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# The Digital Teaching and Learning on Islamic Education Institutions and Their Sustainability in The New Normal Era

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## Abstract

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Islamic educational institutions had encountered globalization and modernizations for years. As the Covid-19 pandemic outbreak, the digital transformation became a must as a reaction and adaptation toward the situation and condition. This article investigates the digital teaching and learning on Islamic education institutions and their sustainability in the new normal era. The method applied in this article was qualitative content analysis method. The findings are: 1) Digital teaching and Learning is a new transformation organizing teaching and learning management using digital application. Covid-19 pandemic has taken its toll on all aspect of life, including education, particularly in teaching and learning activities. It went on virtually using various platforms; 2) the application of Information and Communication Technology (ICT) includes not only in the teaching and learning, but also in the evaluation; 3) the global pandemic demands Islamic education institutions to up-date the institutional system and to manage as well as control institutional activities; and 4) the future digital teaching and learning on Islamic education institutions cover sustainability of ICT, sustainability of human resource to adapt

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with the latest situation, and the sustainability of the institutions' existence

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### Abstrak

**Kata Kunci:** *Lembaga pendidikan Islam telah bertahun-tahun menghadapi globalisasi dan modernisasi. Seiring merebaknya pandemi Covid-19, transformasi digital menjadi suatu keharusan sebagai reaksi dan adaptasi terhadap situasi dan kondisi. Artikel ini mengkaji pengajaran dan pembelajaran digital pada lembaga pendidikan Islam dan keberlanjutannya di era normal baru. Metode yang digunakan dalam artikel ini adalah metode analisis isi kualitatif. Temuan yang diperoleh adalah: 1) Pembelajaran digital merupakan transformasi baru penyelenggaraan pengelolaan belajar mengajar dengan menggunakan aplikasi digital. Pandemi Covid-19 telah berdampak pada seluruh aspek kehidupan, termasuk pendidikan, khususnya dalam kegiatan belajar mengajar. Hal ini berlangsung secara virtual menggunakan berbagai platform; 2) penerapan Teknologi Informasi dan Komunikasi (TIK) tidak hanya mencakup dalam proses belajar mengajar, tetapi juga dalam evaluasi; 3) pandemi global menuntut lembaga pendidikan Islam untuk memperbarui sistem kelembagaan dan mengelola serta mengendalikan kegiatan kelembagaan; dan 4) pembelajaran digital pada lembaga pendidikan Islam masa depan mencakup keberlanjutan TIK, keberlanjutan sumber daya manusia untuk beradaptasi dengan situasi terkini, dan keberlanjutan eksistensi lembaga.*

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### Introduction

Islamic educational institutions had encountered globalization and modernizations for years. As the Covid-19 pandemic outbreak, the world witnessed an unprecedented shift towards digital platforms for education. Islamic education institutions were no exception, as they had to swiftly adapt to the new situation and find sustainable ways to continue teaching and learning. The digital transformation became a must as a reaction, respond and adaptation toward the situation and condition for which educational institutions set up and developed digital education system continuously. Computers and internet as inevitable tools radically changed the way of teaching, learning, and human interaction (Battro and Fischer, 2012: 49).

The COVID-19 pandemic disrupted traditional teaching methods and necessitated a rapid transition to online platforms. Islamic education institutions faced unique challenges due to their emphasis on face-to-face interactions, communal learning environments, and religious practices (Tolchah and Mu' ammar, 2019: 37). However, the crisis also presented an opportunity for these institutions to embrace digital technologies and explore innovative approaches to teaching and learning.

Digital education system nowadays focusses on the implementation of educational strategies and methods that fulfill the technology standard of the current demands (Shutaleva *et.al*, 2019: 32). Teaching and learning in this case embrace approach, methods, strategies, and Islamic curriculum of advanced technological development in the new normal era.

Digital transformation has become a vital component of education worldwide, and Islamic education institutions are gradually recognizing its potential. By incorporating digital tools and platforms, such institutions can reach a wider audience, enhance accessibility, and create engaging learning experiences. The integration of technology allows students to explore Islamic teachings beyond the confines of physical classrooms, fostering a deeper understanding of the subject matter (Mardiana and Anggraini, 2019: 80).

Sustainability is a crucial aspect to consider when implementing digital teaching and learning in Islamic education institutions. It involves developing curriculum, strategies, and infrastructure that can withstand future uncertainties and evolving circumstances (Yusmaliana and Widodo, 2019: 57). To ensure long-term success, institutions need to focus on multiple dimensions of sustainability, including technological infrastructure, faculty development, student support services, and financial viability.

Technological infrastructure forms the backbone of sustainable digital education. Islamic education institutions must invest in reliable internet connectivity, hardware, software, and learning management systems to support seamless online instruction. Adequate training for educators and support staff is

essential to ensure they possess the necessary skills to effectively utilize digital tools and engage students in a virtual setting.

Faculty development programs play a crucial role in sustaining digital teaching and learning in Islamic education institutions. Empowering educators with the knowledge and skills required to design and deliver online courses can enhance the quality of instruction. Ongoing professional development opportunities and collaborative platforms enable teachers to share best practices, exchange resources, and continuously improve their digital pedagogical approaches (Efendi, 2008: 12).

Support services are vital for students participating in digital learning environments. Islamic education institutions must establish robust mechanisms to address technical issues, provide academic support, and promote student engagement. Personalized guidance, counselling services, and online community-building initiatives can help foster a sense of belonging and facilitate holistic learning experiences.

Financial viability is a significant consideration for the sustainable implementation of digital teaching and learning in Islamic education institutions. Funding models need to be established to support investments in infrastructure, technology, training programs, and ongoing maintenance. Partnerships with governmental organizations, philanthropic entities, and private sectors can help secure sustainable funding streams for long-term digital education initiatives.

Data obtained from the Ministry of Religious Affairs for the academic year 20219/2020 shows that Indonesia has 846 Islamic Educational institutions comprising of 58 state institutions (6.9%) and 788 private ones (93.1%). These numbers surely need unflinching development in computers and information technology in order to improve their quality and sustainability. Therefore, the aim of this study is to investigate the digital teaching and learning on Islamic education institutions and their sustainability in the new normal era.

## **Method**

This study used Qualitative Content Analysis (QCA) meaning a process designed to condense raw data into categories or themes based on valid inference and interpretation. This process used inductive reasoning, by which themes and categories emerge from the data through the researcher's careful examination (Forman and Damschroder, 2007: 39). It is a systematic quantitative description of the manifest content. It is considered as a systematic reduction of content, analyzed with special attention to the context in which it was created, to identify themes and extract meaningful interpretations of the data (Roller and Lavrakas, 2015: 232).

QCA encompasses eight-step process of two phases. Phase one is data generation (coding) including absorb content, determine unit of analysis, develop unique codes, conduct preliminary coding, and content. Meanwhile, phase two is data analysis (categorization or Interpretation) covering identify categories across codes, identify themes or patterns across categories, and draw interpretations and implications.

This study explored the digital teaching and learning on Islamic education institutions and their sustainability in the new normal era. The data sources were secondary data consisting texts from books, national and international journal, and other reliable sources.

## **Result and Discussion**

There were at least four things that could be proposed as the result of this study. First, digital teaching and learning was a new transformation organizing teaching and learning management using digital application. Digital teaching and learning refer to the use of digital technologies and tools in the process of teaching and learning. It encompasses the integration of digital resources, applications, and platforms into educational practices to enhance instruction, engage learners, and improve educational outcomes. Efforts were made to

develop software or application programs that could help with meaningful learning (Susilawati, 2021: 36).

Digital teaching involves the use of technology to deliver instructional content, facilitate communication and collaboration, and assess student learning. It includes various methods such as online lectures (zoom, google meet, google classroom, WhatsApp group, YouTube, Google form, Schoology, and many more), multimedia presentations, interactive simulations, and virtual reality experiences. Besides, the use of media should be up to date with the changes and needs of the most recent time (Satria and Herumurti, 2021: 87). Digital teaching can take place in both traditional classroom settings and online or hybrid learning environments without neglecting the characteristics of Islamic educational institutions.

Digital learning, on the other hand, focuses on the use of technology by students to access educational content, engage in activities, and interact with their peers and teachers. It involves the use of digital tools and platforms to acquire knowledge, practice skills, and demonstrate understanding. Digital learning can occur in formal educational settings, such as schools and universities, as well as in informal settings through online courses, educational apps, and self-directed learning platforms. So that students having diverse skills and abilities will be more easily learn (Lubis, 2016: 53).

Overall, digital teaching and learning leverage the capabilities of technology to enhance and transform the traditional educational experience, making it more interactive, personalized, and accessible (Paramansyah, 2021: 24). It has more benefits since it enables learners to engage with content in new ways, collaborate with peers remotely, access a vast range of resources, and receive immediate feedback on their progress (Ma'arif *et al*, 2021: 27).

In Indonesia, there are three types of Islamic educational institutions, namely formal, non-formal, and informal. Formal Islamic educational institution is described as structured educational institutions starting from primary (elementary) education, secondary education, and higher education. It consists

of MI (Madrasah Ibtidaiyah), MTs (*Madrasah Tsanawiyah*), MA (*Madrasah Aliyah*), and Islamic Colleges. Non-formal Islamic education institution may include homeschooling and boarding school. It is not a formal educational institution organized in a structured and tiered manner. While the informal one refers to the space of educational institution focusing on the family and the community, such as TPA (*Taman Pendidikn Al-Quran*) and Quran recital (Tudor, 2013: 26).

Indeed, each level of Islamic educational institution might typically apply different digital teaching and learning methods based on the students' age, developmental stage, and the complexity of the subject matter. However, basically, the goals were the same, i.e., to make sure that the instructional activities still run well and to achieve the learning objectives.

Elementary level might use interactive whiteboards allowing teachers to present content in an engaging and interactive manner and to encourage student participation. Besides, Educational Apps and Games might also be used since they are available on tablets and computers that help younger students learn basic skills such as reading, writing, and math through interactive activities. Multimedia Presentations allowed teachers to incorporate multimedia elements like videos, images, and audio to enhance their lessons and make them more engaging for young learners. Some elementary schools used online learning platforms that provide educational materials, quizzes, and interactive exercises for students to reinforce their learning at home. These methods surely needed support for stable internet connection.

Meanwhile, the secondary level used to apply Learning Management Systems (LMS) platforms, such as Moodle or Canvas, to organize and deliver course materials, assignments, and assessments online. These platforms facilitate communication and collaboration among students and teachers. They held Video Conferencing as well (virtual classrooms and video conferencing tools), such as Zoom or Google Meet, enable remote learning, live discussions, and virtual lectures. Students can interact with teachers and classmates in real-time. Students at this level were often encouraged to access educational resources available on

the internet through digital libraries. While the digital Assessments: might include online quizzes, tests, and projects that can be submitted electronically, allowing for quick grading and feedback.

Many Islamic colleges, further, offered online courses and Online Courses and Massive Open Online Courses (MOOCs), allowing students to access lectures, course materials, and assignments remotely. These courses often include discussion forums and interactive elements. For subjects that require practical experimentation, virtual laboratories provided simulated environments where students can perform experiments and analyze data remotely. Tertiary education often involved group projects and collaborations. Students utilized digital tools like Google Docs, Dropbox, and project management platforms to work together on assignments and share resources. College students also had access to vast online libraries and academic databases, enabling them to conduct in-depth research for their assignments and papers.

It's important to note that these methods can vary across institutions and countries, as technological infrastructure and resources differ. Additionally, hybrid models that combine in-person and digital learning have become more prevalent in recent years, allowing for a blended approach to education.

Second, the study showed that the application of Information and Communication Technology (ICT) included not only in teaching and learning but also in the evaluation. As everybody knows that ICT has had a significant impact on education and plays a crucial role after all. ICT refers to the use of digital technology to access, manage, and communicate information, and it encompasses various tools such as computers, tablets, smartphones, software applications, and the internet. It includes the entire technical team for processing and transmitting the information (Darimi, 2017: 111).

Since digital teaching and learning in Islamic education institutions have become increasingly popular and feasible in recent years, with the advancement of technology and the widespread availability of the internet, many Islamic

education institutions have embraced digital platforms to expand their reach and enhance their teaching methods as well as the evaluation.

ICT provides students and teachers with access to a vast amount of information and resources. The internet allows students to research and explore topics beyond the limitations of traditional textbooks. It enables teachers to find up-to-date information, multimedia content, and educational resources to enhance their lessons.

Furthermore, ICT facilitates interactive and engaging learning experiences. Multimedia presentations, educational software, and online platforms offer interactive simulations, videos, and games that make learning more enjoyable and effective. Students can actively participate, manipulate virtual objects, and collaborate with peers, fostering a deeper understanding of the subject matter.

ICT also allows for personalized learning experiences tailored to individual student needs. Adaptive learning systems can assess students' strengths and weaknesses and provide customized learning paths and resources. Online platforms and learning management systems enable students to learn at their own pace, review materials, and receive immediate feedback.

Moreover, ICT promotes collaboration among students and teachers. Online discussion forums, video conferencing, and collaborative tools facilitate communication and cooperation regardless of physical location. Students can work together on projects, share ideas, and learn from diverse perspectives, enhancing their critical thinking and communication skills.

In general, the use of IT in teaching and learning was as learning media and as an independent or electronic learning tool. The media used was web-based or internet-based learning. In this system, the teaching materials were delivered using a web server and a web browser to access materials like HTTP (hyper Text Transfer Protocol) as protocol for communication (Paramansyah, 2021: 57).

The digital-based learning might include virtual classes allowing direct teaching and learning in which the students could join wherever they were as long as they had internet connection. Activities were planned and materials were prepared then technologies were used (Simamora, 2020: 103). The virtual classes were also supported by voice and video. The students could select the course as long as the teachers had provided the materials. By considering the characteristics of virtual classes, the interaction between students and teachers could be achieved as well through the internet (Pallof and Pratt, 2013: 86).

In the virtual classes the students received the materials, solved the problem, had discussion session, completed the project, even filled the form of attendance. In this case, it could not be denied that e-mail played an important role in supporting virtual communication (Perveen, 2016: 39).

The use of ICT in the implementation of digital teaching and learning can improve the teaching and learning quality itself and enable teachers and students to unlimited access of materials. Besides, it broadens the knowledge and insights so that teachers and students can be more open-minded (Amin and Sundari, 2020: 78). In addition, the use of ICT as interactive device really can facilitate and develop the long-distance learning mode (distance learning) (Budiman, 2017: 37). So, in this term, ICT is not the ultimate goal, but it is a device to support and facilitate humans to achieve effectiveness and efficiency, since technology cannot replace humans.

There are some key aspects to consider dealing with digital teaching and learning in the Islamic educational institutions. Islamic education institutions can offer online courses on various subjects such as Quranic studies, Hadith, Fiqh (jurisprudence), Tafsir (Quranic exegesis), and Arabic language. These courses can be designed to cater to different age groups and levels of expertise, allowing students from around the world to access quality Islamic education.

Digital platforms enable the creation of virtual classrooms where teachers can conduct live lectures, interactive discussions, and question-and-answer sessions with students. Platforms like Zoom, Google Meet, or specialized e-

learning platforms can facilitate real-time teaching and learning experiences. Digital teaching enables Islamic education institutions to reach a global audience and extend their impact beyond their local communities. This can lead to a broader understanding and appreciation of Islamic teachings across cultural and geographic boundaries.

Institutions can create pre-recorded lectures and educational resources that students can access at their convenience. These resources can include video lectures, audio recordings, lecture notes, and supplementary reading materials. They can be made available through online learning platforms, institutional websites, or dedicated e-learning portals.

Besides, virtual discussion forums and Q&A sessions can be set up to encourage student interaction, collaboration, and knowledge-sharing. These platforms allow students to discuss and seek clarification on various Islamic topics, enhancing their learning experience.

Institutions can provide online training programs and professional development opportunities for teachers to enhance their skills in online teaching methodologies, instructional design, and technology integration. This ensures that teachers are equipped to deliver effective online Islamic education.

It's important for Islamic education institutions to strike a balance between the traditional methods of in-person learning and the benefits offered by digital platforms. While online teaching can enhance accessibility and flexibility, it's essential to maintain the integrity and authenticity of Islamic teachings throughout the digital learning experience.

The use of ICT in the digital teaching and learning included that of in the evaluation. ICT provides diverse assessment tools to evaluate students' progress and understanding. Online quizzes, tests, and surveys offer immediate feedback and automated grading, saving time for teachers. Digital portfolios allow students to showcase their work, reflecting their growth and achievements over time. Islamic education institutions can administer online exams and assessments to evaluate students' understanding of the subject matter. This can be done

through online testing platforms that allow for secure and proctored exams or through assignments and projects submitted electronically

ICT supports the implementation of authentic assessment methods. Students can create multimedia presentations, videos, and digital projects that demonstrate their knowledge and skills in real-world contexts. This type of assessment assesses not only content knowledge but also creativity, problem-solving, and digital literacy. ICT facilitates timely and constructive feedback. Teachers can provide feedback on assignments and assessments electronically, allowing for detailed comments and suggestions. Online platforms and communication tools enable ongoing communication between teachers, students, and parents, fostering a collaborative learning environment.

Moreover, ICT enables the collection and analysis of educational data to inform instructional decisions. Learning analytics and educational software track students' performance, identify learning gaps, and provide insights into their learning patterns. Teachers can use this data to adjust their teaching strategies and provide targeted interventions.

On the other side, institutions can also provide online training programs and professional development opportunities for teachers to enhance their skills in online teaching methodologies, instructional design, and technology integration. This ensures that teachers are equipped to deliver effective online Islamic education.

It is important to note that successful implementation of ICT in education requires appropriate infrastructure, teacher training, digital literacy among students, and addressing potential challenges such as access disparities and privacy concerns. When used effectively, ICT can enhance teaching, learning, and evaluation processes, promoting student engagement, critical thinking, and preparing them for the digital age.

Other point resulted from this study was the global pandemic demands Islamic education institutions to up-date the institutional system and to manage as well as to control institutional activities. In response to the global pandemic,

Islamic education institutions can implement technology solutions by integrating technology into the institutional system to facilitate online learning, virtual meetings, and administrative processes. Utilize video conferencing tools, learning management systems, and online collaboration platforms to ensure continuity in education

Besides, they need to restructure curriculum by modifying the curriculum to accommodate online learning and blended learning approaches and develop strategies for delivering lectures, conducting assessments, and facilitating student engagement in a virtual environment. Then they need to provide training to teachers and staff members on using online teaching tools, conduct virtual classes, manage online platforms, and support them with resources and technical assistance to ensure smooth implementation of online education

It is also important to enhance communication channels by establishing effective communication channels to keep students, parents, and staff informed about institutional updates, guidelines, and changes in schedules through email, instant messaging, online portals, and social media platforms to maintain regular contact.

Institutions also focus on student well-being by paying attention to the emotional and psychological well-being of students and offering counselling services and creating virtual platforms for students to connect with their peers and seek support. Fostering the community also needs to do by encouraging virtual community-building activities, such as online discussions, virtual clubs, and virtual events, to maintain a sense of belonging among students and staff members.

Islamic educational institutions need to collaborate with other institutions by sharing experiences and best practices with other Islamic education institutions and collaborating on joint initiatives, research projects, or resource sharing to navigate the challenges posed by the pandemic.

Evaluation and adaptation toward the current situation and condition must be set up by continuously assessing the effectiveness of the implemented

measures and make necessary adjustments based on feedback from students, parents, and staff and staying updated on the latest research and best practices in online education. Institutions have to prepare contingency plans for various scenarios, such as partial lockdowns, localized outbreaks, or sudden changes in guidelines. These plans should address issues such as remote learning, alternative assessment methods, and support for vulnerable students.

Managing and controlling institutional activities in an Islamic education institution involves several key aspects on how to effectively manage and control the activities. A clear vision and mission statement is the foundation that aligns with Islamic principles and values. This will serve as a guiding framework for all activities and decisions within the institution. Besides, institution must establish a competent and ethical leadership team that is well-versed in Islamic education and administration. This team should be responsible for setting strategic goals, making policy decisions, and ensuring compliance with relevant regulations.

Dealing with teaching and learning, institutions develop a comprehensive and balanced curriculum materials that integrates Islamic teachings with academic subjects. Ensure that the curriculum is regularly reviewed and updated to meet the evolving needs of students and align with current educational standards. Faculty and staff management need to hire qualified and dedicated teachers and staff members who are knowledgeable about Islamic principles and can effectively deliver the curriculum and provide them with continuous professional development opportunities to enhance their skills and expertise.

To support the institution system, financial management plays a crucial role. Institution ensures that transparent and accountable financial management practices are run well by maintaining accurate financial records, establish a budgeting process, regularly reviewing financial reports, and seeking fund sources and partnerships that align with the institution's values and goals.

The implementation of technology integration is needed to enhance teaching and learning processes, communication, and administrative tasks as well as to utilize educational software, learning management systems, and

communication platforms to streamline operations and facilitate remote learning, if necessary. Technology also fosters strong relationships with parents and the wider community and keep parents informed about their child's progress and involve them in school activities as well as seek community support and collaboration to enrich the educational experience and provide additional resources.

Institutions must also have quality assurance and continuous improvement. Institutions implement mechanisms to monitor and evaluate the quality of education and institutional practices, conduct regular assessments, gather feedback from stakeholders, and use the findings to drive continuous improvement initiatives. Besides, institution needs to have compliance with legal and regulatory requirements by ensuring compliance with local educational laws and regulations, including accreditation standards, health and safety guidelines, and child protection policies. Institutions have to stay updated on relevant legal requirements and adapt institutional policies accordingly.

The last but not least, the future digital teaching and learning on Islamic education institutions cover sustainability of ICT, human resources to adapt with the latest situation, and the sustainability of the institutions' existence. Islamic education institutions have had to adapt and update their institutional systems to ensure the safety of students, faculty, and staff, as well as to continue providing quality education.

Islamic education institutions can implement remote learning strategies by leveraging technology. This includes conducting online classes, using video conferencing tools for lectures, and utilizing learning management systems to share resources and assignments. Besides, institutions should establish and enforce health and safety protocols in line with guidelines provided by local health authorities and the World Health Organization (WHO). This may include mandatory mask-wearing, physical distancing, regular sanitization of facilities, and temperature checks.

Effective communication is crucial in the new normal era. Institutions should establish clear channels of communication with students, parents, faculty, and staff to provide updates, guidelines, and support. Regular email updates, newsletters, and virtual town hall meetings can be used to keep the community informed. Islamic education institutions should ensure that students have access to support services such as counselling, academic advising, and mentoring. These services can be provided remotely through video conferencing or phone calls to address the emotional and academic needs of students.

Institutions should offer professional development opportunities for faculty to enhance their skills in online teaching and learning methodologies. Training sessions, webinars, and workshops can be organized to help faculty members adapt to the new educational landscape. Further, Islamic education institutions can adopt a hybrid learning approach that combines online and in-person instruction. This allows for flexibility and ensures continuity of education while minimizing the risk of transmission. In-person activities can be limited to practical or experiential components that require hands-on learning.

Institutions can also collaborate with other Islamic education institutions, local communities, and health organizations to share best practices, resources, and strategies for managing the pandemic. By working together, institutions can strengthen their response and support one another. To maintain their sustainability, monitoring and evaluation had been conducted periodically. Islamic education institutions should establish mechanisms to monitor and evaluate the effectiveness of their updated institutional systems. Regular feedback from students, faculty, and staff can help identify areas of improvement and ensure that the implemented measures are meeting the needs of the community.

To guarantee the sustainability of Islamic education institutions, it needs interoperability between ICT, human resources and institutional systems. The rate of technology adoption is overgrowing in the Islamic education environment (Sarwar et al, 2019: 79). Thus, the integration among elements in Islamic

education institutions are believed to be beneficial for technological advances to encourage the ability to innovate have competitiveness in education.

Rapid technological development makes Indonesian education system better. Nowadays, the process of teaching and learning is not bound by space and time anymore (Maslikah et al, 2021: 75). It can be done through synchronous or asynchronous ways. Synchronous learning happens at the same time between teachers and students either using online meeting platforms (virtual synchronous) or face to face directly at the same place and time (live synchronous) (Nieuwoudt, 2020: 25).

Meanwhile, asynchronous learning allows teachers and students to manage their own schedule, within a certain timeframe. Students can access and complete lectures, readings, homework, assignment, projects, and other materials at any time during one- or two-week period. Asynchronous learning can be held independently (self-paced) and that of collaboratively. Self-paced learning enables students learn materials from video, audio, or text that are available on LMS or outside the LMS. While the collaborative one, it can be held through e-mail, project assignments, or focus Group discussion (Gazan, 2020: 96). Both synchronous and asynchronous ways still can facilitate students learn independently as autonomous learners (Hidayah and Az-zafi, 2021: 74). The combination of the two methods creates effective and efficient virtual teaching and learning implementation (Rasheed, 2019: 144).

It is advised, to maintain the sustainability of the Islamic educational institution, to apply blended learning that combines face-to-face learning and online learning with technology so that learners can take advantages both online and offline resources. This learning will trigger the students to be more active and responsible for their learning. The teacher's roles are as guidance and facilitator ensuring that the teaching and learning run well.

Digital teaching and learning offer flexibility and convenience to both students and teachers. With online platforms, students can access educational materials and resources at any time and from anywhere. This flexibility allows

students to learn at their own pace, which is particularly beneficial for those with different learning styles or commitments outside of education. Additionally, teachers can utilize various digital tools to enhance their teaching methods, such as interactive multimedia presentations, virtual simulations, and online discussions, which can promote student engagement and participation.

Digital teaching and learning provide access to a vast array of resources and references. Students can access a wide range of Islamic literature, texts, and scholarly works from around the world. This exposure to diverse perspectives and sources contributes to a more comprehensive understanding of Islamic teachings. Additionally, digital platforms can facilitate collaborative learning and interaction among students, allowing them to exchange ideas and learn from one another.

In terms of sustainability, the integration of digital teaching and learning in Islamic education institutions offers several advantages. It reduces the reliance on physical infrastructure, such as classrooms and textbooks, which can be costly to maintain and update. By leveraging digital platforms, institutions can significantly reduce operational expenses and allocate resources more efficiently. The scalability of digital teaching and learning allows institutions to accommodate a growing number of students without the limitations of physical space. As the demand for Islamic education increases, digital platforms can easily adapt to accommodate larger student populations, ensuring accessibility and inclusivity.

However, it is important to recognize that the successful implementation and sustainability of digital teaching and learning in Islamic education institutions require careful planning and continuous support. Adequate infrastructure, including reliable internet connectivity and access to devices, must be in place to ensure that students can effectively engage in online learning. Institutions need to invest in the training and professional development of teachers to enhance their digital literacy skills and teaching methodologies.

Regular evaluation and assessment of digital learning initiatives are also essential to identify areas for improvement and ensure the quality of education delivered.

In spite of the sustainability of ICT, Islamic education institutions need to improve the human resources. The sustainability of human resources can be achieved by always providing information technology for employees, hiring tech-savvy employees, and building as well as developing teamwork system based on ICT (Angelidou, 2016: 309). The obstacles in human resources performance must be solved appropriately so the employees can work optimally, such as level of education, ability in ICT, and ability of effective communication (Pamungkas and Sukarman, 2020: 19). Improving the quality of human resources in Islamic educational institutions provides chances to compete and outperform modern education (Priatmoko, 2018: 39).

The sustainability of human resources in Islamic educational institution is crucial for their long-term success and impact. It deals with several aspects like recruitment and retention, professional development, leadership development, work environment and well-being, succession planning, community engagement, and embracing technology.

Islamic education institutions need to attract qualified and dedicated individuals who are passionate about teaching and promoting Islamic values. A robust recruitment process, including clear job descriptions, competitive compensation packages, and opportunities for professional growth, can help attract and retain talented educators.

The recruitment process then is continued with professional development and leadership development. Continuous professional development is essential to enhance the knowledge and skills of teachers in Islamic education institutions. Providing regular training programs, workshops, and conferences can help educators stay updated with the latest educational methods, research, and best practices. Nurturing effective leadership within Islamic education institutions is vital for their sustainability. Developing leadership skills among administrators

and principals enables them to create a supportive environment, foster innovation, and effectively manage the institution.

Besides, work environment and well-being also determine the sustainability of human resources. Creating a positive work environment that supports the well-being of staff members is crucial. This includes providing adequate resources, addressing work-related stress, encouraging work-life balance, and promoting a culture of respect and collaboration. Collaborating with the broader Islamic community and establishing partnerships with parents, local mosques, and community organizations can strengthen the support system for Islamic education institutions. Engaging families and the community in educational activities can enhance the institution's sustainability and social impact.

The employees also have to embrace with technology. Incorporating technology effectively into the teaching and learning process can enhance educational outcomes and improve the institution's efficiency. Islamic education institutions should stay abreast of technological advancements and explore how digital tools and online resources can supplement traditional teaching methods. Thus, all employees are demanded to be ICT literate.

At last, the Islamic education institution must pay attention as well to the succession planning. Islamic education institutions should have a well-defined succession plan to ensure continuity in leadership and teaching roles. Identifying and preparing potential successors through mentoring, training, and providing leadership opportunities helps maintain stability and sustainability. By focusing on these aspects, Islamic education institutions can build a sustainable and thriving environment that supports the growth and development of their human resources, ultimately benefiting the institutions' existence.

## **Conclusion**

The digital teaching and learning have become increasingly prevalent in various educational institutions, including Islamic education institutions. The integration of digital tools and technologies (ICT) in these institutions has brought about significant advancements and has the potential for long-term sustainability in the future. The ICT is implemented not only in the digital teaching and learning but also in the evaluation proses that measures the students' performance. The future digital teaching and learning lies in the sustainability of ICT use, adaptive human resource that ultimately will influence the sustainability of the Islamic educational institutions

Digital teaching and learning have the potential to revolutionize Islamic education institutions in the future by increasing accessibility, flexibility, and the range of resources available to students. The sustainability of these initiatives lies in their ability to adapt to technological advancements, provide ongoing support and training for human resources, and address the challenges associated with infrastructure and access. With proper planning and investment, digital teaching and learning can play a significant role in shaping the future of Islamic education, empowering individuals with knowledge and fostering a deeper understanding of Islamic teachings.

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