–34.
- Amrina, Amrina, Adam Mudinillah, Ahmad Firdaus bin Mohd Noor, and others. "The Contribution of Arabic Learning To Improve Religious Materials for Students." *Ijaz Arabi Journal of Arabic Learning* 5, no. 1 (2022).
- Andan, Evanirosa, Christina Bagenda, hasnawati, and Fauzana Annova. *Metode Penelitian Kepustakaan (Library Research)*. Cet. I. Bandung: Media Sains Indonesia, 2022.

<sup>36</sup> Asriyani Sagiyanto et al., "Literasi Media Digital Pada Anak-Anak Majelis Talim Hidayatul Mubtadiin," Jurnal Abdimas Komunikasi Dan Bahasa 1, no. 1 (2021): 1–8.

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- Anwas, Oos M. "Pemanfaatan Teknologi Informasi Dan Komunikasi Pada Pesantren Rakyat Sumber Pucung Malang." *Jurnal Pendidikan Dan Kebudayaan* 21, no. 3 (2015): 207–20.
- Aprilia, Liza, and Harun Lubis. "Gaya Kepemimpinan Transformatif Dalam Membangun Budaya Organisasi Pesantren." *PESANTREN: Studies in Islamic School and Social Education* 1, no. 1 (2023): 1–16.
- Ardiansyah, Dedi, and Basuki Basuki. "Implementasi Nilai-Nilai Kesalehan Sosial Di Pondok Pesantren Dalam Menghadapi Era Society 5.0." *Jurnal Inovasi Pendidikan* 1, no. 2 (2023): 64–81.
- Badi'ah, Siti, Luthfi Salim, and Muhammad Candra Syahputra. "Pesantren Dan Perubahan Sosial Pada Era Digital." *Analisis: Jurnal Studi Keislaman* 21, no. 2 (2021): 349–64.
- Budiarti, Budiarti. "Ritual Massuro Baca Pada Masyarakat Bugis Tinco Bone Perspektif Maqashid Al-Syari'ah." *Al-Mizan (e-Journal)* 17, no. 2 (2021): 201–18.
- Choiriyati, Wahyuni and others. "Etika Media Dalam Kultur New Technology (Mengkaji Etika Internet Versus Undang-Undang Informasi Dan Transaksi Elektronik)." *Jurnal Masyarakat Dan Budaya*, 2019, 247–62.
- Effendi, Rahmat. "Studi Islam Indonesia: Pendidikan Islam Modern (Kajian Historis Perspektif Karel A Steenbrink)." *Alhamra Jurnal Studi Islam* 2, no. 1 (2021): 36–48.
- Farida, Umma. "Radikalisme, Moderatisme, Dan Liberalisme Pesantren: Melacak Pemikiran Dan Gerakan Keagamaan Pesantren Di Era Globalisasi." *Edukasia: Jurnal Penelitian Pendidikan Islam* 10, no. 1 (2015).
- Fauzi, Ahmad, Hasan Baharun, Akmal Mundiri, Umar Manshur, and others. "E-Learning in Pesantren: Learning Transformation Based on the Value of Pesantren." In *Journal of Physics: Conference Series*, 1114:012062. IOP Publishing, 2018.
- Gaol, Rumondang Lumban, and Resmi Hutasoit. "Media Sosial Sebagai Ruang Sakral: Gereja Yang Bertransformasi Bagi Perkembangan Spiritualitas Generasi Z Dalam Era Digital." KENOSIS: Jurnal Kajian Teologi 7, no. 1 (2021): 146–72.
- Gilakjani, Abbas Pourhosein. "A Review of the Literature on the Integration of Technology into the Learning and Teaching of English Language Skills." *International Journal of English Linguistics* 7, no. 5 (2017): 95–106.
- Habib, Muhammad Alhada Fuadilah and others. "Dinamika Pengarusutamaan Moderasi Beragama Dalam Perkembangan Masyarakat Digital." *Asketik: Jurnal Agama Dan Perubahan Sosial* 6, no. 1 (2022): 1–15.

- Hanik, Elya Umi. "Self Directed Learning Berbasis Literasi Digital Pada Masa Pandemi Covid-19 Di Madrasah Ibtidaiyah." *ELEMENTARY: Islamic Teacher Journal* 8, no. 1 (2020): 183.
- Huda, Muhammad Najihul. "Menantang Disintegrasi Moral Di Era Revolusi Industri 4.0: Peran Revolusioner Pondok Pesantren." *Journal of Islamic Education* 9, no. 1 (2023): 1–13.
- Mashudi, Mashudi. "Perilaku Dan Budaya Konsumen Madura Dalam Dinamika Etika Bisnis Syariah." *Al-Insyiroh: Jurnal Studi Keislaman* 2, no. 2 (2018): 133–49.
- Mighfar, Shokhibul. "Menggagas Pendidikan Humanis Religius: Belajar Dari Model Pendidikan Pesantren." *Jurnal Pendidikan Islam Indonesia* 2, no. 2 (2018): 159–80.
- Muid, Abdul. "Peranan Pondok Pesantren Di Era Digital." *At-Tahdzib: Jurnal Studi Islam Dan Muamalah* 7, no. 2 (2019): 62–79.
- Mundiri, Akmal, and Reni Uswatun Hasanah. "Inovasi Pengembangan Kurikulum Pai Di SMP Nurul Jadid." *Tadrib* 4, no. 1 (2018): 40–68.
- Munifah, Munifah. "Antara Tradisi Dan Modernitas: Metamorfosis Pesantren Di Era Digital." *Prosiding Nasional* 2 (2019): 1–24.
- Nelson, Zulkifli, and Dardiri Dardiri. "Inklusivisme Dan Humanisme Pesantren." *Toleransi: Media Ilmiah Komunikasi Umat Beragama* 8, no. 2 (2016): 134–51.
- Sagiyanto, Asriyani, Ferrari Lancia, Achmad Syahlani, and others. "Literasi Media Digital Pada Anak-Anak Majelis Talim Hidayatul Mubtadiin." *Jurnal Abdimas Komunikasi Dan Bahasa* 1, no. 1 (2021): 1–8.
- sahri. "Membangun Nilai Karakter Religius Mellaui Aktivitas Keagamaan Di MTs Al Yakin Pungpungan." *Paramurobi: Jurnal Pendidikan Agama Islam* 5, no. 2 (2022): 83–92.
- Sahri, Sahri, Asrof Syafi'i, and Sokip Sokip. "Direction and Strategy of Islamic Education Ministry of Religious Affairs of Indonesia." *Tarbawi: Jurnal Pendidikan Islam* 20, no. 1 (2023).
- Salim, Luthfi. "Kontruksi Sosial Gender Di Pesantren Studi Kesenjangan Antara Laki-Laki Dengan Perempuan." *Socio Religia* 1, no. 2 (2020).
- Shobirin, Mochammad Syafiuddin, Mujamil Qomar, and Abd Aziz. "Kebijakan Transformasi Digital Madrasah Aliyah Unggulan KH. Abd Wahab Hasbulloh Bahrul'Ulum Tambakberas Jombang." *JoEMS (Journal of Education and Management Studies)* 6, no. 3 (2023): 9–15.
- Sumanto. *Teori Dan Metode Penelitian*. Yogyakarta: CAPS (center of Academic Publishing Service, 2014.

- Syafe'i, Imam. "Pondok Pesantren: Lembaga Pendidikan Pembentukan Karakter." *Al-Tadzkiyyah: Jurnal Pendidikan Islam* 8, no. 1 (2017): 61–82.
- Turnbull, Darren, Ritesh Chugh, and Jo Luck. "Transitioning to E-Learning during the COVID-19 Pandemic: How Have Higher Education Institutions Responded to the Challenge?" *Education and Information Technologies* 26, no. 5 (2021): 6401–19.
- Wiranata, Rz Ricky Satria. "Tantangan, Prospek Dan Peran Pesantren Dalam Pendidikan Karakter Di Era Revolusi Industri 4.0." *AL-MANAR: Jurnal Komunikasi Dan Pendidikan Islam* 8, no. 1 (2019): 61–92.