

# *The Role Of Technology In Islamic Education Management (IEM) In Educational Institutions*

Joko Susilo  
Faculty of Economics and Business  
Indonesian International Islamic University  
Corresponding E-mail: [joko.susilo@uiii.ac.id](mailto:joko.susilo@uiii.ac.id)

*Abstract : In the era of information and communication technology that has developed rapidly, this development has changed many aspects of human life, including education. In addition, the application of technology in Islamic Education Management (IEM) has significant potential benefits, such as increasing the effectiveness of school administration. This aims to examine the significance of technology for IEM in the Islamic Elementary School (MI) of Hasyim Asy'ari Blitar East Java as a case study. Using field research and qualitative descriptive methods, this study carefully analyzes the uses of technology in the Islamic Elementary School (MI) of Hasyim Asy'ari. The study finds that technology has a significant impact on increasing the effectiveness of the teaching and learning process, optimizing education management, enhancing the quality of education, and decreasing education expenses. Furthermore, incorporating collaboration and effective leadership is crucial in addressing obstacles and fostering innovation opportunities in Islamic Education Management within educational institutions.*

**Keywords:** *Technology, Islamic Education Management (IEM), Educational Institution.*

*Abstrak : Di era teknologi informasi dan komunikasi yang berkembang pesat, perkembangan tersebut telah mengubah banyak aspek kehidupan manusia, termasuk pendidikan. Selain itu, penerapan teknologi dalam Manajemen Pendidikan Islam (IEM) mempunyai potensi manfaat yang cukup besar, seperti meningkatkan efektivitas administrasi sekolah. Hal ini bertujuan untuk mengkaji signifikansi teknologi terhadap IEM di Sekolah Dasar Islam (MI) Hasyim Asy'ari Blitar Jawa Timur sebagai studi kasus. Dengan menggunakan penelitian lapangan dan metode deskriptif kualitatif, penelitian ini menganalisis secara cermat pemanfaatan teknologi di Sekolah Dasar Islam (MI) Hasyim Asy'ari. Studi tersebut menemukan bahwa teknologi mempunyai*

*dampak signifikan terhadap peningkatan efektivitas proses belajar mengajar, optimalisasi pengelolaan pendidikan, peningkatan mutu pendidikan, dan penurunan biaya pendidikan. Selain itu, menggabungkan kolaborasi dan kepemimpinan yang efektif sangat penting dalam mengatasi hambatan dan mendorong peluang inovasi dalam Manajemen Pendidikan Islam di lembaga pendidikan.*

**Kata Kunci:** *Teknologi, Manajemen Pendidikan Islam (IEM), Instansi Pendidikan.*

## I. INTRODUCTION

Adopting assistive technology in an educational setting can be enhanced by incorporating a socio-technical approach. This approach goes beyond viewing the device as a simple human-technology interface and recognizes the interconnectedness between individuals, organizations, and technology[1]. In addition, The management of Islamic education refers to the systematic administration and coordination of Islamic educational institutions, including the allocation and use of learning resources and addressing other pertinent aspects. Its primary objective is to ensure the effective and efficient attainment of the purposes set out by Islamic education. Islamic education encompasses various pathways, degrees, and modalities, including official and non-formal instruction channels [2].

Overall, the contemporary dynamics of Indonesian educational institutions facilitate the advancement of the three models above of Islamic educational institutions: a) Islamic residential schools, which are indigenous

educational establishments in Indonesia; 2) madrasas, which both the government and the community administer; and 3) Islamic public schools[3].

Furthermore, the instructional exchanges educators facilitate during learning and teaching activities are intended to accomplish predetermined learning objectives. To achieve these learning objectives, an educator must possess ingenuity. Creative educators can impart engaging knowledge to prevent students from becoming rapidly uninterested and infuse the classroom with vitality[4]. Therefore, Concerning the deficiencies in the implementation of educational technology, instructors must diligently strive to augment their expertise and competencies in utilizing information technology[5].

On the other hand, the role of leadership in the madrasah has a significant impact in managing madrasah resources, budgets, and administration, as well as in curriculum development and staff management[6]. Besides, the presence of educators is crucial in the digital age since they play a pivotal role in enhancing the quality of education. Nevertheless, educators have had several educational obstacles throughout the digital age, including the influence of technological advancements and information on the progressively fast growth of scientific knowledge[7].

However, prospects exist for developing novel adaptive and pertinent methodologies. In addition, madrasah institutions gain an enhanced reputation and competitiveness, as well as improved learning quality and skill development for students, as a result of innovations in Islamic education management. Hence, collaboration and effective leadership are critical elements in effectively addressing obstacles and broadening opportunities for innovation[8]. In addition, The advantages brought about by innovations in the administration of Islamic education

are enormous and extend to various stakeholders.

In this context, the most crucial problem (phenomenon) to be brought to light and written about is "the role of technology in Islamic education management in educational institutions: Evidence in Islamic Elementary School of Hasyim Asy'ari Kebonduren Blitar." As a result, the passage emphasizes the difficulties and possibilities presented to Islamic education in madrasahs due to the development of technical innovation technology in Islamic Education Management.

## II. METHOD

The technique adopted in this study involves field research and qualitative descriptive methodologies. The study was started by thoroughly examining the available literature, with particular emphasis on academic articles discussing the role of technology in Islamic education management in educational institutions. The data used in this research is obtained from a compilation of publications indexed domestically and globally, supplied by Google Scholar. The analysis process has four discrete stages: data collection, data reduction, data presentation, and conclusion. The present study obtained sample data from the headmaster, operator, and teachers of the Islamic Elementary School of Hasyim Asy'ari Kebonduren Blitar, located in East Java.

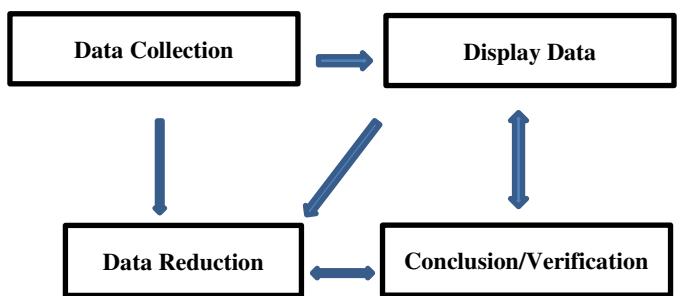


Figure 1 : Data Analysis Technique

## III. RESULT AND DISCUSSION

Future programs for the development of teachers should try to steer instructors

who utilize technology with a learner-centered approach rather than a teacher-centered approach to the use of technology[9]. The use of e-learning in learning has inhibiting and supporting factors that encompass the technological capabilities of information technology (IT), the availability of appropriate equipment, the selection of practical learning methods and modes, the characteristics of teaching materials, the accessibility of network connectivity, the level of parental support, and the provision of training for students in utilizing e-learning platforms[10]. This follows the interview the researcher conducted with one of the sources, B/Binti Astutik, S.Ag, as a teacher in the Islamic Elementary School of Hasyim Asy'ari.

*“During the COVID-19 pandemic, we had to use technology, and then all teacher data was entered into Simpatika. Then, regarding learning with the development of technology, students have to adapt and not only absorb learning material from material at the madrasah, but also they can use for getting the materials in e-learning, starting with subject matter and exams”.*

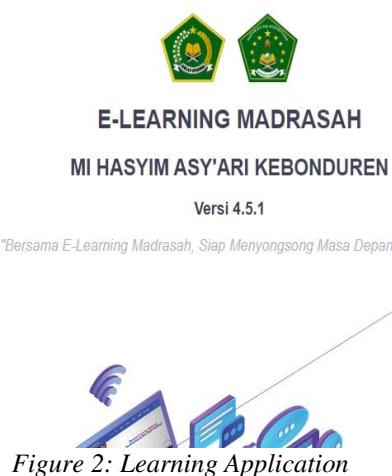


Figure 2: Learning Application

Figure 3: E-Learning Application (Desktop)

Based on document data on e-learning usage activities at the Islamic Elementary School of Hasyim Asy'ari.



Figure 4: E-Learning CBT PC

This picture shows that the madrasah, operating since the COVID-19 epidemic in 2020, has been using e-learning in its instructional methods. This is related to the statement by the operator (E)/Erni Faridatus S, S.Pd in the Islamic Elementary School of Hasyim Asy'ari:

*“Regarding the applications used in madrasah for teachers and students, the teacher's application is directly at SIMPATIKA from the Ministry of Religion Affairs of the Republic Indonesia while the students used to EMIS. Apart from that, the use of technology has been carried out by teachers with fingerprints and students during the pandemic carried out attendance in the E-learning application, and now it is a manual system.”*

E-learning is a technology that may help students and instructors learn more effectively amid the Covid-19 epidemic. Many people support this learning, but various elements might impede learning. Thus, an assessment must be performed to take corrective actions[11]. According to the Headmaster (N)/Nina Khoirun Nisa', S.Pd.I, Gr of the Islamic Elementary School of Hasyim Asy'ari said that:

*Islamic Elementary School of Hasyim Asy'ari has used technology to keep up with current developments such as SIMPATIKA. At the same time, students enter EMIS data, including children's biodata, data on parents and students who receive educational assistance, and data directly synchronized to the Regional Office Center. Therefore, student learning outcomes are entered into RDM (Madrasah Digital Report), and the data is connected to EMIS. In addition, the technology available at the madrasah is a computer lab that students can use to obtain information with supervision and filtering from the madrasah.*

The development of communication technology has a positive impact on students; for example, when studying, it can make it easier for students to carry out assignments given by teachers, and the negative impact is coming up to students if the students cannot use it[12]. According to the operator operator (E)/Erni Faridatus S, S.Pd, Technology has both positive and negative impacts on students:

*“Technology has positive and negative impacts; especially students can access learning resources not only through printed books but also through electronic books and videos in e-learning, of course with filtering from madrasas. Apart from that, the negative impact is that not all*

*parents can access technology, so supervision at home is still not optimal, and students can access information outside of assignments in e-learning”.*

This statement is supported by Headmaster (N)/Nina Khoirun Nisa', S.Pd.I, Gr that technology has both positive and negative impacts on children:

*“The use of technology has many positive impacts, especially for teachers and students. The positive impact for teachers is that technology provides a way for children to understand more efficiently with a projector so that children can see the video in real-time. Meanwhile, the lack of technology is the emergence of AI that is smarter than teachers and does assignments using Google/Internet, making students lazy to search for teaching materials.”*

Besides that, learning assessments are conducted frequently in line with the madrasah curriculum to ascertain how students have achieved their learning goals[13]. This is to find out how technology impacts students positively and negatively. In addition, the statement was given by B/Binti Astutik, S.Ag, as the teacher said:

*“One of the positive impacts of technology is variation in learning if previously it was still at the hearing stage without seeing the audio or visual form of the material. If we use technology, students become more enthusiastic about learning, while the negative impact of technology is that they must periodically educate students on the use of technology properly and correctly in the madrasah environment.”*

E-learning is a technological tool that facilitates the process of online education, enabling the replication of

traditional classroom learning in a virtual environment.[14]. The use of technology has had a good response from students. This is supposed to tell Headmaster (N)/Nina Khoirun Nisa', S.Pd.I, Gr that:

*"If we want to compare students' response to post-demi and post-pandemic, there has been a decrease in interest in e-learning apps. On the other hand, using e-learning during exams greatly facilitates creating and working on questions for teachers and students at the Islamic Elementary School of Hasyim Asy'ari."*

One of its advantages is that e-learning offers a comprehensive set of features. Even though some students are not proficient with this application, it will be challenging in the learning process[15]. One of the challenges and obstacles faced by the Islamic Elementary School of Hasyim Asy'ari is the limited budget for purchasing equipment such as projectors, computers, laptops, fingerprints, etc. This statement was given by Headmaster (N)/Nina Khoirun Nisa', S.Pd.I, Gr said that:

*"One of the challenges is the limited budget, so to advance technology, we need a lot of budget such as computer labs, language labs, etc. On the other hand, the use of technology in the madrasah environment cannot yet be limited."*

On the other hand, one limitation of the E-Learning Application is occasional deficiencies in the internet network quality [14]. Researchers found in the field that the infrastructure is still not optimal; the madrasah operator's statement proves operator (E)/Erni Faridatus S, S.Pd that several children still do not have cell phones.

*"Lack of knowledge of student guardians about using technology such as e-learning. Apart from that, some students still don't have cell phones when the CBT exam is*

*carried out, so we try to overcome this by lending cell phones for the exam students to use. "*

Some of the most common obstacles and challenges in the budget this is following what was conveyed by one of the interviewees from B/Binti Astutik, S.Ag:

*"One of the obstacles in the field is the budget for purchasing items such as projectors, laptops, computers, language labs, etc. Furthermore, computer networks are still not optimal because they are constrained by signals and lack of knowledge about using technology."*



Figure 5 : E-Learning CBT HP

This image illustrates the accessibility of the e-learning application for all students, enabling them to engage in computer-based testing (CBT) examinations. Another challenge that might arise from online education is students' lack of self-discipline when actively engaging in teaching and learning activities[15]. Based on the findings derived from the analysis of observations, documentation, and interviews, it is evident that e-learning programs exhibit a higher degree of efficacy when used as educational tools[16].

## CONCLUSION

Integrating online learning platforms and virtual classrooms has revolutionized the teaching and learning process. This proves that students can now access

various educational resources, participate in interactive lessons, and receive personalized instruction. In addition, this technology optimizes education management by simplifying administrative tasks, facilitating communication between teachers, students, and parents, and providing real-time analytics to monitor students' progress. Additionally, it enhances the quality of education by enabling remote and flexible learning, fostering collaborative environments, and promoting personalized learning experiences. Consequently, this technology significantly decreases education expenses by reducing the need for physical infrastructure, textbooks, and transportation costs in the Islamic Elementary School of Hasyim Asy'ari Kebonduren Blitar East Java.

This study focuses on the Islamic Elementary School of Hasyim Asy'ari Kebonduren Blitar East Java. The current research focuses on one madrasah, and future research can continue in another madrasah in Blitar. However, realizing innovation's full potential necessitates collaboration between madrasah, communities, and other relevant stakeholders. In addition, Active involvement in the broader community facilitates the identification of practical requirements and the development of programs congruent with social and cultural circumstances. Therefore, the pivotal role of robust and forward-thinking leadership in fostering innovation with a forward-thinking perspective and a steadfast dedication to transformation motivates all teachers and stakeholders to adopt novel concepts and methodologies, creating an environment that promotes innovation in technology and cooperation. In conclusion, the study underscores the significant influence of invention in the administration of Islamic education, with far-reaching effects on students, educational institutions, and society. Islamic Education has the

potential to significantly influence the future of education within the Islamic framework by acknowledging the obstacles, leveraging the advantages, and embracing inventive approaches in technology.

## REFERENCES

- [1] V. Ayon and A. Dillon, "Assistive Technology in Education: Conceptions of a Socio-technical Design Challenge," *Int. J. Inf. Divers. Incl. IJIDI*, vol. 5, no. 3, Sep. 2021, doi: 10.33137/ijidi.v5i3.36136.
- [2] M. Idris and N. Yusuf, "The Role Of Islamic Education Management In Realizing Quality Educational Institutions," vol. 5, no. 1, 2020.
- [3] D. Defnaldi, Y. Yunani, A. Warisno, A. A. Andari, and A. Anshori, "The Evolution of Islamic Education Institutions in Indonesia," *JMKSP J. Manaj. Kepemimp. Dan Supervisi Pendidik.*, vol. 8, no. 1, pp. 164–174, Jan. 2023, doi: 10.31851/jmksp.v8i1.10941.
- [4] S. Perawati, S. D. Puluhatumena, and M. Asbari, "The Role of Islamic Education In Forming a Creative and Innovative Person," vol. 01, no. 03.
- [5] F. Fathuddin, N. Nurdin, and R. Rustina, "The Challenges of Teaching Islamic Education In the Millennial Generation Era," *Int. J. Contemp. Islam. Educ.*, vol. 5, no. 1, pp. 1–14, Jul. 2023, doi: 10.24239/ijcied.Vol5.Iss1.66.
- [6] M. A. Prastiwi and A. Widodo, "Peran Kepemimpinan Kepala Madrasah Di Era 5.0, Pendidikan Dan Teknologi, Pada Kompetensi 21st Century," *Primer J. Ilm. Multidisiplin*, vol. 1, no. 5, pp. 536–544, Oct. 2023, doi: 10.55681/primer.v1i5.211.
- [7] A. Sadriani, I. Arifin, and M. R. S. Ahmad, "Peran Guru Dalam

Perkembangan Teknologi Pendidikan di Era Digital”.

[8] N. A. Shofiyah, T. S. Komarudin, and Moch. S. Hasan, “Innovations in Islamic Education Management within the University Context: Addressing Challenges and Exploring Future Prospects,” *Nidhomul Haq J. Manaj. Pendidik. Islam*, vol. 8, no. 2, pp. 193–209, Jul. 2023, doi: 10.31538/ndh.v8i2.3625.

[9] T. C. Liu, “Teaching in a wireless learning environment: A case study,” 2023.

[10] STKIP Al-amin Indramayu, A. R. M. Ilmi, M. Duryat, IAIN Syekh Nurjati Cirebon, A. Nurmantoro, and STKIP Al-Amin Indramayu, “Analisis Pemanfaatan E-Learning Madrasah: Studi Kasus Di Kabupaten Indramayu,” *Educatio*, vol. 17, no. 1, pp. 97–109, Jul. 2022, doi: 10.29408/edc.v17i1.5802.

[11] A. R. Dhani, “Efektivitas E-Learning Madrasah Dalam Pembelajaran Biologi DI MAN 3 Jombang,” *EDUTECH J. Inov. Pendidik. Berbantuan Teknol.*, vol. 1, no. 2, pp. 127–133, Sep. 2021, doi: 10.51878/edutech.v1i2.452.

[12] A. Anjar, M. K. Ritonga, and T. Toni, “Dampak Positif Dan Negatif Perkembangan Teknologi Komunikasi Terhadap Mahasiswa PPKn FKIP Labuhanbatu,” *Civ. J. PEMBELAJARAN DAN ILMU Civ.*, vol. 7, no. 2, pp. 41–44, Sep. 2021, doi: 10.36987/civitas.v7i2.3535.

[13] A. Afifah, “Implementasi Pembelajaran Jarak Jauh Dengan Media E-Learning (Studi Di Madrasah Ibtidaiyah Negeri 7 Ponorogo),” *Ibriez J. Kependidikan Dasar Islam Berbas. Sains*, Dec. 2021, doi: 10.21154/ibriez.v6i2.183.

[14] Fakultas Keguruan dan Ilmu Pendidikan, Universitas Riau, M. Agustia Ningsih, S. Dila Melani, M. Irianti, and Mhd. Amin, “Penerapan Aplikasi E-Learning Madrasah Di MA Darul Hikmah Pekanbaru,” *J. Manaj. Pendidik.*, vol. 5, no. 3, pp. 184–188, Dec. 2020, doi: 10.34125/jmp.v5i3.795.

[15] M. Hayati, “Pemanfaatan E-Learning Madrasah Sebagai Media Pembelajaran Pada Masa Pandemi Covid- 19 Di MTsN 5 Klaten”.

[16] M. Sutaryono, “Implementasi Aplikasi E-Learning Madrasah Dalam Meningkatkan Efektivitas Dan Hasil Belajar Pada Masa Pandemi Covid 19 Di MTsN 20 Jakarta Timur,” *Second. J. Inov. Pendidik. Menengah*, vol. 3, no. 1, pp. 38–46, Feb. 2023, doi: 10.51878/secondary.v3i1.1944.