TECHNOLOGY COLLABORATION AND PESANTREN EDUCATION SIMPONI LIRBOYO APPLICATION STUDY

[1]Muhammad Rizqi Mubarok, [2]Achmad Roysul Rohim, [3]Dewi Aisah, [4]Siti Indah,
[5]Mar'atus Sholihah

Tribakti Islamic University Lirboyo Kediri

*Correspondence Address:
Email:[1]rizqialabror12@gmail.com
[2]achmadroysul@gmail.com
[3] aisahdewiais12@gmail.com
[4]fsitiiindah@gmail.com
[5]ningmaya1986@gmail.com

Abstract: This research discusses the collaboration of technology and education at Pondok Pesantren Lirboyo Kediri with a focus on the application of the SIMPONI Lirboyo application. The SIMPONI Lirboyo application is an application designed by Madrasah Hidayatul Mubtadiin Pondok Pesantren Lirboyo. This application aims to make it easier for santri guardians to access information related to santri activities and administration. This research aims to explore how technology integration through the SIMPONI Lirboyo application can support the quality of learning and support the efficient governance of pesantren education. This research uses a qualitative method with a case study approach at the Lirboyo Kediri Islamic Boarding School. Data were collected through interviews, observations, and document analysis. The results showed that the SIMPONI application had a positive impact in terms of the efficiency of managing santri data, monitoring learning activities, and increasing awareness of the importance of discipline through digital features.

INTRODUCTION

Islamic boarding schools, as one of the oldest Islamic educational institutions in Indonesia, have a strategic role in shaping the character, spirituality, and intellectuality of students (Mansyuri et al., 2023). Islamic boarding schools continue to adapt to the times without abandoning traditional values. In the context of the digital era, pesantren began to utilize technology to support various aspects of education and administration to improve the effectiveness of the learning process and institutional governance.

Information technology is one of the important transformation tools in modernizing pesantren. The use of digital-based applications, such as SIMPONI (Sistem Informasi Pondok Pesantren), allows for more efficient management of data and santri activities. SIMPONI Lirboyo, which is implemented at Pondok Pesantren Lirboyo, provides an innovative solution

in bridging communication between santri guardians and the pesantren, as well as assisting the academic and non-academic management of santri.

This application is designed to provide convenience for santri guardians in monitoring the progress of their children's education. Through features such as attendance reports, activity schedules, and administrative information, SIMPONI Lirboyo creates transparency and easy access to information. This is in line with the demands of modern society, which wants openness and speed of access in education management.

Collaboration between technology and pesantren education has a positive impact in improving the efficiency of education management and the quality of learning. In this case, the implementation of Lirboyo Islamic Boarding School utilizes technology such as the SIMPONI Lirboyo application. The SIMPONI Lirboyo application is an innovation of Madrasah Hidayatul Mubtai'in to face the challenges of the digital era. By utilizing digital platforms, pesantren not only maintain relevance in the midst of changing times, but also expand the reach of Islamic character-based education. However, the application of technology in pesantren also presents significant challenges, such as limited technological infrastructure, digital literacy gaps, and resistance to change (Rojiid Arbi Muhyardho & Imamul Muttaqin, 2024). Pesantren must be able to answer and face these challenges by providing technology training for staff and students and improving supporting facilities to optimize digital transformation.

In this research, Lirboyo's SIMPONI application is used as a case study to explore how technology can be utilized in supporting pesantren education management. The focus is on the effectiveness of the application in increasing the involvement of santri guardians, administrative efficiency, and real-time information delivery. The study also identified challenges and solutions in implementing the application in a pesantren environment.

The research results are expected to provide new insights for pesantren-based educational institutions in utilizing technology to improve the quality of education and services. In addition, this research can be a reference for similar application developers in designing a platform that suits the needs of pesantren. The collaboration between technology and pesantren education through applications such as SIMPONI Lirboyo shows that modernization does not have to conflict with traditional values. Instead, technology can be a tool that supports the sustainability of pesantren traditions while responding effectively and relevantly to the needs of modern society.

RESEARCH METHODS

The method used in this research is a qualitative method. The type of approach used in this research, is a case study approach to provide a comprehensive description of how technology can be collaborated in a traditional educational environment, identify the challenges faced, and evaluate the effectiveness of technological collaboration in supporting the management of pesantren, by collecting data obtained using three ways; interviews, observation, and documentation, and the author also collects data by means of article literacy to add insights that exist in previous studies so that the results of the research obtained can be accurate and systematic. In this study, the research location is the PUSTIKDA Office which is located in the scope of the Ma'had Aly Madrasah Hidayatul Mubtadiien Building which is located in the Lirboyo village, Mojoroto District, Kediri City, about 3 km from Kediri City to the west.

RESULTS AND DISCUSSION

Boarding School Education

Pesantren education has very long historical roots in the Islamic tradition in the archipelago (R. Azizah, 2021). Since the early 13th century, pesantren have been the center of in-depth religious education and an important part of the Islamic education system in Indonesia (Fadlan et al., n.d.). Pesantren were established by Islamic scholars to educate the younger generation in understanding and practicing the teachings of Islam as a whole. Initially, pesantren education was simple, focusing on the teaching of the yellow book or classical Islamic literature. Over time, the pesantren system began to develop with various educational approaches. This institution not only teaches religious knowledge but also builds a close community between santri and kiai. Until now, pesantren remains a relevant and influential pillar of Islamic education in shaping civilization.

Lirboyo Islamic Boarding School, founded in 1910 in Kediri, East Java, by KH Abdul Karim, is one of the largest and oldest Islamic boarding schools in Indonesia. Since its inception, Lirboyo has been a center for teaching religious knowledge, especially the study of the yellow book, and has produced many scholars and community leaders who are influential at the national level. Lirboyo Islamic Boarding School has a significant contribution in maintaining the Islamic tradition of ahlussunnah wal jamaah, making it one of the main references for Islamic education in the country. However, in this digital era, Lirboyo also realizes the importance of adapting pesantren education to the times (Al Fithri et al., 2024).

Through innovations such as technology integration and relevant skills training, this pesantren continues to strive to bridge the Islamic tradition with the needs of the modern world, so that it remains relevant in forming a generation with noble character and competitiveness (R. N. N. Azizah & Syafaat, 2024).

The education system at Lirboyo Islamic Boarding School is based on traditional methods that are deeply rooted in the classical Islamic scientific heritage. The study of the yellowIslamic classic books is the core of the curriculum, where santri study various religious disciplines such as fiqh, tafsir, hadith, and tasawwuf through books that have been recognized for their authority for centuries. The emphasis on in-depth study of classical books makes santri have a solid foundation in understanding and practicing Islamic teachings (Harahap et al., 2024). This learning process uses the methods of sorogan, bandongan, memorization, Bahstul masail. However, along with the demands of the times, this pesantren also began to integrate general knowledge into its curriculum. This step aims to equip santri with broader insights, such as technological literacy, and practical skills, so that they are not only able to become religious experts but also contribute in various fields of modern life without leaving their Islamic identity (Hasanah & Sofa, 2025).

Lirboyo Islamic Boarding School continues to adapt to the times with infrastructure updates to support more relevant and quality learning. One of the main efforts is the construction of technology facilities, such as computer laboratories, the Lirboyo Bakery Outlet, and the da'wah media room (LIM Office). These facilities allow santri to access a wider range of learning resources while preparing them for the challenges of the digital era (Susiani et al., 2024). With this modernization, Lirboyo shows its commitment to remain a center of Islamic education that is able to compete at the global level without losing its traditional roots.

As part of innovations in the field of education, Lirboyo Islamic Boarding School has begun to implement digitalization in its learning management process. One concrete step is the use of digital media for the study of the yellowIslamic classic book through live streaming on Instragram social media, where learning materials can be accessed through online platforms and digital applications. This not only makes it easier for the santri to learn the lessons, but also allows the pesantren to reach a wider audience outside of its neighborhood.

In addition to digitizing learning, Lirboyo also utilizes online platforms to provide da'wah materials that can be accessed by the general public. Social media, podcasts, and websites are used to deliver Islamic messages with a more interactive and accessible approach. On the other hand, Lirboyo Islamic Boarding School also develops santri skills through

entrepreneurship training in the form of the Lirboyo Bakery outlet and digital literacy through websites, blogs and Media for outside da'wah (LIM Production). Santri are trained to utilize information technology productively, both for educational purposes and business development. This step not only broadens the santri's horizons, but also equips them with practical skills to face the challenges of the modern world of work and entrepreneurship (Khofi & Furqon, 2024).

Not only in learning, technology also plays an important role in pesantren management (Mansyuri et al., 2023). The pesantren management information system (SIMPesantren) allows for more organized management of santri data, financial administration, and academic activities. With this platform, pesantren can optimize operational efficiency and increase transparency, making management more professional and accountable.

Social media is now an effective da'wah tool for educational pesantren. Through platforms such as YouTube, Instagram, and TikTok, pesantren can convey Islamic messages to a wider audience, including the younger generation. Lectures, studies, and other educational content can be produced in a format that is attractive and easily accepted by the digital society. This not only strengthens the role of pesantren as educational institutions but also as agents of change in modern da'wah.

With optimal integration of technology, pesantren have great potential to become a pillar of a progressive Islamic digital civilization (Kholis et al., 2023). The combination of a strong scientific tradition and modern technology can make pesantren a relevant model of Islamic education in the era of digitalization. Pesantren not only survive in the midst of changing times, but also become pioneers in shaping a generation with noble morals and technological literacy.

Implementation of SIMPONI Lirboyo

The development of technology in the world of pesantren education is driven by the need to improve the efficiency and quality of management of religious-based educational institutions in the midst of the digital era. Lirboyo Islamic Boarding School became one of the pioneers by introducing SIMPONI (Management Information System of Lirboyo Islamic Boarding School), a digital innovation designed to support various aspects of pesantren operations. This system helps manage santri data, activity schedules, and financial administration in an integrated and accurate manner. The presence of SIMPONI reflects the importance of information systems in modern pesantren management, which not only makes it easier for administrators to carry out administrative tasks but also strengthens transparency and accountability.

Tujuan utama dari pengembangan SIMPONI adalah menciptakan efisiensi dalam operasional pesantren, memastikan transparansi dalam pengelolaan data, serta meningkatkan aksesibilitas bagi seluruh pihak yang terlibat, mulai dari pengurus hingga wali santri. Dengan sistem ini, proses pengelolaan yang sebelumnya dilakukan secara manual dapat dilakukan lebih cepat dan minim kesalahan. Selain itu, SIMPONI juga memungkinkan pihak pesantren untuk memantau dan mengevaluasi kinerja secara real-time, sehingga pengambilan keputusan menjadi lebih tepat.

The main objective of developing SIMPONI is to create efficiency in pesantren operations, ensure transparency in data management, and increase accessibility for all parties involved, from administrators to santri guardians. With this system, the management process that was previously done manually can be done more quickly and with minimal errors. In addition, SIMPONI also allows the pesantren to monitor and evaluate performance in real-time, so that decision making becomes more precise.

After the system was designed, the next stage was socialization and training to the entire board of teachers and administrators. This training involved both pesantren staff and santri to ensure they understood how SIMPONI worked, from data management to the utilization of its digital features. In addition, technical assistance was provided during the initial implementation period to help users overcome technical obstacles that may arise. This stage is important to build trust and ability to use the new system optimally.

For SIMPONI to run smoothly, the integration process with the traditional system was also a major concern. The pesantren adjusts its management structure to accommodate the new technology without disrupting the long-established manual methods. By ensuring continuity between manual and digital systems, pesantren can maintain the traditions that have become their identity while utilizing technology to improve management efficiency and effectiveness. This approach makes SIMPONI implementation not only a modernization step, but also an effort to maintain a balance between tradition and innovation.

SIMPONI Lirboyo has a positive impact on pesantren management, santri, and parents. For pesantren, this system simplifies various aspects of management, making it more effective and efficient. Administration that previously required more time and effort can now be done quickly with a high level of accuracy. In addition, transparency in data and financial management is increasing, thus minimizing the potential for errors and misunderstandings between the management and stakeholders. Other benefits are felt by students and parents, where they can easily access information related to learning evaluation results in the form of;

report cards, activeness and attendance, to payment status through an integrated system. This provides a sense of security and comfort for parents because they can monitor their child's educational progress directly, even though it can be accessed during the year-end vacation on the academic calendar.

The implementation of SIMPONI Lirboyo is inseparable from various challenges that must be faced to achieve maximum success. One of the main challenges is technological limitations, especially technological infrastructure in the pesantren environment that is not yet fully adequate, uneven internet access in some parts and human resource readiness, where pesantren staff and administrators need to adapt to the new system and change the traditional work culture towards digitalization. To overcome these challenges, it is necessary to provide continuous socialization and training for all SIMPONI Lirboyo users, so that they are able to operate the application optimally.

Based on the explanation above, it can be understood that with the collaboration of technology and pesantren education, SIMPONI Lirboyo can contribute to supporting the quality of learning and supporting the governance of pesantren education without abandoning traditional pesantren values. By continuing to adapt and overcome existing challenges, pesantren are expected to be able to answer the needs of the times while maintaining their role as a relevant and competitive religious education center in the digital era. This system not only improves management efficiency, but also strengthens the relationship between pesantren, santri, and parents through greater transparency and accessibility.

CONCLUSIONS AND RECOMMENDATION

The development of technology in the world of pesantren education, as reflected in the use of technology in the implementation of the SIMPONI Lirboyo Application, is a strategic step to improve management efficiency and learning quality. The SIMPONI Lirboyo application successfully integrates technology into the traditional pesantren system, which is able to provide convenience in administrative management, financial transparency, and information accessibility for students and parents. This system not only supports more effective operations but also maintains the continuity of traditional pesantren values. Despite facing challenges such as limited technological infrastructure and human resource readiness, Lirboyo shows its commitment to overcoming these obstacles through continuous training and strengthening technological adaptation. Thus, the collaboration between technology and pesantren education, as implemented through SIMPONI, can be a model for other Islamic

educational institutions to remain relevant, innovative, and competitive in the digital era without losing their traditional identity.

REFERENCES

Al Fithri, Q. A., Maula, A. R., Azizah, N. A. W., & Diana, A. E. (2024). Institutional Innovation of Islamic Education Perspective of KH. Ahmad Dahlan and its Relevance in the Modern Era. Intellectual: Journal of Education and Islamic Studies, 14(2), 223-238. https://doi.org/10.33367/ji.v14i2.5564

Azizah, R. (2021). The Relevance of Pesantren Culture: A Review on "The Ethical History of Pesantren in Nusantara." Risalatuna: Journal of Pesantren Studies, 1(1), 58. https://doi.org/10.54471/rjps.v1i1.1243

Azizah, R. N. N., & Syafaat, U. K. M. (2024). The Crisis of Human Resource Formation in Pesantren: Overcoming the Quality Gap in the Digital Era Through Adaptive Solutions. 03(06).

Fadlan, M. N., Munhanif, A., & Azmi, A. N. (t.t.). PESANTREN AND WASATHIYAH ISLAM: ULAMA, INTELLECTUAL TRADITION AND THE SOCIAL ROOTS OF ISLAMIC MODERATION.

Harahap, R., Nasution, H. B., & Al Farabi, M. (2024). The Existence of Syahamah Putri Islamic Boarding School in Maintaining the Understanding of Ahlusunah Waljamaah in Margoyoso District, Pati Regency, Central Java Province. Journal of Education Management and Social Sciences (JMPIS), 5(5).

Hasanah, U., & Sofa, A. R. (2025). Strategy, implementation, and the role of caregivers in the development of religious education at Pondok Pesantren Zainul Hasan Genggong Probolinggo. Journal of Management and Islamic Education, 3(1), 152-172.

Khofi, M. B., & Furqon, M. (2024). Kiai's Leadership Strategy in Developing Islamic Boarding Schools. INCARE, International Journal of Educational Resources, 5(3), 265-288. https://doi.org/10.59689/incare.v5i3.1019

Kholis, N., Istiarohmi, L., & Cahyani, D. D. (2023). Strengthening Islamic Education in the Age of Technology. Islamic Insights Journal, 5(2), 24-37.

Mansyuri, A. H., Patrisia, B. A., Karimah, B., Sari, D. V. F., & Huda, W. N. (2023). Optimizing the Role of Pesantren in Islamic Education Institutions in the Modern Era. MA'ALIM: Journal of Islamic Education, 4(1), 101-112.

Rojiid Arbi Muhyardho & Imamul Muttaqin. (2024). Challenges and Leadership Strategies in Islamic Education Management in the Digital Era. Journal of Budi Pekerti Agama Islam, 3(1), 65-75. https://doi.org/10.61132/jbpai.v3i1.860

Susiani, A., Setiani, N., & Irma, A. (2024). Evaluation of Teacher Professionalism at Mas Darul Qur'an Pekanbaru: From Theory to Practice. Al-Hasib: Journal of Islamic Education Management, 1(1), 41-54.