



Digital Devotion: How Virtual Spaces and Technological Advancements Shape Religious Practices in an Indonesian Islamic Boarding School

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Abstract:

This study aims to explore the utilization of digital technology in supporting learning and religious activities within an Islamic boarding school. A qualitative case study design was employed to obtain an in-depth understanding of how digital technology is integrated into students' daily educational and religious practices. Data were collected through observations and semi-structured interviews involving boarding school administrators, teachers, and students. The data were analyzed using the interactive model of data condensation, data display, and conclusion drawing and verification. The findings reveal that digital technology, including smartphones, digital Islamic applications, digital books, social media, and online learning platforms, is primarily utilized as a complementary tool to facilitate access to educational resources and Islamic knowledge. The results also indicate that the effective use of digital technology is supported by institutional regulations, teacher supervision, and students' self-discipline, enabling technology to enhance learning and religious activities without replacing conventional face-to-face instruction. The study implies that balanced technology integration, supported by appropriate institutional policies and educational guidance, can promote sustainable digital transformation while preserving the educational values and character-building mission of Islamic education.

INTRODUCTION

The rapid advancement of digital technology has transformed various aspects of human life, including education, communication, and religious practices (Jamil et al., 2025; Malla et al., 2023). Educational institutions are increasingly integrating digital technologies to improve learning accessibility, expand educational resources, and enhance students' engagement in the learning process (Darwanto et al., 2024). This transformation is also evident in Islamic educational institutions, where digital technology provides opportunities for students to access religious knowledge through digital Qur'an applications, electronic Islamic books, online lectures, and learning management systems (Muhith et al., 2023; Siregar et al., 2025). The integration of digital technology enables students to obtain information more efficiently while supporting independent learning beyond the classroom environment. However, the implementation of digital technology in Islamic boarding schools requires careful consideration because these institutions are not only responsible for academic

development but also for nurturing students' religious values, moral character, and discipline. Therefore, understanding how digital technology is utilized within the context of Islamic boarding schools is important for developing educational strategies that balance technological innovation with the preservation of religious traditions and institutional values. Consequently, this issue has become increasingly relevant for educators, policymakers, and researchers seeking to promote sustainable digital transformation in Islamic education.

Despite the significant opportunities offered by digital technology, its implementation in educational environments has also introduced several challenges. The widespread use of smartphones, social media, and online learning platforms has generated concerns regarding students' learning concentration, excessive dependence on digital devices, information overload, and inappropriate use of online content (Tantowi et al., 2025). These challenges become more complex in Islamic boarding schools because students are expected to maintain discipline, participate in intensive religious learning, and uphold moral values while adapting to technological developments. Educational institutions therefore face the challenge of maximizing the educational benefits of technology while minimizing its potential negative consequences. In many cases, institutional policies regarding smartphone use, internet accessibility, and digital learning resources differ substantially according to each school's educational philosophy and management practices. As a result, understanding how Islamic boarding schools regulate and utilize digital technology has become increasingly important. Investigating this issue provides valuable insights into how educational institutions can effectively integrate technology without compromising their educational objectives, religious identity, and character-building mission.

The phenomenon of digital technology adoption has become increasingly visible in many Islamic boarding schools, including Pondok Pesantren Darul Lughah Wal Karomah. Based on preliminary observations, digital technology has gradually become part of students' daily academic and religious activities. Students utilize smartphones to access learning materials, digital Islamic books, Qur'an applications, educational videos, and online religious lectures while also communicating with teachers regarding academic assignments. Digital applications are further employed to support daily worship through prayer reminders, digital supplications, and other religious resources. Nevertheless, the use of digital technology remains subject to institutional regulations that govern smartphone access, usage duration, and appropriate learning purposes (Hidayat et al., 2025; Rohid et al., 2025). Students continue to participate in face-to-face learning, congregational prayers, and other pesantren activities according to established schedules, indicating that digital technology functions as a complementary educational resource rather than replacing conventional learning practices. This phenomenon illustrates the ongoing interaction between technological innovation and the preservation of traditional Islamic educational values, making it an important context for further academic investigation (Saepurohman et al., 2025).

Recent studies have extensively examined the integration of digital technology in educational settings, demonstrating that digital learning platforms, mobile applications, and social media can improve students' access to educational resources, learning flexibility, and academic engagement (Wedi et al., 2025). Within the context of Islamic education, previous research has also reported that digital Qur'an applications, electronic Islamic books, and online religious lectures have expanded opportunities for students to acquire Islamic knowledge beyond conventional classroom instruction (Suparjo et al., 2024). Other studies have emphasized the role of digital literacy in enhancing students' independent learning and information-seeking behaviors (Pendidikan et al., 2023). However, most previous studies have primarily focused on the effectiveness of digital learning tools or the adoption of educational technology in schools and universities, while relatively limited attention has been

given to Islamic boarding schools (pesantren), where educational activities combine formal learning, religious instruction, and character development within a residential environment. Consequently, the interaction between technological innovation, institutional regulations, and students' daily religious practices remains insufficiently explored, creating an important research gap that requires further investigation.

Although previous studies have contributed significantly to understanding digital technology in education, several limitations remain. First, many investigations have concentrated on academic outcomes while paying less attention to the integration of digital technology into students' religious activities and daily life within Islamic boarding schools (Mintasih et al., 2024). Second, earlier research has generally examined either students' perceptions or teachers' perspectives separately, resulting in a limited understanding of how multiple stakeholders experience technology integration within the same educational setting (Nasution et al., 2024). Third, only a few studies have combined direct observations with interviews to provide a comprehensive picture of technology utilization in pesantren environments (Raya, 2024). Therefore, this study addresses these limitations by exploring the utilization of digital technology from the perspectives of boarding school administrators, teachers, and students while simultaneously examining actual technology practices through field observations. By adopting this approach, the study provides a more comprehensive understanding of how digital technology is integrated into both learning and religious activities within an Islamic boarding school context.

The novelty of this study lies in its comprehensive examination of digital technology utilization in both educational and religious activities within Pondok Pesantren Darul Lughah Wal Karomah through a qualitative case study approach. Unlike previous studies that mainly emphasize technology adoption or learning effectiveness, this research investigates how digital technology is implemented within an Islamic boarding school while remaining aligned with institutional regulations, religious values, and character education. Accordingly, this study seeks to answer the following research question: How is digital technology utilized to support learning and religious activities at Pondok Pesantren Darul Lughah Wal Karomah? It is argued that digital technology can effectively support educational and religious practices when its implementation is accompanied by appropriate institutional policies, continuous supervision, and responsible digital behavior. The findings are expected to contribute theoretically to the growing body of knowledge on digital transformation in Islamic education and practically to provide recommendations for educators, Islamic boarding school administrators, and policymakers in developing balanced and sustainable technology integration that preserves the fundamental values of Islamic education.

RESEARCH METHODS

This study employed a qualitative research design using a case study approach to explore in depth how students (santri) utilize digital technology in learning and religious activities at Pondok Pesantren Darul Lughah Wal Karomah. A qualitative case study was selected because it enables researchers to gain a comprehensive understanding of participants' experiences, perceptions, and practices within their natural setting (Sabono et al., 2024; Villamin et al., 2025). The research was conducted at Pondok Pesantren Darul Lughah Wal Karomah, which was purposively selected due to its integration of digital technology into educational and religious activities while maintaining the traditional values of Islamic boarding school education. This setting provides a relevant context for examining the opportunities and challenges of digital technology adoption among santri.

Data were collected through observation and semi-structured interviews. Observation was carried out to examine directly how digital technologies, including smartphones, digital Islamic applications, electronic religious texts, social media, and online

learning platforms, were used in students' daily learning and worship activities (Lavarda & Bellucci, 2022; Sibbald et al., 2021). Semi-structured interviews were conducted with purposively selected informants, including the head of the Islamic boarding school, teachers (ustaz/ustazah), and santri who actively utilized digital technology. The purposive sampling technique was employed because these participants possessed relevant knowledge and practical experience related to the research focus, allowing the researcher to obtain rich and meaningful information.

The collected data were analyzed using the interactive data analysis model developed by Miles, Huberman, and Saldaña, consisting of data condensation, data display, and conclusion drawing and verification (Agilan, 2026; Cleland et al., 2021). During the data condensation stage, the researcher selected, simplified, and organized the collected information to focus on issues relevant to the research objectives. The condensed data were then presented systematically through data displays to facilitate interpretation and identify emerging patterns. Finally, conclusions were drawn and continuously verified throughout the research process to ensure their consistency and accuracy. To enhance the trustworthiness of the findings, source triangulation was applied by comparing information obtained from the head of the boarding school, teachers, and santri, thereby strengthening the credibility and validity of the research results.

RESULTS AND DISCUSSION

Results

The observation findings showed that digital technology had become part of students' daily learning and religious activities at Pondok Pesantren Darul Lughah Wal Karomah. Students used smartphones to access learning materials, search for additional references, communicate with teachers and classmates regarding assignments, and participate in online learning activities. During classroom observations, digital technology was used to support face-to-face instruction through digital learning materials and online educational platforms. Students remained actively engaged in classroom discussions while utilizing digital resources as complementary learning tools.

The observations also indicated that digital technology supported students' religious activities. Students were observed using digital Qur'an applications, digital Hadith collections, prayer time reminder applications, Qibla compass applications, and digital books during religious study sessions and independent learning. Social media platforms were also accessed to follow Islamic lectures and educational content. Throughout the observation period, the boarding school implemented regulations governing smartphone use, and students continued to participate in scheduled learning activities, congregational prayers, and other boarding school programs according to institutional rules.

The interview with the head of the Islamic boarding school revealed that digital technology was permitted within the pesantren under specific regulations and supervision. Smartphones were primarily used to support learning activities through digital learning materials, digital Islamic books, religious applications, and online learning platforms. The participant also stated that restrictions on the duration and purpose of smartphone use had been established within the boarding school.

"Digital technology is allowed because it helps students access learning materials, digital Islamic books, and religious applications more easily. However, its use must remain under supervision to prevent excessive social media use and maintain students' learning discipline."

The interview with the teacher showed that digital technology had been integrated into classroom instruction through presentation media, educational videos, digital Islamic books, and religious applications. According to the participant, students demonstrated active participation during technology-assisted learning activities. The teacher also reported that

some students experienced limitations in accessing digital devices, requiring supervision during the learning process.

"Digital media, including presentations, educational videos, and digital Islamic resources, makes learning more engaging and helps students understand the material more effectively. Nevertheless, supervision remains necessary to ensure that technology is used appropriately."

The interview with a student indicated that smartphones were frequently used to access digital Qur'an applications, digital Islamic books, online learning materials, and Islamic lectures available on YouTube and social media. The participant also reported using digital applications for prayer reminders and daily supplications while following the regulations established by the boarding school regarding smartphone use.

"I use my smartphone to read the digital Qur'an, access digital Islamic books, search for learning materials, and follow Islamic lectures on YouTube and social media. It makes learning easier because information is available quickly, but I still prefer studying directly with my teacher because discussions are more comprehensive."

The overall findings indicate that digital technology was utilized in both educational and religious activities at Pondok Pesantren Darul Lughah Wal Karomah. Smartphones, digital Islamic applications, digital books, social media, and online learning platforms were observed as part of students' daily activities, while interviews with the head of the boarding school, teachers, and students described the use of these technologies within the institutional regulations implemented by the pesantren.

Discussion

The findings of this study indicate that digital technology has become an essential supporting tool for learning and religious activities at Pondok Pesantren Darul Lughah Wal Karomah. The observation and interview results show that smartphones, digital Islamic applications, digital books, social media, and online learning platforms are primarily utilized to facilitate access to educational resources and Islamic knowledge while remaining under institutional regulations. These findings are consistent with previous studies reporting that digital technology has improved access to educational materials, increased learning flexibility, and supported student-centered learning in educational institutions (Ju'subaidi et al., 2024). However, unlike studies that describe technology use with relatively fewer restrictions, this study found that technology integration within the pesantren is accompanied by clear institutional policies and continuous supervision, ensuring that digital technology supports educational objectives without diminishing the traditional values of Islamic boarding school education.

The findings also demonstrate that digital technology contributes not only to academic learning but also to students' religious practices. Students utilized digital Qur'an applications, digital Hadith collections, prayer reminder applications, digital Islamic books, and online Islamic lectures to support their daily worship and independent religious learning. These findings are in line with previous research suggesting that digital media has increasingly become an important platform for accessing religious knowledge and facilitating spiritual development (Ibda et al., 2023). Nevertheless, this study found that students continued to prioritize direct learning with teachers, indicating that digital resources functioned as complementary learning tools rather than replacing conventional face-to-face instruction. This finding highlights the continued importance of teacher guidance within Islamic educational settings despite rapid technological advancement.

Another significant finding concerns the role of institutional supervision in regulating students' use of digital technology. The boarding school implemented policies regarding smartphone access, usage duration, and educational purposes to ensure that technology was used responsibly. Previous studies have reported that uncontrolled digital technology use

may negatively affect students' concentration, academic performance, and social behavior (Kholili et al., 2024; Tanti et al., 2025). In contrast, the present findings suggest that structured supervision and institutional regulations can reduce these potential risks while maintaining the educational benefits of technology. This difference indicates that the success of digital technology integration is influenced not only by technological availability but also by institutional management and educational culture.

From a theoretical perspective, this study contributes to the understanding of digital technology integration within Islamic boarding schools by demonstrating that technological innovation can coexist with traditional religious education. The findings reinforce existing theories that technology serves as a complementary educational resource when implemented within an appropriate pedagogical and institutional framework (Subair et al., 2024). In addition, this study provides empirical evidence that institutional values, leadership, and educational policies play important roles in shaping students' digital learning practices. These findings broaden the discussion on digital transformation in Islamic education by emphasizing the interaction between technology adoption and the preservation of religious educational traditions.

From a practical perspective, this study provides useful insights for Islamic boarding schools, educators, and educational policymakers seeking to implement digital technology in religious education. The findings suggest that technology integration should be supported by clear institutional regulations, continuous supervision, and appropriate digital literacy programs to maximize educational benefits while minimizing potential negative impacts. Teachers may also integrate digital learning resources with conventional classroom instruction to improve learning effectiveness without reducing direct interaction with students. Therefore, this study contributes practical recommendations for developing sustainable, balanced, and value-oriented digital technology implementation in Islamic boarding schools while preserving their educational and religious identity.

CONCLUSION

This study demonstrates that digital technology has been positively integrated into learning and religious activities at Pondok Pesantren Darul Lughah Wal Karomah, where smartphones, digital Islamic applications, digital books, social media, and online learning platforms are utilized to support access to educational resources and Islamic knowledge while complementing students' daily religious practices. The findings highlight that digital technology serves as a supporting tool rather than a replacement for conventional face-to-face learning, emphasizing that its successful implementation depends on institutional regulations, teacher supervision, and students' self-discipline in maintaining the values of Islamic education. This study contributes to the existing body of knowledge by providing empirical evidence on the integration of digital technology within an Islamic boarding school through the perspectives of administrators, teachers, and students, thereby enriching the literature on digital transformation in Islamic education. Practically, the findings offer insights for educators, boarding school administrators, and policymakers in developing balanced strategies for technology integration that preserve religious values while enhancing learning quality. Nevertheless, this study is limited by its focus on a single Islamic boarding school and the use of a qualitative case study approach, which may restrict the generalizability of the findings. Therefore, future research is recommended to involve multiple Islamic boarding schools with diverse educational contexts and to employ comparative or mixed-method approaches to obtain a broader understanding of digital technology utilization, as well as to examine its relationship with digital literacy, learning outcomes, and students' character development.

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REFERENCES

- Agilan, N. (2026). Doing Qualitative Case Study Research: Meaning, Design and Execution (Part 1). *Qualitative Research Journal*. <https://doi.org/10.1108/QRJ-04-2025-0153>
- Cleland, J., MacLeod, A., & Ellaway, R. (2021). The Curious Case of Case Study Research. *Medical Education*, 55(10), 1131–1141. <https://doi.org/10.1111/medu.14544>
- Darwanto, A., Prahmana, R., Susanti, A., & Khalil, I. (2024). Transformation of Boarding School Management Models in Enhancing Student Accessibility and Educational Quality. *Jurnal Pendidikan Agama Islam*. <https://doi.org/10.14421/jpai.v21i1.8632>
- Hidayat, A., Dhuhani, E. M., & Hasbiyallah. (2025). Evaluating the Acceptance and Use of Education Management Information System (EMIS) 4.0 in a Private Islamic Boarding School Based on the Technology Acceptance Model. *Nazhruna: Jurnal Pendidikan Islam*. <https://doi.org/10.31538/nzh.v8i2.150>
- Ibda, H., Sofanudin, A., Syafi, M., Soedjiwo, N. A. F., Azizah, A., & Arif, M. (2023). Digital Learning Using Maktabah Syumilah NU 1.0 Software and Computer Application for Islamic Moderation in Pesantren. *International Journal of Electrical and Computer Engineering (IJECE)*. <https://doi.org/10.11591/ijece.v13i3.pp3530-3539>
- Jamil, Z. A., Nurhuda, Alfian, Ulfah, S., Rasidin, & Youssef, A. (2025). Program Evaluation Study on Islamic Religious Education in Pesantren: Addressing Educational Degradation in the Digital Era. *Jurnal Pendidikan Agama Islam*. <https://doi.org/10.14421/jpai.v22i1.11358>
- Ju'subaidi, Mujahidin, A., Abdullah, I., & Rofiq, A. C. (2024). Students' Critical Awareness of the Internet and Social Media Use as Resources for Islamic Learning in Indonesian Public Senior High Schools. *British Journal of Religious Education*, 47, 140–155. <https://doi.org/10.1080/01416200.2024.2368888>
- Kholili, M., Izudin, A., & Hakim, M. L. (2024). Islamic Proselytizing in Digital Religion in Indonesia: The Challenges of Broadcasting Regulation. *Cogent Social Sciences*, 10. <https://doi.org/10.1080/23311886.2024.2357460>
- Lavarda, R., & Bellucci, C. (2022). Case Study as a Suitable Method to Research Strategy as Practice Perspective. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2022.4296>
- Malla, H. A. B., Haryani, A., Abu, A., Nur, A., Andi, H., & Malla, B. (2023). Teachers' Digital Literacy Ability to Improve Islamic Religion Education Learning in Islamic Boarding School. *International Journal of Educational Reform*, 35, 648–671. <https://doi.org/10.1177/10567879231211287>
- Mintasih, D., Sukiman, S., & Purnama, S. (2024). Integration of Digital Technology in Islamic Religious Education Learning: A Qualitative Study on Teachers' Competence and Implementation Models in Secondary Schools. *Jurnal Pendidikan Islam*. <https://doi.org/10.14421/jpi.2024.131.85-96>
- Muhith, A., Dwiyo, Y., Munawati, S., Mustofa, A., & Haryanto, S. (2023). Challenges of Islamic Boarding School Organizational Culture in the Millennial Generation and the Digital Era 4.0. *Nazhruna: Jurnal Pendidikan Islam*. <https://doi.org/10.31538/nzh.v6i3.4231>

- Nasution, S., Asari, H., Al-Rasyid, H., Dalimunthe, R., & Rahman, A. (2024). Learning Arabic Language Sciences Based on Technology in Traditional Islamic Boarding Schools in Indonesia. *Nazḥruna: Jurnal Pendidikan Islam*. <https://doi.org/10.31538/nzh.v7i1.4222>
- Azizah, N., Nurdianzah, E., Wijaya, M., Azami, T., & Rohman, A. (2023). Religious Moderation in the Industrial Era 4.0: Deradicalization Through the Development of Intellectual Traditions at Fadhlul Fadhlān Islamic Boarding School Semarang. *Jurnal Pendidikan Agama Islam*. <https://doi.org/10.14421/jpai.v20i2.7771>
- Raya, M. K. F. (2024). Digital Islam: New Space for Authority and Religious Commodification Among Islamic Preachers in Contemporary Indonesia. *Contemporary Islam*, 19, 161–194. <https://doi.org/10.1007/s11562-024-00570-z>
- Rohid, N., Sugihartati, R., Suyanto, B., Susilo, D., & Zikri, A. (2025). Digital Activism in Contemporary Islamic Politics: A Critical Analysis of Social Media's Impact on Islamic Movements. *MILRev: Metro Islamic Law Review*. <https://doi.org/10.32332/milrev.v4i1.10159>
- Sabono, F., Widiastuti, I., & Sudradjat, I. (2024). Potential Advantages and Disadvantages of Case Study as Methodological Approach in Streetscape Research. *Nakḥara: Journal of Environmental Design and Planning*. <https://doi.org/10.54028/nj202423411>
- Saepurohman, A., Badrudin, Erihadiana, M., Lestari, A. S., & Alai, A. (2025). Strategic Management of Digital Literacy Initiatives in Islamic Boarding Schools of Tasikmalaya. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*. <https://doi.org/10.31538/munaddhomah.v6i2.1711>
- Sibbald, S., Paciocco, S., Fournie, M., Van Asseldonk, R., & Scurr, T. (2021). Continuing to Enhance the Quality of Case Study Methodology in Health Services Research. *Healthcare Management Forum*, 34, 291–296. <https://doi.org/10.1177/08404704211028857>
- Siregar, H., Nurhamzah, N., Munir, M., & Fikri, M. (2025). Enhancing Islamic Education Through Technology Integration: A Study of Teaching Practices in Indonesia. *Jurnal Ilmiah Peuradeun*. <https://doi.org/10.26811/peuradeun.v13i2.1875>
- Subair, M., Syamsurijal, S., Rismawidiawati, R., Idham, I., Muslim, A., & Nur, M. (2024). Multilingualism, Technology, and Religious Moderation in Indonesian Islamic Boarding Schools. *International Journal of Language Education*. <https://doi.org/10.26858/ijole.v8i3.66498>
- Suparjo, Purnomo, S., Azizah, N., Suwito, & Sinaga, F. S. S. (2024). The Patterns of Student Scientific Development Through Digital Media Consumption in Islamic Boarding Schools. *International Journal of Religion*. <https://doi.org/10.61707/67yzn798>
- Tanti, T., Anwar, K., Jamaluddin, J., Saleh, A., Yusup, D. K., & Jahanifar, M. (2025). Faith Meets Technology: Navigating Student Satisfaction in Indonesia's Islamic Higher Education Online Learning. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*. <https://doi.org/10.22437/jiutj.v9i2.41513>
- Tantowi, A., Gunawan, M. A., & Ibrahim, A. (2025). Optimizing Islamic Boarding School Management in the Digital Era: Analysis of Technology Effectiveness in Administration and Operations. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*. <https://doi.org/10.31538/munaddhomah.v6i2.1738>
- Villamin, P., Lopez, V., Thapa, D. K., & Cleary, M. (2025). A Worked Example of Qualitative Descriptive Design: A Step-by-Step Guide for Novice and Early Career Researchers. *Journal of Advanced Nursing*, 81(8), 5181–5195. <https://doi.org/10.1111/jan.16625>
- Wedi, A., Mardiana, D., & Umiarso. (2025). Digital Transformation Model of Islamic Religious Education in the AI Era: A Case Study of Madrasah Aliyah in East Java, Indonesia. *International Journal of Learning, Teaching and Educational Research*. <https://doi.org/10.26803/ijlter.24.8.37>