

## Digital-Based Learning During the Covid-19 Pandemic at Indonesian Islamic State University

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Manuscript received 29 Apr. 2021    revised 11 Jun. 2021    accepted 16 Jul. 2021    Date of publication 26 Sep. 2021  
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### Abstract

*This study aims to determine the type of platform used by lecturers in learning and analyze the effectiveness of the platform as a learning media during the Covid-19 pandemic. This study uses a quantitative method with a survey type, the source of the data is taken by using a questionnaire to 143 respondents from two universities, namely Raden Intan Islamic State University of Lampung and Metro Lampung Islamic State Institute. The data were analyzed using SPSS 20 software with descriptive analysis. The results of the analysis show that there are eight platforms used by lecturers as digital-based learning media, namely Zoom Cloud Meeting, Whatsapp Group, Google Classroom, Youtube Channel, Google Meet, Google Form, Facebook, and Instagram. In addition, the results of the analysis generally show that the use of digital-based platforms in the learning process is less effective. Some of the issues discovered include lack of supporting facilities that make the learning is not optimal, lack of lecturers' ability to manage digital-based learning, and lack of learning innovation that makes the integration of technology in learning is not achieved. The results of this study can certainly be a reference for both universities in making policies, especially regarding digital-based learning during the Covid-19 pandemic.*

**Keywords:** *Digital learning, digital platform, Islamic university*

### Abstrak

*Penelitian ini bertujuan untuk mengetahui jenis platform yang digunakan dosen dalam pembelajaran, serta menganalisis tahap efektifitas platform tersebut sebagai media pembelajaran pada masa pandemi Covid-19. Penelitian ini menggunakan metode kuantitatif dengan jenis survei, sumber data diambil menggunakan angket kepada seratus empat puluh tiga orang responden dari dua perguruan tinggi yaitu, Universitas Islam Negeri Raden Intan Lampung dan Institut Agama Islam Negeri Metro Lampung. Seluruh data dinalisis menggunakan Software SPSS 20 dengan analisis deksriptif. Hasil analisis menunjukkan bahwa, terdapat delapan platform yang digunakan dosen sebagai media pembelajaran berbasis digital, yaitu Zoom Cloud Meeting, Grup Whatsapp, Google Classroom, Kanal Youtube, Google Meet, Google Form, Facebook dan Instagram. Selanjutnya secara umum hasil analisis menunjukkan penggunaan platform berbasis digital dalam proses pembelajaran ternyata kurang efektif. Beberapa permasalahan yang muncul adalah, kurangnya sarana pendukung sehingga pembelajaran*

*tidak maksimal, rendahnya kemampuan dosen mengelola pembelajaran berbasis digital, minimnya inovasi pembelajaran sehingga integrasi teknologi dalam pembelajaran tidak tercapai. Hasil penelitian ini tentu dapat menjadi acuan bagi kedua pihak universitas dalam membuat kebijakan, khususnya terkait pembelajaran berbasis digital pada masa pandemi Covid-19.*

**Kata kunci:** Pembelajaran berbasis digital, platform digital, perguruan tinggi Islam

## **Introduction**

Covid-19 virus pandemic which came from Wuhan, China, has spread all over the world and affects many aspects of life (Shi et al., 2020). Although this pandemic basically concerns the health of citizens around the world, the other main impact is the occurrence of changes and shifts in goal setting, strategies, and approaches in the economic and education sectors (Sohrabi et al., 2020). The social distancing policy which aims to break the chain of this virus causes limited physical interaction and requires community social adaptation (Wilder-Smith & Freedman, 2020).

The educational aspect has also become the main target of these changes and adaptations which make learning can no longer be done entirely face-to-face and needs to be adapted toward learning from home or blended learning (Sulastri & Maula, 2020). The change of the fundamental education paradigm mostly happens at the level of higher education using a more open system and curriculum (Hadžiomerović, 2020; Lubis, 2017). Therefore, optimizing the use of appropriate technology and communication is the main priority in improving the quality of education during this pandemic (Jima'ain et al., 2019; Salsabila et al., 2021; Supriyatno & Kurniawan, 2020).

The adaptation and innovation in the integration of education and technology have not only become the main focus in general science studies but also in religious studies, especially in Islamic religious education (Awaluddin & Samsudin, 2021). Islamic education which tends to use a traditional approach and prioritizes direct interaction from students and teachers faces real challenges in its implementation during the pandemic, which requires implicative formulation and approach in determining and combining Islamic religious learning practices and current technology while reducing the potential of technical problems that might occur in the implementation process (Susanti, 2020). Therefore, the development of technology

and communication should be integrated into Islamic religious learning practices (Engkizar et al., 2018; Putra et al., 2020; Putri et al., 2020).

Distance learning and blended learning which can be considered as forms of educational innovation application certainly cannot be separated from the use of various digital platforms. Digital platforms that are commonly used in online learning such as Zoom Meeting, Google Meeting, Google Classroom, WhatsApp, Youtube. The digital platform has been proved to be effective means of learning at the higher education level (Kusdani, 2021; Wahyuni et al., 2021). In addition, in the process of using digital platforms, the supportive hardware and software are necessary to support the use of digital *platforms* in the learning process (Assidiqi & Sumarni, 2020).

Literature review and library research have become the main approach in many studies on the development of technology-based Islamic religious education (Assidiqi & Sumarni, 2020; Awaluddin & Samsudin, 2021; Fauziyah, 2020; Muthoharoh, 2020; Priatna, 2018b; Riyadi et al., 2021; Talkah & Muslih, 2021b; Yazdi, 2012; Zaim, 2020; Zazin & Zaim, 2020; Zia & Hamami, 2020). In addition, studies in the application of technology in learning are still mostly focused on general science and carried out more in the context of primary school level (Anugrahana, 2020; Arifin et al., 2020; Edison, 2021; Sulastri et al., 2020; Suradika et al., 2020) and secondary school level (Hanafi, 2019; Jauhari, 2019; Kulbi, 2019; Ulya, 2021; Novianti et al., 2020; Ramdani et al., 2021; Ratnawati & Werdiningsih, 2020; Susanti, 2020).

Studies on the implementation of technology integration in religious studies at the higher education level are still quite limited so they need to be reviewed in more depth (Mulyono & Wekke, 2018; Sumarsono, 2021; Yudiawan et al., 2021). Based on the problems and considerations above, it is necessary to further explore and analyze the effectiveness of Digital-based Islamic Learning in Islamic Higher Education in Lampung Province of Indonesia.

### **Literature Review**

Global change and transformation as a result of the COVID-19 pandemic demands optimization and innovation in the use of digital media and technology (Alami, 2020). This adjustment in the educational aspect does not only change the

learning practice, but also in planning and evaluation process which also needs to be modified and adjusted according to the subjects, teaching strategies, and the material being taught (Fitrah & Ruslan, 2021).

Various kinds of digital platforms have been analyzed and studied for online learning such as Whatsapp, Google classroom, Google meet, Zoom cloud meeting, Youtube, and so on (Kulbi, 2019; Kusdani, 2021; Wahyuni et al., 2021), although results varies from each study (Rosali, 2020). Youtube gets priority as the media with the most potential to be optimized with a variety of learning content and variations (Suradika et al., 2020). In addition, social media is also a digital platform that has been proven to be effectively optimized for the learning process (Arifin et al., 2020; Munadi, 2021). In general, the ease of use and popularity of the digital platform are the main factors in choosing the digital media used, such as Whatsapp and Zoom cloud meetings (Assidiqia & Sumarni, 2020; Ramdani et al., 2021; Sulastri et al., 2020).

In the context of Islamic education, the contribution of digital technology is not only limited to the implementation of online learning, but also as a good material source and face-to-face learning strategy (Salsabila et al., 2021). The integration of digital technology and Islamic religious learning has not only made an impact on increasing student activities and learning outcomes, but also on motivation and interest in learning that continues outside the classroom (Riyadi et al., 2021). In addition, the effectiveness of the implementation of online learning lies not only in the optimization of learning technology, but also the teacher's character and student characteristics (Fauziyah, 2020; Rahim et al., 2021). There are at least three aspects that influence the development of Islamic religious learning, such as learning conditions, learning methods, and learning activities. In this case, collaboration between students, teachers and parents also has an important role in the success of online-based Islamic education (Jauhari, 2019). With the efforts and cooperation of all parties, online or digital-based Islamic education can even be better than face-to-face interaction and student learning outcomes can also be optimized (Edison, 2021; Kurdie, 2019; Mahmud, 2019).

Digital technology-based innovation is basically an effort to adjust educational plans, goals, content, and evaluation of Islamic religious learning according to the current situation and circumstance, such as the covid-19 pandemic (Awaluddin & Samsudin, 2021; Nadeem, 2020; Susanti, 2020; Tang, 2018; Zaim, 2020). The technology-based approach in Islamic teaching and learning does not only provide Islamic education with access to materials anywhere and anytime (Muthoharoh, 2020), it also provides at least six abilities that can be developed in online-based Islamic education, such as the ability to think critically and problem solving, the ability to communicate and being teamwork, the ability to innovate and discover new things, the ability to use information and communication technology, the ability to learn independently, and the ability to digital literacy (Ratnawati & Wilis Werdiningsih, 2020; Fatahudin et al., 2019; Febriani et al., 2020).

The potential for Islamic learning based on digital and current technology is still very open and has many adaptive alternatives to response time and social changes (Sumarsono, 2021). Therefore, the use of technology and digital platforms is very relevant in the context of developing Islamic teaching and learning (Talkah & Muslih, 2021).

There are some possible forms of using digital media in Islamic religious learning such as the use of WhatsApp in class discussions and instructions based on groups or classes (Awaluddin & Samsudin, 2021). Social media can also be an alternative source for the development of Islamic religious learning (Priatna, 2018; Zazin & Zaim, 2020). Zoom cloud meetings can be used to measure students' abilities in practice, for example worship practices and memorization of related theories (Habibi, 2020) and any religious practices (Hanafi, 2019). Meanwhile, YouTube and Google can be the main sources for providing online material and discussion source for Islamic religious studies, both individually and in groups (Manshuruddin, 2021 & Aini et al., 2019). Some alternative platforms such as Moodle and Edmodo can also be developed for Arabic learning or other activities, although they require special skills (Hidayah & Kusumaningrum, 2021).

Meanwhile, learning the history of Islamic culture can be developed using the Google Classroom platform (ramadhan, 2020). Social media such as Facebook and Twitter have also proven their effectiveness in increasing Islamic learning activities (Tarihoran, 2020; Yudhiantara, 2017). Therefore, training and development of teacher capabilities in terms of knowledge and innovative use of digital media in Islamic learning is absolutely necessary (Salsabila et al., 2021) which is supported by increasing the quality and quantity of facilities and infrastructure supporting technological developments (Zia & Hamami, 2020; Ashidiqi et al., 2019).

Some of the fundamental obstacles found in online or digital-based Islamic education are related to the quality and availability of the internet connection in each region (Alvianto, 2020; Anugrahana, 2020; Rahawarin et al., 2020; Suherman et al., 2021). In addition, the lack of students understanding in the use of digital media and platforms is also an inhibiting factor in the implementation of digital-based Islamic education (Ulya, 2021). Additional costs and parental anxiety about content outside of learning that might harmful for their children also add to the difficulty of parent-teacher collaboration in implementing digital-based learning (Susanti, 2020). Teachers may also have difficulties in understanding which students really pay attention to teacher instruction and given materials appropriately (Novianti et al., 2020). In addition, the increasing potential for plagiarism in completing assignments is also a serious problem in online learning models (Saefulmilah & Saway, 2020).

## **Method**

This study uses a survey-based quantitative method to find out the extent to digital-based Islamic learning can be implemented and developed in the Islamic Higher Education environment during the pandemic which encompasses the use of scientific sampling method with a designed questionnaire (Apuke, 2017). The population of the research are students majoring in Islamic Banking and Islamic Accounting, Faculty of Economics and Islamic Business in the second semester at Islamic State Universito of Raden Intan Lampung and and Islamic Intitute of Metro Lampung, Indonesia which is about 358 students. The questionnaire is in the form of a google form which then distributed to the Whatsapp groups of each class. Of all

these students, only 143 students responded by filling out the form completely which then was used as a source of research data.

The questionnaire uses a Likert scale to measure student perceptions of digital-based Islamic learning in Islamic Higher Education with a rating scale of 1 to 5 and the assessment criteria from strongly disagree to strongly agree. Moreover, additional columns in the form of blank spaces regarding the reasons for choosing the answer is provided so that research problems can be explored more deeply. Construct validity is used to provide a clear picture of research data in order to be able to answer research questions based on supporting theories. The data analysis technique used in this study is descriptive quantitative analysis to calculate the percentage result of the score obtained from the questionnaire which is interpreted through the criteria of very good (80-100%), good (60-79%), quite good (40-59% ), poor (20-39%), and very poor (0-19%). From the results of this percentage, the analysis and conclusions were carried out to answer digital-based Islamic learning in the Islamic Higher Education environment in the province of Lampung.

### **Findings and Discussions**

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**Table 1. The analysis of digital based islamic teaching learning in islamic higher education during Covid 19**

No	Question	Answer	Percentage	Criteria
1	Most used platforms	Zoom	65.1%	High
		Whatsapp	62.8%	High
		Google classroom	62.8%	High
		Youtube	20.9 %	Low
		Google meet	46.5%	Medium
		Google forms	30.2%	Low
		Facebook	-	Very low
		Instagram	-	Very low
		Etc	-	Very low
2	Effectiveness	Effective	56.8%	Less effective
		Not yet effective	43.2%	
3	Resistance	Network/ signal	66.7%	High
		Instructions for use	9.8%	Very low
		Cost	21.6%	Low
		Availability of media/tools	1.9%	Very low

The first data discusses digital platforms that are often used in Islamic learning at Islamic universities in Lampung. The results show that Zoom Meeting is the most frequently accessed digital platform in learning, with a percentage of 65.1%. This is in line with several studies that prove that zoom meeting is a popular application because it does not require a lot of memory to be used in online learning, online seminars, online meetings and so on (Habibi, 2020). With the zoom meeting application, learning can be conditioned as face-to-face learning, and can even be optimized with various media, videos, and other discussion materials that can provide a more interaction, especially on material that requires practice (Hanafi, 2019). However, this application also has a weakness, such as the limited time for learning and its high internet quota (Brahma, 2020).

Other digital platforms preferred by students to use are WhatsApp and Google Classroom. These two platforms are more frequently used in the process of delivering and completing assignments and student attendance in online learning (Yusnita et al., 2018; Zafirah et al., 2018; Awaluddin & Samsudin, 2021). Ease of use and access that

can be done at any time are the main reasons for utilizing the two platforms. However, the unexpected result is the use of the YouTube platform which is quite low in Islamic religious learning. This result contradicts many studies that prove that YouTube is one of the sources and learning media that is very rich in learning materials and variations that can be optimized in improving learning outcomes (Kulbi, 2019; Kusdani, 2021; Suradika et al., 2020; Wahyuni et al., 2021; Syafril et al., 2021). The use of social media such as Facebook and Instagram as social media platforms that are very often used by students every day has also not been used as a medium for learning Islam, so the potential and advantages of these two platforms cannot be explored further.

The data also shows that the effectiveness of using digital platforms in Islamic religious learning at Islamic universities in Lampung is still categorized as less effective, which is only 56.8%. The ineffectiveness of this digital platform is influenced by many factors, both in practice and in technical implementation. This result is different with many studies which have concluded that the use of digital platforms in learning allows students to learn without time and space limits, because using digital platforms they can meet face to face even though they are not in one place (Aziz et al., 2019; Mustakim, 2020; Syafril et al., 2021). The use of online media such as digital platforms allows students to have a high enthusiasm for learning and doing assignments. Applications carried out with digital classes using digital platforms can achieve complete learning and there is a significant increase in student interest and learning outcomes (Hastaty, 2018). The discussion of the obstacles in its implementation will be able to provide an insight regarding the ineffective factor in the use of digital platforms in Islamic religious learning at Islamic universities in Lampung.

The final finding in this study is about the factors that hinder the effectiveness of using digital platforms in Islamic learning at state Islamic Universities in Lampung province. The main obstacle is the availability of the internet network or an unstable signal with a percentage of 66.7% which greatly affects the use of digital platforms in the learning process, since the availability of internet network access is essentially needed in the use of digital platforms (Mustakim, 2020). In addition, students also

stated some difficulties in applying online learning which mainly about the large cost to provide phone credit and internet needed for online learning. Several students also provided information on their problems in following technical instructions for using digital platforms which often resulted in disruptions in the implementation of online learning.

The results of this study basically conclude that in the Islamic religious higher education environment, optimizing the use of digital platforms still requires efforts to improve and support from many parties. The ineffectiveness of digital-based Islamic learning also indicates the lack of ability of Islamic education lecturers in applying digital technology and platforms in teaching and providing lecture materials. Technical knowledge and other skills related to the use of current technology are important keys to implementing digital-based Islamic religious learning (Hidayah & Kusumaningrum, 2021). There are three major aspects of the effectiveness of online learning in higher education, such as organization (culture, policy, roles), technology (availability, reliability, accessibility) and human resource capability (skill, knowledge, behavior) (Priatna, 2020). From these three aspects, Islamic higher education needs extra efforts and attention on availability dan accessibility for technology and the capability of lecturers in implementing the online learning in the future.

The results of this study also indirectly illustrate the low creativity and innovation among Islamic education lecturers in developing strategies and learning materials based on digital technology. In this case, increasing the quantity and quality of digital learning infrastructure will not be able to provide the desired results without being accompanied by efforts to increase the ability and understanding of Islamic education lecturers in the use and innovation of learning technology (Salsabila et al., 2021).

Islamic learning at Islamic universities in Lampung also only uses limited digital platforms, such as Zoom cloud meeting, Whatsapp, Google classroom, Google form and Youtube. This gives the impression that the digital platform is only a substitute for face-to-face meetings that are conditioned as closely as possible and in a way that is not much different with face-to-face interaction, even though there are many other

platforms such as Edmodo and Moodle that can be used to optimize learning (Hidayah & Kusumaningrum, 2021). Various applications that can be accessed and downloaded on playstore at no cost have not also been used as alternative materials for Islamic religious learning.

Some of these findings illustrate that Islamic lecturers still prioritize the traditional approach that upholds the etiquette of students and teachers in studying. They were not able to prioritize optimizing existing technology even though learning is done online. The lack of training and development programs for Islamic teachers and lecturers in the use and innovation of the latest learning technology is believed to be the main reason of this case. Moreover, the lack of participation of Islamic lecturers in contributing and joining these training and development activities resulted in the low ability and understanding of Islamic teachers in integrating Islamic religious knowledge and digital technology (Salsabila et al., 2021).

This research also highlights the existence of educational policies in Islamic colleges that are still not supported by the readiness and capability of the Islamic education lecturers. The online learning system policy launched by the Minister of Education and Culture in order to anticipate the COVID-19 pandemic has created its own challenges, especially for Islamic universities which have the authority to determine the implementation of the learning system independently which demands mass changes and adjustments (Novianti et al., 2020; Khoiriyati et al., 2021; Saputri et al., 2021). With the inadequate readiness and availability of infrastructure, of course the implementation of online learning in Islamic religious education is still not optimal. Therefore, cooperation, communication, and socialization from the government and Islamic higher education institutions are important factors in creating the effectiveness of digital-based Islamic education.

The implementation of digital-based Islamic learning in Islamic universities is still experiencing obstacles and problems, especially the availability of an adequate internet network and high maintenance costs. These also become major problems in the implementation of online-based Islamic learning in other studies, especially in areas with unfavorable geographical conditions (Alvianto, 2020; Anugrahana, 2020).

To reduce the potential for problems and obstacles in its implementation, it is necessary to have full supports from all parties, especially the government and Islamic education institutions to optimize any assistance to all students in providing sufficient access in the learning process (Alvianto, 2020; Anugrahana, 2020; Prasetyo et al., 2020; Pratama & Azhari, 2020). To reduce the potential for problems and obstacles in its implementation, it is necessary to have full supports from all parties, especially the government and Islamic education institutions to optimize any assistance to all students in providing sufficient access in the learning process.

### **Conclusion**

Innovation and adaptation of digital-based technology is a necessity in the process of improving the overall quality of education, especially during the COVID-19 pandemic. However, this study illustrates that not all educational institutions can realize ideal and targeted learning in accordance with the directions and technical guidelines provided by the government. Even at several state Islamic universities in Lampung, there has not been a adequate readiness of educators or instructors in optimizing the use of digital technology in Islamic learning with the lack of understanding and ability to innovate the development of digital-based teaching materials and strategies. Moreover, learning process seems to imitate a face-to-face learning system, without exploring the potential of digital sources and current technology in learning practices. In this case, the efforts and cooperation of the government, educational institutions and all parties involved in the educational process are absolutely needed in order to lead Islamic higher education institutions in welcoming various opportunities and challenges in the future.

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