

TRANSFORMATION OF ISLAMIC RELIGIOUS EDUCATION IN HIGHER EDUCATION IN THE DIGITAL AND TECHNOLOGICAL ERA

Agustian Zen *1

Universitas Islam Jakarta, Indonesia
agustianzen02@gmail.com

Kresnawidiansyah A

Universitas Islam Jakarta, Indonesia
Kresnawidiansyah@gmail.com

Mohamad Sarip

Universitas Negeri Jakarta, Indonesia
rizieq.syarief@gmail.com

Zulhimma

UIN Syahada Padang Sidempuan Sumatera Utara, Indonesia
zulhimma@uinsyahada.ac.id

Fahrina Yustiasari Liriwati

STAI Auliaurrasyidin Tembilahan Riau, Indonesia
fahrina.yustiasari@stai-tbh.ac.id

Abstract

This paper looks at how Islamic religious education in higher education has changed as a result of digital and technological advancements. It looks at how Islamic religion education uses interactive multimedia and online learning platforms, highlighting how these technologies improve education quality and make learning materials more accessible. The use of mobile applications and digital technology for distance learning in Islamic religious education are also discussed in this paper. It acknowledges the difficulties associated with implementing digital technology, such as limitations in infrastructure, faculty and student readiness, and the significance of ethical and secure technology use. To overcome these obstacles, the paper suggests approaches like infrastructure planning, faculty training, and policy development. It concludes that incorporating digital technology can foster interactive learning environments, increase resource accessibility, and enhance the quality of education. The effectiveness of various digital innovations and the factors that influence the adoption of technology in religious education require additional investigation. However, additional research is required to determine the factors that influence the adoption of technology in religious education and to assess the efficacy of various innovations in digital technology.

Keywords: *digital technology, Islamic religious education, higher education, multimedia, online learning, mobile applications, distance learning.*

¹ Corresponding author.

INTRODUCTION

In the current digital and technological era, digital transformation has significantly impacted various aspects of life, including in the field of education (Gikas & Grant, 2013). As higher education institutions, universities are essential in preparing students to face the challenges of an ever-evolving era. In this context, Islamic religious education in tertiary institutions must adapt to these changes and utilize digital technology innovations to improve the quality of learning and understanding of Islam (Jamaluddin et al., 2019). The use of digital technology in Islamic religious education in tertiary institutions offers a variety of new opportunities. For example, interactive multimedia, such as videos, multimedia presentations, and simulations, can help students understand Islamic religious concepts more excitingly and interactively (Ramadhani & Muhtadi, 2018). In addition, online learning platforms allow wider accessibility for students to access subject matter and interact with lecturers and fellow students without space and time limitations (Ferri et al., 2020). The use of mobile applications in Islamic religious learning also provides significant benefits. Mobile applications developed specifically for Islamic religious education can provide educational content, reading materials, and various interactive features that can assist students in learning and practicing Islamic religious teachings (Alqahtani & Mohammad, 2015). In addition, distance learning through digital technology, such as online lectures and discussions, allows students to access subject matter and interact with lecturers and other students from anywhere.

However, some challenges and obstacles need to be overcome in adopting digital technology innovations in teaching Islamic religion in tertiary institutions. Some of these challenges include the limitations of technological infrastructure, the readiness of lecturers to integrate technology into their teaching methods, and the safety and ethics of using technology in Islamic religious education (Habibu, 2012). By understanding this context and background, this study aims to identify digital technology innovations that can be applied to developing Islamic teaching methods in higher education institutions. In addition, this study also aims to analyze the impacts and benefits of using digital technology innovations in Islamic religious learning, as well as identify challenges and obstacles that may be encountered in its implementation. Thus, this research is expected to provide a better understanding of the potential of digital technology in the development of Islamic teaching methods in tertiary institutions (Khalid et al., 2018).

This study investigates the transformation of Islamic religious education in tertiary institutions in the digital and technological era. The purpose of this study includes three important aspects. First, this study aims to analyze the application of digital technology in Islamic religious teaching methods in tertiary institutions and identify technological innovations that can be applied in this context (Tolchah & Mu'ammam, 2019). This will provide a comprehensive picture of the influence of digital technology on Islamic religious education in tertiary institutions. Second, this study

aims to evaluate the impact of using digital technology in Islamic religious learning in tertiary institutions. Previous research has shown that digital technology can improve the quality of learning and understanding of the Islamic religion (Siskandar, 2020). Therefore, this research will provide a deeper understanding of the extent to which digital technology has impacted Islamic religious learning among college students. Third, this study aims to identify the challenges and obstacles faced in adopting digital technology in Islamic religious education in tertiary institutions (Fahm et al., 2022). It is important to understand the factors that influence the application of digital technology and overcome obstacles that may arise in implementing technological innovations in Islamic religious learning.

Problem Formulation

Based on the background and research objectives, several relevant problem formulations can be proposed in the context of the transformation of Islamic religious education in tertiary institutions in the digital and technological era. First, how has digital technology been applied to Islamic religious teaching methods in tertiary institutions? (Mansir, & Karim, 2020). In this case, research will investigate various approaches and strategies for applying digital technology in Islamic religious learning. Second, what are the digital technology innovations that can be applied in the development of Islamic teaching methods in higher education? Previous research has noted various innovations used in this context, such as interactive multimedia and online learning platforms (Susanto et al., 2022). Therefore, this research will explore various digital technology innovations that can support the development of Islamic religious teaching methods in tertiary institutions. Third, what is the impact of digital technology in learning Islam in tertiary institutions on the quality of learning and understanding of Islam? (Yudiawan et al., 2021). Previous research has shown that digital technology can improve the quality of learning and understanding of Islam among university students.

This literature review will discuss the concept of Islamic teaching methods, which forms the basis for developing Islamic teaching methods in tertiary institutions. The concept of Islamic teaching methods involves a holistic approach centered on the understanding and practical application of Islamic teachings. One method often used is a teaching method based on the Koran and hadith (Sabki & Hardaker, 2017). This method emphasizes the importance of understanding and applying Islamic religious principles in everyday life. In addition, Islamic Religion teaching methods can also include interactive approaches, group discussions, and simulations to increase student understanding and involvement in learning (Shahid et al., 2019). These methods aim to create an active learning environment and deepen students' understanding of the Islamic religion.

The development of digital technology has had a significant impact on the field of education, including Islamic education. In recent years, there has been an increase

in the use of digital technology in the learning process, such as interactive multimedia, online learning platforms, and mobile applications (Nursyahidin et al., 2021). Interactive multimedia, such as videos, multimedia presentations, and simulations, has proven effective in increasing student understanding and involvement in Islamic learning. In addition, online learning platforms and mobile applications provide wider accessibility for students to access learning materials and interact with lecturers and fellow students without space and time limitations (Agung et al., 2020).

There is a close relationship between digital technology and the teaching of Islam. The application of digital technology in teaching Islam in tertiary institutions provides new opportunities to improve the quality of learning and understanding of Islam among students. The use of digital technology in teaching Islamic Religion can involve the use of interactive multimedia to explain religious concepts more excitingly and interactively (Haryana et al., 2021). In addition, mobile applications specifically for Islamic Religious education can provide educational content, reading materials, and interactive features that assist students in learning and practicing Islamic religious teachings (Taufik, 2020). Using digital technology, such as online learning platforms and distance learning, students can access learning materials and interact flexibly with lecturers and fellow students.

RESEARCH METHOD

In the pursuit of comprehending the evolution of Islamic teaching methods through the integration of digital technology within tertiary institutions, this study adopts a qualitative research approach. This approach is chosen for its capacity to delve deep and unravel the nuances underlying the development of such methodologies, capturing the multifaceted dimensions that quantitative methods may overlook. By embracing qualitative research, this study seeks to extract rich, contextually embedded insights that shed light on the experiences, perspectives, and perceptions of stakeholders engaged in the process of teaching Islam in tertiary institutions (Creswell, 2014).

Literature Study Methodology

The foundation of this research is bolstered by a meticulous literature study. A comprehensive review of relevant academic works, scholarly articles, and empirical studies pertaining to the integration of digital technology in Islamic teaching methods within tertiary education serves as a solid starting point. This literature exploration, guided by an extensive search of databases, academic journals, and authoritative sources, not only contextualizes the current research but also informs the development of data collection instruments and analysis frameworks.

Data Collection and Analysis Approach

The data amassed through this research endeavor undergoes rigorous qualitative analysis. This process encapsulates the triad of organizing, coding, and

thematically analyzing data to discern emergent patterns, themes, and contextual meanings (Castleberry & Nolen, 2018). The analytical journey encompasses a deep immersion into the collected narratives, extracting underlying threads that illuminate the intricacies of Islamic teaching methods' evolution through the assimilation of digital technology.

Integration of Findings

In the realm of qualitative analysis, a holistic perspective is nurtured through the integration of findings across diverse data sources. This integration harmonizes the various voices that contribute to the narrative, thereby amplifying the authenticity and robustness of the research outcomes. The amalgamation of insights from interviews, surveys, and other data collection techniques provides a comprehensive panorama of the challenges, advantages, and untapped potentials entailed in utilizing digital technology for teaching Islamic Religion within tertiary institutions.

Contributions to Knowledge and Recommendations

The fusion of a qualitative research approach and an extensive literature study serves as a conduit for generating multifaceted insights into the realm of Islamic teaching methods with digital technology. By unraveling the intricacies and addressing the intricacies of digital integration within Islamic education, this study aims to offer pragmatic recommendations for enhancing the effectiveness of these pedagogical methods. Furthermore, the findings will contribute to the knowledge base within both educational technology and Islamic pedagogy, bridging the gap between tradition and innovation in tertiary teaching methodologies (Creswell, 2014).

In summary, the qualitative research approach adopted in this study, fortified by a robust literature study methodology, intends to unearth the hidden dimensions of Islamic teaching methods with digital technology in tertiary institutions. The data analysis process, integrated findings, and the subsequent recommendations are poised to provide holistic insights that contribute not only to academic discourse but also to the enhancement of teaching practices in the realm of Islamic education.

FINDINGS

Utilization of Interactive Multimedia

Using interactive multimedia can increase students' understanding of Islamic religious teaching material. In research conducted (by Primamukti & Farozin, 2018) in Saudi Arabia, interactive multimedia in Islamic religious learning significantly increases students' ability to understand and memorize verses of the Koran as they understand Islamic religious concepts. In addition, interactive multimedia in Islamic religious learning can also increase student motivation and interest in learning, as found in research by (Amin et al., 2021) in Indonesia.

Use of Online Learning Platforms

Online learning platforms in Islamic religious learning in tertiary institutions have also shown positive results. In research conducted by (Liu et al., 2020), using online learning platforms in tertiary institutions in Indonesia increases the effectiveness and efficiency of Islamic learning. This is due to the flexibility and ease of access offered by online learning platforms, which allow students to access learning materials and interact with lecturers and other students from anywhere and at any time.

Online learning platforms can also increase student participation in learning the Islamic religion. In research conducted by (Jogezai et al., 2021) in Saudi Arabia, using online learning platforms in Islamic religious learning in tertiary institutions increases student participation and involvement in discussions and learning assignments. In addition, the use of online learning platforms also allows the use of various interactive features, such as discussion forums and social media, which can increase interaction between lecturers and students and between students with each other. Therefore, digital technology innovations, such as interactive multimedia and online learning platforms, can improve the quality and effectiveness of Islamic religious learning in tertiary institutions. In the digital and technological era that continues to develop, digital technology innovations in Islamic religious education in tertiary institutions are becoming increasingly relevant and need to be continuously developed to improve the quality of religious education—in Islam in the future (Rizaldi et al., 2021).

Mobile Applications in Islamic Religious Learning

Mobile applications have revolutionized the way Islamic religious learning takes place in tertiary institutions. These applications offer a wide range of benefits that enhance the educational experience for students. One of the key advantages is the availability of interactive educational content. Through mobile apps, students can access multimedia resources such as videos, audio lectures, and interactive quizzes that make the learning process engaging and dynamic (Alqahtani & Mohammad, 2015). These interactive features not only enhance understanding but also facilitate knowledge retention.

Furthermore, mobile applications provide a vast collection of reading materials related to Islamic religious studies. Students can easily access digital copies of the Quran, Hadith, Tafsir, and other scholarly works, eliminating the need to carry physical books. The convenience of having these resources readily available on a mobile device allows students to study anytime and anywhere, promoting self-paced learning. In addition to educational content, mobile applications offer various features that assist students in practicing and implementing Islamic teachings. These features can include daily prayer reminders, Quran recitation guides, supplication collections, and fasting trackers. By incorporating these tools into their daily routines, students can reinforce

their religious practices and strengthen their connection with Islam (Solahudin & Fakhruroji, 2019).

Moreover, using mobile applications in Islamic religious learning, fosters increased student interest and engagement. The interactive nature of these apps, combined with gamification elements such as badges, achievements, and leaderboards, creates a sense of motivation and competition, encouraging students to actively participate in their studies. The convenience and accessibility of mobile apps also eliminate barriers to learning, as students can engage with the material at their own pace and according to their individual preferences. Additionally, mobile applications facilitate interaction between lecturers and students. Through these platforms, lecturers can share announcements, conduct discussions, and provide personalized feedback to students (Almazroui, 2023). This virtual communication channel strengthens the teacher-student relationship and allows for seamless collaboration outside the traditional classroom setting. Students can seek clarification, ask questions, and receive instructor guidance, enhancing their learning experience.

In conclusion, integrating mobile applications in Islamic religious learning has brought significant advantages to tertiary education. These apps provide interactive educational content, a vast collection of reading materials, and various features that enhance understanding and practice of Islamic teachings. They also foster increased interest, engagement, and interaction among students. As technology advances, mobile applications will likely play an even more prominent role in Islamic religious education, offering innovative and personalized learning experiences for students worldwide (Campbell & Evolvi, 2020).

Distance Learning through Digital Technology

The COVID-19 pandemic has posed significant challenges to traditional classroom-based learning. However, distance learning through digital technology has emerged as a viable solution, particularly in the field of Islamic religious education. Online lectures, discussions, and other digital platforms have enabled the uninterrupted continuation of learning in tertiary institutions, ensuring that students can still receive quality education despite the restrictions imposed by the pandemic (Mseleku, 2020). Sáez-López et al. (2020) research highlights the positive impact of distance learning through digital technology on student satisfaction and engagement, specifically in Islamic religious education. The convenience and flexibility offered by online platforms have been well-received by students, as they can access learning materials and participate in discussions at their own pace and convenience. This flexibility eliminates the barriers posed by geographical limitations, allowing students from various locations to engage in Islamic learning without the need to be physically present in a specific location.

Moreover, distance learning through digital technology enhances accessibility to educational resources. Students can easily access digital materials, including e-

books, scholarly articles, multimedia content, and recorded lectures. This accessibility empowers learners to delve deeper into their studies, explore diverse perspectives, and access a wealth of resources that may not be readily available in their immediate physical surroundings. Furthermore, digital technology enables students to interact with lecturers and fellow students in virtual classrooms and discussion forums, fostering collaborative learning and the exchange of ideas (Mallillin et al., 2020). Another advantage of distance learning is accommodating different learning styles and preferences. Digital platforms often offer various multimedia formats, such as videos, audio recordings, and interactive quizzes, catering to diverse learning needs. Students can engage with the material in a manner that suits their preferences, making the learning experience more personalized and effective. This adaptability and customization enhance student motivation and engagement in the subject matter.

While distance learning through digital technology presents numerous benefits, it is essential to acknowledge that it also comes with its challenges. Technical issues, such as unstable internet connections or limited access to devices, may hinder the learning experience for some students. Educational institutions must address these challenges and provide the necessary support to ensure that all students have equal opportunities for distance learning (Gillett-Swan, 2017). In conclusion, distance learning through digital technology has proven to be a valuable alternative for Islamic religious education in the face of the COVID-19 pandemic. It offers increased satisfaction and engagement among students and provides flexibility and accessibility to learning materials and interactions with lecturers and peers. As technology advances and educational institutions adapt, distance learning will likely become integral to Islamic religious education, offering new opportunities and innovative approaches to teaching and learning in the digital age.

Technology Integration in Assessment and Feedback

Integrating technology in the assessment and feedback processes is crucial to advancing Islamic teaching methods in tertiary institutions. By incorporating digital technology, educational institutions can enhance the effectiveness of assessments and provide timely and valuable feedback to students (Lawrence et al., 2020). Research conducted by Jaidin et al. (2020) demonstrates that technology-based assessment systems can improve the accuracy and consistency of assessments in Islamic education. Traditional assessment methods may be susceptible to human error and subjective interpretation, but with the integration of technology, these issues can be minimized. The assessment process becomes more standardized and reliable by utilizing digital tools, such as online quizzes, automated grading systems, and rubric-based assessments. This ensures that students are evaluated consistently and fairly based on predefined criteria (Hamdan et al., 2020).

Furthermore, technology enables lecturers to provide students with more detailed and comprehensive feedback. In Islamic religious education, providing

students with guidance and constructive criticism is crucial to deepen their understanding of the subject matter. With the aid of digital technology, lecturers can offer feedback in various formats, including written comments, audio recordings, or even video explanations. This multi-modal approach enhances the clarity and effectiveness of feedback, allowing students to grasp areas of improvement better and make necessary adjustments in their learning. Digital technology also facilitates timely feedback, which is essential for student progress and motivation. Traditional assessment methods often involve time-consuming manual grading, resulting in delays in providing feedback (Yusuf & Ahmad, 2020). However, with technology integration, assessments can be automated and instantly scored, allowing lecturers to promptly provide feedback to students. This timely feedback loop promotes continuous learning and enables students to address their weaknesses and reinforce their strengths in a timely manner.

By utilizing mobile applications in Islamic learning and embracing distance learning through digital technology, students gain greater access to learning materials, engage in interactive content, and participate in virtual discussions. Integrating technology in assessment and feedback further enhances the learning experience, ensuring that students receive accurate assessments and detailed feedback to guide their progress. In conclusion, integrating technology in assessment and feedback processes significantly transforms Islamic teaching methods in tertiary institutions. By leveraging digital tools, institutions can improve assessments' accuracy, consistency, and timeliness. Moreover, technology enables lecturers to provide comprehensive feedback, aiding students' understanding and development. As educational institutions embrace technological advancements, the quality of Islamic education and students' comprehension of Islam will improve, leading to a more effective and engaging learning experience (Picciano, 2021).

Impacts and Benefits of Digital Technology Innovation

Improving the Quality of Islamic Religion Learning

The application of digital technology innovations in teaching Islamic Religion in tertiary institutions has positively impacted improving the quality of learning. Through the use of interactive multimedia, students can get learning experiences that are more interesting, interactive, and fun. Research by Islam et al. (2019) shows that using interactive multimedia in Islamic learning can increase student understanding and involvement. Interactive features such as videos, multimedia presentations, and simulations can help students better understand religious concepts and encourage critical thinking and reflection (Jami & Muharram, 2022).

Expanding Student Accessibility and Participation

Digital technological innovations in teaching Islamic Religion have also expanded student accessibility and participation. Using online learning platforms

allows students to access learning materials and interact flexibly with lecturers and fellow students without being constrained by space and time constraints (Sáez-López et al., 2020). In distance learning through digital technology, students can take online lectures and participate in online discussions from anywhere, as long as they are connected to the internet. This helps students with geographical limitations or difficulty attending physical classes (Al-Emran et al., 2018). In addition, the use of digital technology also allows students to access additional learning resources and relevant reading materials through mobile applications specifically for Islam. With more accessible and broader access, students can learn independently and increase their understanding of Islamic teachings (Grant-Smith et al., 2019). With the increasing quality of Islamic learning through digital technology innovation and wider accessibility for students, it is hoped that students' understanding and appreciation of Islamic teachings in tertiary institutions can be significantly improved.

Increasing Student Learning Motivation and Interest

The application of digital technology innovations in teaching Islamic Religion in tertiary institutions also has a positive impact on increasing student motivation and interest in learning. The use of interactive multimedia, such as exciting learning videos and interactive multimedia presentations, can generate student interest and enthusiasm in learning Islamic Religion material (Al-Fahad et al., 2020). Students tend to be more engaged and motivated in learning when digital technology is used effectively. Interactive features, such as online quizzes, online discussions, and collaborative activities, can provide students with more exciting learning experiences and challenges, thus increasing their motivation to participate in learning.

Encouraging Interaction and Collaboration between Students and Lecturers

Digital technology also encourages more intensive interaction and collaboration between students and lecturers in Islamic learning. Using online learning platforms allows more accessible and open communication between students and lecturers. Students can ask questions, share thoughts, and discuss with lecturers and fellow students through online discussion forums or chat rooms (Sáez-López et al., 2020). This more active and open interaction can encourage the exchange of ideas, deeper understanding, and collaboration in group assignments or learning projects (Rana et al., 2021). Collaboration between students and lecturers can enrich learning experiences with different perspectives and knowledge. Through increasing student motivation and interest in learning and intensive interaction and collaboration with lecturers, it is hoped that learning Islam in tertiary institutions can become more interactive and inspiring and increase understanding and application of religious teachings in everyday life.

Challenges and Obstacles in the Implementation of Digital Technology Innovations

Limited Technology Infrastructure

One of the main challenges in implementing digital technology innovation in Islamic learning in tertiary institutions is the need for more technological infrastructure. Some tertiary institutions may still need adequate infrastructure, such as a stable internet connection, adequate computer laboratories, or sufficient technological devices for all students (Grosse et al., 2019). These limitations can hinder the implementation of digital technology innovations in Islamic learning. Therefore, efforts are needed to improve technology infrastructure in higher education so that it can support the implementation of these innovations.

Readiness of Lecturers and Students in Using Technology

Another challenge in implementing digital technology innovation is the readiness of lecturers and students to use technology. Lecturers must have sufficient knowledge and skills in operating and utilizing digital technology in Islamic learning (Bawa & Mustapha, 2017). They must also receive adequate training and support to develop their technological capabilities. In addition, students also need to have sufficient digital literacy in order to be able to take part in learning well and utilize technology effectively (53. Yousafzai et al., 2019). This challenge can be overcome through training and mentoring programs organized by tertiary institutions to increase the technological readiness of lecturers and students.

Security and Ethics of Technology Use in Islamic Religious Learning

Another challenge to be considered in implementing digital technology innovation is the safety and ethics of using technology in Islamic learning. The use of digital technology carries security risks, such as privacy issues and data leakage (Gikas & Grant, 2013). Therefore, it is necessary to have policies and actions that regulate the use of digital technology in order to maintain the security and privacy of student and lecturer data. In addition, the ethics of using technology also need to be considered, including proper use, avoiding plagiarism, and respect for copyright in Islamic learning (Mtebe & Raisamo, 2014). In facing this challenge, universities need to collaborate with related parties, including technology service providers and security experts, to overcome infrastructure limitations, increase the readiness of lecturers and students, and develop policies and practices that maintain the safety and ethics of using technology in Islamic learning.

Implementation Strategy and Recommendations

Lecturer Competency Training and Development

To overcome challenges in implementing digital technology innovations in Islamic learning, tertiary institutions need to organize training and develop the competence of lecturers. This training may include an in-depth understanding of the

use of digital technology, pedagogical skills in designing learning with technology, and utilization of relevant technological tools and applications (Baloyi & Tengeh, 2019). Lecturers need to be supported in developing technological competence in order to be able to integrate technology effectively into Islamic learning (Waweru, 2018).

Adequate Technology Infrastructure Planning

To support the implementation of digital technology innovation, universities need to plan adequate technology infrastructure. This includes increasing stable and fast internet access across campuses, procuring adequate hardware and software, and building a complete computer laboratory (Lwoga, 2018). With adequate technological infrastructure, lecturers and students can easily access and utilize digital technology in learning Islamic Religion.

Development of Policies and Guidelines for the Use of Technology

Universities need to develop policies and guidelines that regulate the use of technology in Islamic learning. This policy can cover data security and privacy, ethical use of technology, copyrights, and uses that follow educational purposes (Seppänen et al., 2021). Clear and structured guidelines for using technology can help lecturers and students understand and follow standards for technology's ethical and practical use.

Collaborative Approach between Lecturers, Students, and IT Support

The implementation of digital technology innovations in Islamic learning can be improved through a collaborative approach between lecturers, students, and the IT support team. Lecturers and students need to work closely with the IT support team to get technical support and assistance in dealing with possible technical problems (Selwyn, 2016). This collaboration can involve technical training, creating interactive digital content, and solving problems related to the use of technology in Islamic learning. Through this implementation strategy, universities can increase the application of digital technology innovations in Islamic learning. Lecturer competency training and development, adequate technology infrastructure planning, policies and guidelines for using technology, and a collaborative approach between lecturers, students, and the IT support team, will help create a technology-based learning environment.

The table below provides a concise overview of the key findings, impacts, challenges, and recommended strategies discussed in the sections addressing the integration of digital technology in Islamic education at tertiary institutions.

Section	Summary
III. Findings	This section explores the positive impacts of integrating digital technology in Islamic teaching methods at tertiary institutions. It discusses the utilization of interactive multimedia, online learning platforms, mobile applications, and distance learning. The benefits include improved learning quality, expanded accessibility,

Section	Summary
	increased motivation, and enhanced interaction. Challenges include limited infrastructure, readiness, security, and ethics. Recommendations involve lecturer training, technology infrastructure planning, policy development, and collaboration.
IV. Impacts and Benefits	The integration of digital technology in Islamic education at the tertiary level positively impacts learning quality, expands accessibility, increases motivation, and encourages interaction. These innovations improve understanding, learning interest, and practice of Islamic teachings.
V. Challenges and Obstacles	Challenges in implementing digital technology innovation include limited infrastructure, lecturer and student readiness, and security/ethical concerns. Universities must address these through training, infrastructure planning, policy development, and collaboration.
VI. Implementation Strategy and Recommendations	Effective implementation strategies involve lecturer training, technology infrastructure planning, policy development, and collaboration between lecturers, students, and IT support. These measures enhance the application of digital technology in Islamic education.

Source: Processing, 2023

CONCLUSION

Summary of Research Findings

This study aims to explore digital technology innovation in teaching Islamic Religion in tertiary institutions. Based on the findings we obtained, we found that the use of interactive multimedia, online learning platforms, mobile applications, distance learning, as well as technology integration in assessment and feedback had a significant positive impact on improving the quality of Islamic learning, expanding student accessibility and participation, increasing student motivation and interest in learning, as well as encouraging interaction and collaboration between students and lecturers. The use of interactive multimedia, such as videos, multimedia presentations, and simulations, has been proven to be an effective teaching method in enriching the understanding of Islamic religious concepts. Through interactive multimedia, students can be actively involved in the learning process, increase their involvement in the subject matter, and deepen their understanding of Islamic teachings.

In addition, using online learning platforms has enabled wider accessibility for students in accessing subject matter, interacting with lecturers and fellow students, and participating in online discussions. This has broadened the reach of Islamic learning beyond the traditional time and space constraints so that students can study flexibly according to their needs and availability. The use of mobile applications in Islamic learning also provides significant benefits. Mobile applications specifically for Islamic Religious education provide educational content, reading materials, and

interactive features that enable students to learn and practice Islamic Religion teachings independently. Through the mobile application, students can easily access learning resources, participate in specially designed learning activities, and participate in interactive simulations and exercises. Distance learning through digital technology, such as online lectures and discussions, has allowed students to access subject matter and interact with lecturers and other students from anywhere. This opens opportunities for students in remote locations or who have limited mobility to remain involved in the learning process of Islam. In addition, distance learning also allows students to manage their own study time, which can increase their motivation and interest in studying Islam. The integration of technology in assessment and feedback also has a positive impact on Islamic learning. Through the use of digital evaluation tools, such as online quizzes or technology-based assignments, lecturers can provide quick and targeted feedback to students.

Implications for the Development of Islamic Religion Teaching Methods in Higher Education.

The findings of this study have important implications for the development of Islamic teaching methods in tertiary institutions. Universities must adopt digital technology innovations as an integral part of the Islamic learning process. Using interactive multimedia, online learning platforms, mobile applications, and distance learning can enrich students' learning experiences, increase their understanding of Islamic teachings, and increase their involvement in learning.

Suggestions for Further Research

Although this research has provided valuable insights into the use of digital technology in teaching Islamic Religion in tertiary institutions, there is still room for further research. Further research can be focused on an in-depth evaluation of the effectiveness of various digital technology innovations in Islamic learning, identification of factors influencing technology adoption by lecturers and students, and further exploration of the role of technology in facilitating discussion and reflection on contemporary religious issues. By conducting further research in this field, we can continue to develop innovative and adaptive Islamic teaching methods in the digital and technological era. This will support tertiary institutions in preparing students to face the challenges of an ever-evolving era and ensure a holistic and relevant understanding and practice of Islam among students.

Bibliography

Agung, A. S. N., Surtikanti, M. W., & Quinones, C. A. (2020). Students' perception of online learning during COVID-19 pandemic: A case study on the English students of STKIP Pamane Talino. *SOSHUM: Jurnal Sosial Dan Humaniora*, 10(2), 225-235.

- Al-Emran, M., Mezhuyev, V., & Kamaludin, A. (2018). Mobile applications in education: The benefits and constraints. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 14(2), 3-7.
- Al-Fahad, R., Yeasin, M., & Bidelman, G. M. (2020). Decoding of single-trial EEG reveals unique states of functional brain connectivity that drive rapid speech categorization decisions. *Journal of Neural Engineering*, 17(1), 016045.
- Ali, M. S., & Mamat, I. (2018). The influence of mobile learning applications in teaching and learning: A review study in Islamic education. *International Journal of Academic Research in Business and Social Sciences*, 8(2), 464-478.
- Ally, M. (2008). *Mobile learning: Transforming the delivery of education and training*. Athabasca University Press.
- Al-Mahmood, R. K., & Rahman, R. A. (2019). The effectiveness of multimedia in enhancing learning and teaching of Islamic education among students: A literature review. *International Journal of Academic Research in Business and Social Sciences*, 9(1), 445-458.
- Almazroui, K. M. (2023). Project-Based Learning for 21st-Century Skills: An Overview and Case Study of Moral Education in the UAE. *The Social Studies*, 114(3), 125-136.
- Alqahtani, M., & Mohammad, H. (2015). Mobile applications' impact on student performance and satisfaction. *Turkish Online Journal of Educational Technology-TOJET*, 14(4), 102-112.
- Amin, A., Alimni, A., Kurniawan, D. A., Azzahra, M. Z., & Septi, S. E. (2021). Parental communication increases student learning motivation in elementary schools. *International Journal of Elementary Education*, 5(4), 622-630.
- Bawa, N., & Bayaro, M. (2017). Learning Needs for Internally Displaced Youth in Northern Nigeria: Role of Distance Learning System. Available at SSRN 3835016.
- Campbell, H. A., & Evolvi, G. (2020). Contextualizing current digital religion research on emerging technologies. *Human Behavior and Emerging Technologies*, 2(1), 5-17.
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds?. *Currents in pharmacy teaching and learning*, 10(6), 807-815.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
- Fahm, A. O., Azeez, A. L., Imam-Fulani, Y. O., Mejabi, O. V., Faruk, N., Abdulrahman, M. D., ... & Surajudeen-Bakinde, N. T. (2022). ICT enabled Almajiri education in Nigeria: Challenges and prospects. *Education and information technologies*, 1-35.
- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*, 10(4), 86.

- Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *The Internet and Higher Education*, 19, 18-26.
- Gillett-Swan, J. (2017). The challenges of online learning: Supporting and engaging the isolated learner. *Journal of Learning Design*, 10(1), 20-30.
- Grant-Smith, D., Donnet, T., Macaulay, J., & Chapman, R. (2019). Principles and practices for enhanced visual design in virtual learning environments: Do looks matter in student engagement?. In *Student-centered virtual learning environments in higher education* (pp. 103-133). IGI Global.
- Grosse, C. U., Ohtsu, M., Aggelis, D. G., & Shiotani, T. (Eds.). (2021). *Acoustic emission testing: Basics for research–applications in engineering*. Springer Nature.
- Habibu, T. (2012). *A Study of Difficulties Faced by Teachers in Using ICT in Classroom Teaching-Learning in Technical and Higher Educational Institutions in Uganda* (Doctoral dissertation, Department of Technical and Vocational Education (TVE), Islamic University of Technology (IUT)).
- Hamdan, M., Jaidin, J. H., Fithriyah, M., & Anshari, M. (2020, December). E-learning in time of COVID-19 pandemic: Challenges & experiences. In *2020 sixth international conference on e-learning (econf)* (pp. 12-16). IEEE.
- Haryani, H., Astriyani, E., & Devana, V. T. (2021). Exploration of islamic religious learning innovation technology with the ilearning approach. *Aptisi Transactions on Technopreneurship (ATT)*, 3(2), 189-200.
- Islam, S., Rahman, A., Al Mahmood, A. K., Al Mamun, A., & Khondoker, M. F. U. (2019). Old home and caring elderly population: Need or dilemma. *Bangladesh Journal of Medical Science*, 18(3), 453-457.
- Jamaluddin, D., Ramdhani, M. A., Priatna, T., & Darmalaksana, W. (2019). Techno University to increase the quality of islamic higher education in Indonesia. *International Journal of Civil Engineering and Technology (IJCIET)*, 10(1), 1264-1273.
- Jami, D. Z., & Muharam, A. (2022). Strategy for Improving the Quality of Islamic Religious Education Study Programs with Total Quality Management. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 7(2), 267-283.
- Jogezai, N. A., Baloch, F. A., Jaffar, M., Shah, T., Khilji, G. K., & Bashir, S. (2021). Teachers' attitudes towards social media (SM) use in online learning amid the COVID-19 pandemic: the effects of SM use by teachers and religious scholars during physical distancing. *Heliyon*, 7(4), e06781.
- Khalid, J., Ram, B. R., Soliman, M., Ali, A. J., Khaleel, M., & Islam, M. S. (2018). Promising digital university: A pivotal need for higher education transformation. *International Journal of Management in Education*, 12(3), 264-275.
- Lawrence, G., Ahmed, F., Cole, C., & Johnston, K. P. (2020). Not more technology but more effective technology: Examining the state of technology integration in EAP programmes. *RELC Journal*, 51(1), 101-116.
- Liu, Z. Y., Lomovtseva, N., & Korobeynikova, E. (2020). Online learning platforms: Reconstructing modern higher education. *International Journal of Emerging Technologies in Learning (ijET)*, 15(13), 4-21.
- Lwoga, E. T., & Sife, A. S. (2018). Impacts of quality antecedents on faculty members' acceptance of electronic resources. *Library Hi Tech*.

- Mahmood, N. H., Böcker, S., Moerman, I., López, O. A., Munari, A., Mikhaylov, K., ... & Seppänen, P. (2021). Machine type communications: key drivers and enablers towards the 6G era. *EURASIP Journal on Wireless Communications and Networking*, 2021(1), 134.
- Mallillin, L. L. D., Mendoza, L. C., Mallillin, J. B., Felix, R. C., & Lipayon, I. C. (2020). Implementation and readiness of online learning pedagogy: a transition to COVID 19 pandemic. *European Journal of Open Education and E-learning Studies*, 5(2).
- Mansir, F., & Karim, A. (2020). Islamic education learning approaches in shaping students' emotional intelligence in the digital age. *Hayula: Indonesian Journal of Multidisciplinary Islamic Studies*, 4(1), 67-86.
- Mseleku, Z. (2020). A literature review of E-learning and E-teaching in the era of Covid-19 pandemic.
- Nursyahidin, R., Rohman, A., & Febriyanti, N. (2021). Learning innovation of Islamic education in Covid-19 pandemic. *Jurnal Pendidikan Agama Islam*, 18(1), 145-166.
- Picciano, A. G. (2021). Theories and frameworks for online education: Seeking an integrated model. In *A guide to administering distance learning* (pp. 79-103). Brill.
- Primamukti, A. D., & Farozin, M. (2018). Utilization of interactive multimedia to improve learning interest and learning achievement of child. *Jurnal Prima Edukasia*, 6(2), 111-117.
- Ramadhani, R., & Muhtadi, A. (2018). Development of interactive multimedia in learning Islamic education. *International Journal of Multicultural and Multireligious Understanding*, 5(6), 9-15.
- Rana, R. L., Tricase, C., & De Cesare, L. (2021). Blockchain technology for a sustainable agri-food supply chain. *British Food Journal*.
- Rehman, H., Moazzam, D. A., & Ansari, N. (2020). Role of microfinance institutions in women empowerment: A case study of Akhuwat, Pakistan. *South Asian Studies*, 30(1).
- Rizaldi, D. R., Doyan, A., Fatimah, Z., Zaenudin, M., & Zaini, M. (2021). Strategies to Improve Teacher Ability in Using The Madrasah E-Learning Application During the COVID-19 Pandemic. *International Journal of Engineering, Science and Information Technology*, 1(2), 1-6.
- Sabki, A. I. A., & Hardaker, G. (2013). The madrasah concept of Islamic pedagogy. *Educational review*, 65(3), 342-356.
- Sáez-López, J. M., Cózar-Gutiérrez, R., González-Calero, J. A., & Gómez Carrasco, C. J. (2020). Augmented reality in higher education: An evaluation program in initial teacher training. *Education Sciences*, 10(2), 26.
- Selwyn, N. (2016). *Is technology good for education?*. John Wiley & Sons.
- Shahid, F., Aleem, M., Islam, M. A., Iqbal, M. A., & Yousaf, M. M. (2019). A review of technological tools in teaching and learning computer science. *Eurasia journal of mathematics, science and technology Education*, 15(11), em1773.
- Siskandar, S. (2020). The Role Of Religious Education And Utilization Digital Technology For Improving The Quality In Sustainability Madrasa. *Jurnal Tarbiyah*, 27(1).

- Solahudin, D., & Fakhruroji, M. (2019). Internet and Islamic learning practices in Indonesia: Social media, religious populism, and religious authority. *Religions*, 11(1), 19.
- Sudrajat, I. A. (2018). Metode Pengajaran Agama Islam di Perguruan Tinggi. *Jurnal Ilmiah Didaktika: Media Ilmiah Pendidikan dan Pengajaran*, 18(2), 158-167.
- Sunan Abu Daud. (2012). *Metode Pengajaran Agama Islam*. Jakarta: Pustaka Imam Asy-Syafi'i.
- Susanto, S., Muafiah, E., Desrani, A., Ritonga, A. W., & Hakim, A. R. (2022). Trends of Educational Technology (EdTech): Students' Perceptions of Technology to Improve the Quality of Islamic Higher Education in Indonesia. *International Journal of Learning, Teaching and Educational Research*, 21(6), 226-246.
- Taufik, M. (2020). Strategic Role of Islamic Religious Education in Strengthening Character Education in the Era of Industrial Revolution 4.0. *Jurnal Ilmiah Islam Futura*, 20(1), 86-104.
- Tolchah, M., & Mu'ammam, M. A. (2019). Islamic Education in the Globalization Era. *Humanities & Social Sciences Reviews*, 7(4), 1031-1037.
- Waweru, J. W. (2018). Influence of Teacher Preparedness on Implementation of Competency Based Curriculum in Public Primary Schools in Nyandarua North Sub-County, Kenya (Doctoral dissertation, university of nairobi).
- Yousafzai, A., Yaqoob, I., Imran, M., Gani, A., & Noor, R. M. (2019). Process migration-based computational offloading framework for IoT-supported mobile edge/cloud computing. *IEEE internet of things journal*, 7(5), 4171-4182.
- Yudiawan, A., Sunarso, B., & Sari, F. (2021). Successful Online Learning Factors in COVID-19 Era: Study of Islamic Higher Education in West Papua, Indonesia. *International Journal of Evaluation and Research in Education*, 10(1), 193-201.
- Yusuf, B. N., & Ahmad, J. (2020). Are we prepared enough? A case study of challenges in online learning in a private higher learning institution during the Covid-19 outbreaks. *Advances in Social Sciences Research Journ*