

THE ROLE OF TECHNOLOGY IN MODERN ISLAMIC EDUCATION MANAGEMENT

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Abstract

The role of technology in modern Islamic education management is crucial in improving administrative efficiency and teaching quality. By utilising school management applications and other digital platforms, Islamic education institutions can manage administrative processes, student data, and exam administration more effectively and securely. Technology also allows for the diversification of teaching methods through the use of digital resources such as learning videos, e-books and interactive materials, thereby reaching students' various learning styles and enriching their learning experience. However, the integration of these technologies must be done carefully to ensure that they are compatible with Islamic values. Challenges such as the selection of Shariah-compliant platforms, adequate infrastructure, and the technical skills of teachers and staff must be addressed. Support from all stakeholders, including the government, educational institutions, and the community, is needed to support the successful implementation of this technology. With a wise and measured approach, technology can be an invaluable tool to improve the quality and efficiency of modern Islamic education management.

Keywords: Technology, Management, Islamic Education, Modern.

Introduction

In the current era of globalisation and digitalisation, the role of technology in various sectors is vital, including in Islamic education management. Technology plays a very vital role in modern life today. In general, technology has facilitated many aspects of daily life, ranging from communication, transport, to work. In terms of communication, technology has enabled people to get in touch with each other quickly and efficiently, without barriers of time and distance (Sitopu et al., 2024); (Guna et al., 2024); (Fawait et al., 2024). Through devices such as smartphones and the internet, we can connect with anyone around the world, get real-time information, and participate in global discussions. In the field of work, technology has brought innovations that create high efficiency and productivity, such as the automation of routine tasks and the use of analytics software for better decision-making (Bandur et al., 2022).

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In addition, technology also plays a role in various other fields, such as education, healthcare, and commerce, all of which have undergone significant transformations. In education, technology has underpinned distance learning and e-learning, making education more accessible to many. In the healthcare sector, technological advancements have led to sophisticated medical equipment and information systems that facilitate disease diagnosis and patient data management (Özdemir & Selçuk, 2021). In commerce, e-commerce and digital marketing technologies have opened up new business opportunities and made it easier for consumers to obtain products and services more easily. In short, technology has become the foundation for development and progress in almost all sectors of life, making it a fundamental element in modern life. However, the application of technology in Islamic education management still faces various challenges and obstacles that hinder the process of modernisation and efficiency (Akrim, 2022).

One of the main challenges is the limited technological infrastructure in many Islamic education institutions, especially those in remote areas. The lack of access to fast internet and adequate hardware makes it difficult for many institutions to integrate technology into the learning and management process. In addition, the shortage of teaching staff skilled in the use of technology is also a major obstacle. Not all teachers have sufficient knowledge and skills to utilise technology in teaching, making training and professional development crucial but often overlooked (Baidi & SUTRISNO, 2022).

In addition to infrastructure and human resource issues, cultural and mindset barriers also play an important role. In some communities, there is still resistance to change and modernisation, which is often perceived as going against traditional values. Such views can slow down the adoption of technology and innovation in Islamic education. Furthermore, the limited budget allocated to education is often inadequate for investment in the required technology. The lack of policy support from the government and other stakeholders also adds to the complexity of this issue (Nasution et al., 2022). Therefore, systematic and collaborative efforts between the government, educational institutions and society are needed to overcome these challenges and promote modernisation in Islamic education through the application of technology.

Delays in technology adoption result in Islamic education institutions falling behind in terms of innovation, quality of education services, and resource management. This also affects the competitiveness of the institution in producing graduates who are ready to face the challenges of the digital era. The lack of technology in education management also makes administrative processes slow, inaccurate and difficult to audit, which in turn can reduce transparency and accountability. This research aims to examine the role of technology in modern Islamic education management, identify barriers, and provide practical and strategic recommendations to improve the use of technology in Islamic education management (Lundeto et al., 2021).

Therefore, this research examines the role of technology in modern Islamic education management, the technology used in Islamic education management and the effectiveness of technology in improving Islamic education management.

Research Methods

The study in this research uses the literature research method. Literature research method, also known as literature review or literature review, is a method that involves the collection, evaluation, and synthesis of various published theoretical and empirical sources related to a particular research topic. This method is often used in order to understand the development of research in a particular field, identify gaps in the literature, as well as form a strong theoretical basis for further research. (Jelahut, 2022); (JUNAIDI, 2021).

Results and Discussion

The Role of Technology in Islamic Education Management

Educational technology is a discipline that studies and practices the use of technological tools to support teaching and learning processes. It encompasses all aspects related to the planning, development, implementation, management, and evaluation of educational processes and resources. In this context, educational technology is not only limited to the use of digital tools such as computers and the internet, but also includes innovative teaching strategies and methods supported by technology (Taja et al., 2021). By utilising educational technology, the learning process can be made more interactive, engaging and effective, which in turn can improve student learning outcomes.

The concept of educational technology also involves critical thinking about how technology can be used effectively to achieve educational goals. This includes an understanding of how different media and tools can be used to support students' various learning styles, overcome geographical and physical challenges and facilitate lifelong learning. The importance of educational technology is even more evident in today's digital age, where students and educators can connect and share information on a global platform. Thus, educational technology plays an important role in transforming traditional education systems to be more inclusive and adaptive to the changing needs of the modern world (Susilo et al., 2022).

The development of technology in education has undergone a significant transformation over the past few decades. At the beginning of the development, educational technology may only include simple tools such as overhead projectors and filmstrips. However, with the advancement of digital technology, we have seen the wide adoption of computers, the internet, and mobile devices in the teaching and learning process (Syakhrani & Aslan, 2024); (Judijanto et al., 2024). E-learning platforms and Learning Management Systems (LMS) such as Moodle and Blackboard have enabled

educators to design and manage courses online, allowing easy access to learning materials from anywhere at any time. In addition, video conferencing applications such as Zoom and Microsoft Teams have become vital tools for distance learning, especially during the COVID-19 pandemic (Yumnah, 2021).

In addition to these tools and platforms, technologies such as Artificial Intelligence (AI), Augmented Reality (AR) and Virtual Reality (VR) are also starting to be integrated into education. AI can be used to personalise learning through analysing student data and providing material recommendations according to individual learning needs. AR and VR open up new opportunities for immersive learning, where students can explore three-dimensional environments or interactive simulations that enrich their learning experience. With the development of these technologies, time and space barriers in education are diminishing, providing greater opportunities for everyone to access high-quality education (Kultsum et al., 2022).

The use of Information and Communication Technology (ICT) in Islamic education management has opened the door for many innovations and efficiencies in the organisation and management of educational institutions. In this digital era, many Islamic boarding schools, madrasas and universities have implemented ICT-based management systems for administrative, financial and human resource management. With a sophisticated Education Management Information System (EMIS), student and staff data can be managed more efficiently, from new student registration, class scheduling, to grade processing (González-Pérez & Ramírez-Montoya, 2022). In addition, the use of ICT enables the integration of various services in one centralised system, which in turn facilitates coordination and faster and more accurate decision-making.

Apart from managerial aspects, ICT also plays an important role in improving the quality of learning in Islamic education. E-learning and LMS platforms allow teachers and ustadz to upload learning materials, video lectures and interactive modules that can be accessed by students anytime and anywhere. The use of social media and instant messaging applications such as WhatsApp and Telegram is also an effective means of communication between teachers, students and parents. Online discussion forums can be used to discuss religious topics, recite the Quran, and deepen understanding of the rules of fiqh and hadith. Thus, ICT helps create a more collaborative learning environment and stimulates critical thinking among students (Zaini et al., 2021).

Furthermore, ICT enables Islamic education to reach a wider audience, even on a global scale. Through streaming platforms and online lectures, religious leaders and scholars can deliver lectures and Islamic studies to thousands or even millions of people in different parts of the world. This not only strengthens the global propagation of Islam but also enriches the diversity of perspectives in studying Islamic teachings. With the right use of ICT, Islamic education can continue to adapt to the times, improve the

quality of education, and facilitate the dissemination of religious knowledge more effectively and efficiently (Ismail et al., 2022).

The implementation of Management Information Systems (MIS) in Islamic education institutions, whether at the madrasah, pesantren, or university level, has a significant impact on the efficiency and quality of education provision. By using SIM, complex administrative processes can be simplified, reducing the burden of time-consuming manual work. For example, student, teacher and staff data can be managed digitally from the registration process, attendance, to assessment. SIM also enables integration between various departments, such as finance, academics, and human resources, making it easier to manage budgets, tuition payments, and transparency of financial reports (Chuanchen & Zaini, 2023).

In addition, SIM also supports curriculum management and the learning process. Document administration such as lesson schedules, assignments, and student progress reports can be centralised and easily accessed by both teachers and students. Academic information such as syllabus, lesson plans, and teaching materials can be disseminated more effectively through SIM. In fact, there are other features such as exam scheduling, student satisfaction surveys, and teacher performance evaluation that can be automated, providing real-time data that can be used for further analysis for continuous improvement (Amzaleg & Masry-Herzallah, 2022).

However, SIM implementation also requires careful technical and non-technical preparations. The availability of adequate technological infrastructure and internet access are basic prerequisites that must be fulfilled. In addition, training educators and staff to use the system effectively is essential. It also involves changing the culture of the organisation to a more digital and integrated one. Another challenge that needs to be addressed is the data security aspect, given that student and staff data is sensitive and requires strict protection from leakage or misuse (Memon et al., 2021).

Thus, the implementation of Management Information Systems (MIS) in Islamic education institutions offers significant benefits in terms of operational efficiency and improving the quality of education provision. With SIM, administrative and management processes can be managed more effectively and integrated, facilitating various aspects of education management from student data to finance. However, successful implementation of SIM requires careful preparation, both in terms of technological infrastructure as well as training and organisational culture. By addressing these challenges, Islamic education institutions can achieve significant improvements in the efficiency and effectiveness of their operations, supporting better and sustainable educational goals.

Technology Used in Islamic Education Management

E-learning platforms and education management applications have become important milestones in the development of modern education, especially in

responding to the challenges of the digital era. By utilising the latest technology, e-learning platforms allow the learning process to be conducted online, both synchronously and asynchronously. Platforms such as Google Classroom, Moodle, Edmodo, or Canvas offer various interesting features such as assignment management, discussion forums, interactive quizzes, and automated assessments. Thus, students can learn anywhere and anytime, and access various learning resources from all over the world. This certainly opens up wider opportunities for students to explore and develop their potential (Sartika & Fransiska, 2024); (Iksal et al., 2024); (Irwan et al., 2024).

Educational management applications, on the other hand, focus on managing operational and administrative activities in educational institutions. Applications such as School Management System (SMS), PowerSchool, or SIMEDU, provide comprehensive solutions for student data management, attendance, class scheduling, financial reporting, and communication between teachers, students, and parents. By digitising data, these applications enable educational institutions to monitor and analyse their performance and needs more efficiently. For example, teachers can input grades and provide feedback directly through the app, while parents can monitor their child's academic progress in real-time (Memon et al., 2021).

However, the implementation of e-learning platforms and education management applications requires readiness and commitment from various parties. Educational institutions need to provide adequate technological infrastructure and ensure stable internet access. In addition, training for teachers, students and administrative staff is essential so that they can utilise this technology optimally. Personal data security is also a major concern in implementing this digital system. By protecting sensitive data and ensuring appropriate use in accordance with applicable rules and regulations, educational institutions can create a safe and effective technology-based learning environment.

As such, e-learning platforms and education management applications present innovations that are changing the face of education by enabling learning and administration processes to be conducted more efficiently and flexibly. Successful implementation requires adequate infrastructure, thorough training, and special attention to data security. Thus, educational institutions can maximise the potential of technology to improve the quality and effectiveness of education delivery.

Effectiveness of Technology in Islamic Education Management

The use of technology in Islamic education management has brought significant changes in the way information and education are delivered and managed. With the advent of technology, madrasahs, pesantren and other Islamic education institutions can utilise digital systems to improve administration, teaching and learning processes. For example, with school management applications, student data can be accessed and processed more efficiently, facilitating the distribution of information between

teachers, students and parents. Technology also enables online examinations and the management of important records in a more organised and secure manner (Adhi et al., 2022).

In the realm of learning, technology enables diversification of teaching methods by utilising digital resources such as learning videos, e-books and interactive materials that can be accessed anytime and anywhere. In the context of Islamic education, technology can be used to provide more dynamic and interactive learning content, such as Arabic language learning applications, Quranic interpretation and hadith. This can enrich students' learning experience and accommodate various learning styles, from visual to auditory. Technology also supports the improvement of students' digital literacy, which is an important skill in this modern era (Alhamuddin et al., 2021).

However, the effectiveness of technology in Islamic education management cannot be separated from its challenges. One of the main challenges is ensuring that the technology used is aligned with Islamic values and can be accounted for. This means choosing safe, shariah-compliant platforms and software, and ensuring that the content does not contradict Islamic teachings. In addition, there are challenges in terms of infrastructure, where not all institutions may have adequate access to technological devices and the internet. Training for teachers and staff on the use of technology is also an important aspect to ensure that they have the skills needed to utilise it effectively (Suparjo et al., 2021).

In conclusion, technology has great potential to improve the effectiveness of Islamic education management, but its implementation must be done carefully and thoughtfully. It requires commitment from all parties involved, including the government, educational institutions and the community, to support the provision of adequate infrastructure and ensure that the use of technology is implemented within the framework of Islamic values. Thus, Islamic education institutions can utilise technology to create a learning environment that is more effective, efficient and in accordance with Islamic teachings.

Conclusion

The role of technology in modern Islamic education management is significant in improving administrative efficiency and teaching quality. With the help of school management applications and other digital platforms, Islamic education institutions can manage student data, administrative processes and exam administration more effectively and securely. Technology also enables the diversification of teaching methods through the use of digital resources such as learning videos, e-books and interactive materials, thereby reaching students' various learning styles and enriching their learning experience. This not only increases convenience and accessibility for students but also prepares them with digital literacy which is much needed in the modern era.

However, the implementation of technology in Islamic education must be done carefully, ensuring that the use of technology is aligned with Islamic values. Challenges such as the choice of Shariah-compliant platforms, adequate infrastructure, and the technical skills of teachers and staff must be addressed to ensure its effectiveness. Commitment from all stakeholders, including the government, educational institutions and the community, is essential to support the successful integration of these technologies. With a wise and measured approach, technology can be an invaluable tool to improve the quality and efficiency of modern Islamic education management.

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