



## Management of Digitalization of Islamic Boarding Schools in Realizing the Quality of Modern Education at Nahdlatul Wathan Quran House Lombok

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### Abstrak

Penelitian ini mengkaji tentang pengelolaan digitalisasi di Rumah Quran Nahdlatul Wathan Lombok dalam upaya mewujudkan kualitas pendidikan modern. Dalam era globalisasi dan digitalisasi, pesantren dituntut untuk mengadopsi teknologi informasi guna meningkatkan efisiensi dan efektivitas proses pembelajaran serta pengelolaan administrasi pendidikan. Studi ini berfokus pada langkah-langkah yang diambil oleh Rumah Quran Nahdlatul Wathan Lombok dalam membangun infrastruktur teknologi, mengembangkan kurikulum digital, serta meningkatkan kompetensi digital para pendidik dan santri. Metode penelitian yang digunakan adalah studi kasus dengan pendekatan kualitatif, melibatkan observasi langsung, wawancara mendalam dengan pihak pengelola, sedangkan teknik analisis data menggunakan model interaktif. Adapun hasil penelitian menunjukkan bahwa digitalisasi telah membawa dampak positif signifikan dalam berbagai aspek, termasuk aksesibilitas materi pembelajaran, efisiensi administrasi, dan peningkatan keterampilan digital santri.

**Kata Kunci:** Pengelolaan, Digitalisasi dan Pendidikan Modern

### Abstract

This research examines the management of digitalization at Rumah Quran Nahdlatul Wathan Lombok in an effort to realize the quality of modern education. In the era of globalization and digitalization, Islamic boarding schools are required to adopt information technology to increase the efficiency and effectiveness of the learning process and educational administration management. This study focuses on the steps taken by Rumah Quran Nahdlatul Wathan Lombok in building technological infrastructure, developing a digital curriculum, and increasing the digital competence of educators and students. The research method used is a case study with a qualitative approach, involving direct observation, in-depth interviews with management, while the data analysis technique uses an interactive model. The research results show that digitalization has had a significant positive impact in various aspects, including accessibility of learning materials, administrative efficiency, and improving students' digital skills.

**Keywords:** *Management, Digitalization and Modern Education*

## Introduction

In the era of globalization and the rapid development of information technology, digitalization has become an unavoidable need in various sectors, including education. (Dwi & Sabban, 2023) The use of digital technology not only supports the teaching and learning process, but can also improve the overall quality of education. One of the educational institutions that is starting to feel the positive impact of digitalization is pesantren. Therefore, with the development of digitalization in pesantren, this educational institution is expected to be able to improve the quality of education, overcome geographical limitations, optimize administration, and prepare students to face an increasingly digitally connected world.

We know that digitalization of pesantren is an important step in utilizing technology to advance education, including Islamic education and provide wider benefits to the community. (Haris, 2023) In the regulation of Law Number 18 of 2019 concerning Pesantren states that in an effort to increase faith and piety as well as noble morals, Pesantren that grow and develop in society with its distinctiveness have made an important contribution in realizing Islam that *Grace Lil'alamin* by producing people of faith who have character, love for the country and progress, and are proven to have a real role both in the movement and struggle for independence and national development within the framework of the Unitary State of the Republic of Indonesia. (Abdillah et al., 2024)

Therefore, pesantren education must not be left behind and need to prepare itself to face the changes that are currently happening, including digitalization or modernity. Digitalization of pesantren is important for various reasons that show the urgency of implementing information and communication technology in pesantren education such as increasing educational accessibility; enriching curriculum and learning; increase administrative efficiency; facilitate collaborative communication; and prepare students to face digital challenges. (Arief & Assya'bani, 2022)

Pesantren as the oldest Islamic educational institution in Indonesia certainly cannot be separated from historical value. The pesantren in Indonesia began since Islam entered this country. As an educational institution that has long been entrenched in this country, pesantren are recognized as having a great contribution to the historical journey of the Indonesian nation. Pesantren not only gave birth to the most influential national figures in the country, but also recognized as having succeeded in shaping its own character, where the majority of Indonesian Muslims have been known as an accommodating and tolerant nation. (Malla Avila, 2022)

In the national education structure, pesantren is a very important link. This is not only because of its relatively long history of emergence, but also because pesantren significantly contribute to efforts to educate the nation's life. Historically, pesantren were community-based educational institutions. (Hamzah, 2006). Pesantren is part of Islamic education in Indonesia, established because of the

demands and needs of the times. This can be seen in the course of history, "If traced back, pesantren were actually born on the awareness and obligation of Islamic da'wah, as well as producing cadres of ulama and da'i.

Islamic boarding schools emerged as the hope of the Indonesian nation, which was already commonly held. (Mahmud, 2005) Rumah Quran Nahdlatul Wathan Lombok is one of the Islamic boarding schools that has started steps to integrate digital technology in its educational process. As a pesantren that prioritizes learning the Quran and religious sciences, Rumah Quran Nahdlatul Wathan realizes that digitalization management can have a significant impact on the effectiveness and efficiency of the learning process, as well as increase information accessibility for students. Digitalization in pesantren covers various aspects, ranging from the use of educational software, online learning applications, to integrated information management systems. (Sholikhah, 2024) Thus, students not only get in-depth religious education, but also digital skills that are relevant to the demands of the times. This innovation is expected to produce graduates who are not only proficient in religious science, but also able to compete in the modern all-digital world.

However, this digitization process is not without challenges. Some of the obstacles faced include limited technological infrastructure, the ability of teaching staff to operate digital devices, and resistance to change from those who still stick to traditional methods. Therefore, effective management and proper

implementation strategies are needed to overcome the various obstacles already mentioned.

Some previous studies related to digitalization in developing education, such as those written by Alip Nur Yanto et al, with the title "Digitalization of Darul Mustafa Lebak Banten Islamic Boarding School" The results of the study show that digitalization of pesantren provides significant benefits, such as efficiency in administrative processes, increased accuracy and data security, and faster feedback to students. (Yanto et al., 2023)

Further research written by, Miftachul Ulum, Abdul Mun'im with the title "Digitalization of Pesantren Education (Paradigms and Challenges in Maintaining Pesantren Culture "The result of this study is that the presence of modern pesantren is a form of response to the development of the pesantren education system in the digital era that adopts the concept of virtual education. ( Miftachul Ulum, 2019)

While the research entitled Management of Digitalization of Pesantren in Realizing the Quality of Modern Education, aims to explore how digitalization management can be applied in the context of pesantren and how this contributes to realizing the quality of modern education. The results of this research are expected to be a model for other Islamic boarding schools in Indonesia in their efforts to adopt digital technology to improve the quality of education.

### **Research Methods**

This research approach uses qualitative-descriptive methods by taking

field study data located at Rumah Quran Nahdlatul Wathan Lombok. A qualitative approach can explain something behind the phenomenon.(Sholikhah, 2024) In this study, the subject of research was the caretaker of the Nahdlatul Wathan Quran House in Lombok. The data collection technique uses observation and interviews, while the data analysis technique uses an interactive model.

Usually, researchers will ask questions to participants or resource persons to find out the assessment of infrastructure in the learning process, John W Creswell calls it an open-ended approach.(Creswell, 2012) As for data analysis with data reduction stages, presenting data, displaying data according to the problems discussed in this research and verification or drawing conclusions, making corrections and checking with relevant sources and journals, so that conclusions can be made.

## **Results and Discussion**

### **A. The Urgency of Digitalizing Pesantren Management**

The management of digitalization of pesantren has a very important role in improving the quality of education towards modern education so that it can be faced with the challenges of the times (*modern era*). It is of course not as easy as turning the palm of the hand. In fact, it is closely related to problems or problems in the world of education, especially the digitization of pesantren. Therefore, researchers feel it is very important with the management of digitalization of pesantren to dismiss chaos due to the absence of good management. Here are the reasons why the management of digitalization of pesantren is very important.

#### **1. Improved Access and Quality of Education**

Accessibility of learning materials with digitization of learning materials can be accessed online by students anytime and anywhere. This allows students to study independently and add insight outside of formal study hours. Digital Learning Quality allows the presentation of more interactive and interesting learning materials, such as videos, animations, and simulations that can deepen students' understanding of the subject matter. In line with research written by Siti Alifah, improving the quality of education in Indonesia is a necessity and necessity, which strengthens all parties to continue to improve the quality of education digitalization.

Every system used has a weak side and a strong side, the system should be adapted to the circumstances of each region, so that without losing local wisdom that must be preserved.(Alifah, 2021) Thus the progress of educational institutions, in Nahdlatul Wathan Quran House Lombok As one of the centers of Islamic-based educational learning, it cannot be separated from the importance of digitalization towards modern education.

#### **2. Administrative Management Efficiency**

Data management of a digital-based education management system of pesantren can certainly facilitate the management of student data, including academic data, attendance, and health records. This increases the efficiency and accuracy of pesantren administration. Automated administrative processes such as registration, payment, and assessment can be done online, reducing staff workload and optimizing well-being in educational institutions. In line with the results of an interview with the management of the Nahdlatul Wathan Lombok Quran House "With the digitization of mbak, Alhamdulillah we as administrators feel very

helped to carry out all activities related to educational institutions here". (Alifah, 2021)

Thus, the rapid progress of a digitalization of education in the current era, both in pesantren and non-pesantren, is very helpful to improve and develop the curriculum or the development of students' abilities or the unity of students. Therefore, Islamic-based educational institutions such as the Nahdlatul Wathan Qur'an House are not outdated to lead to modern educational institutions.

### 3. Digital Skills Development

Digital skills development is a target for preparation for the future. The use of technology in education helps students develop digital skills that are needed in the era of digital literacy, for example; programming, and data analysis. Students who are skilled in technology will be more competitive in a global world that increasingly prioritizes digital capabilities in realizing the quality of modern education. In line with research written by Nuur Wachid Abdul Majid, "The development of science and technology has changed the world as the industrial revolution occurred. This can lead to a paradigm shift in society to develop work patterns and deliver information to the public. This paradigm shift is a series of trend patterns that change people's mindset to continue to actualize themselves in cyberspace".(Majid et al., 2022)

Thus, the development of digital skills has changed the industrial revolution a lot, so that it has an impact on all aspects of life, including the progress of educational institutions. From these changes will become a trend

pattern, moreover it can be developed in pesantren-based educational institutions. This is to answer that Islamic-based educational institutions are not outdated.

## B. Digitalization Strategy in Realizing the Quality of Modern Education

The digitalization strategy to realize the quality of modern education at the Nahdlatul Wathan Quran House has involved various aspects, ranging from infrastructure development, the use of digitalization of Islamic boarding schools, to improving technological skills. There are several strategies applied in the development of digitalization infrastructure, and technological skills in the Nahdlatul Wathan Qur'an House as follows:

### 1. Technology Infrastructure Development

Infrastructure development is one way to realize the quality of educational institutions towards modern education, as well as stable Internet access to support all activities in educational institutions. Adequate technological devices such as computers, tablets, and projectors, as well as software needed for the teaching-learning process and digital-based educational institution systems to manage administration, attendance, assessment, and communication efficiently.

This is in line with research written by Mia Fitriawati, "Information technology provides benefits for the progress of educational institutions, including producing good information in

the sense that the information obtained by educational institutions becomes accurate, trustworthy, timely, can be easily understood, complete, and relevant. In addition, the efficiency of the performance of educational institutions can increase. Of course, this has an effect on being able to compete with its competitors".(Fitriawati, 2017)

In addition, the argument was reinforced by the caretaker of the Nahdlatul Wathan Qur'an House, he said, "Digitalization of pesantren is the management of cottages digitally. Even regarding information, the number of memorization, and news of the development of students' abilities are carried out digitally or online".(Interview, n.d.)

Thus, the strategy that can be done in the educational institution of Rumah Qur'an Nahdlatul Wathan Lombok, one of which is by developing digitalization infrastructure, so that information becomes accurate and efficient towards modern quality education.

## **2. Improving the Digital Competence of Educators**

Increasing digital competence is one of the strategies of educational institutions towards the quality of modern educational institutions. As well as organizing regular training for teachers and staff to improve digital literacy and skills using educational technology. Continuous professional development, can provide access to teachers to attend online courses, webinars, and seminars on digital education.

In line with the research written by, Bramantyo Tri Asmoro et al "The competence of educators needed in adjusts to problems which include the inability of students to understand the material provided by the teacher, the instructions from the material have not been maximized to be understood by students and students feel online learning is boring and makes children bored includes; Learner centered tutorials, work example tutorials, education games, synchronous and asynchronous methods that can help teachers to support teacher competence in pedagogical, personality, social and professional aspects".(Asmoro et al., 2021)

Thus, one of the strategies to realize modern quality educational institutions, by increasing digital competence so that educators and education staff are not outdated and can develop sustainably.

### **C. Obstacles and Challenges in Realizing the Quality of Modern Education**

In realizing the quality of education towards modernity through the digitization of pesantren at the Nahdlatul Wathan Qur'an House Lombok as mentioned earlier, it is certainly not as easy as turning the palm of the hand. Where will face various obstacles and challenges, including:

#### **1. Infrastructure Limitations**

Limited infrastructure is one of the obstacles to realizing modern quality education. For example, internet access. This does not only happen in the Nahdlatul Wathan Lombok Qur'an house, even many educational institutions, especially in rural areas, have difficulty getting fast and stable

internet access. Furthermore, the limitations of technological devices, not all educational institutions have enough hardware such as computers, tablets, or projectors that are adequate to be used in the teaching-learning process.

In line with what was conveyed by the management of the Nahdlatul Wathan Lombok Qur'an House which stated, "One of the things that hinders the progress of an educational institution is the lack of infrastructure, especially in the field of digitalization. Well, in the cottage there is a mahram card, code or barkot that serves to open access and information about the lodge and students.

Including learning systems have begun to develop through online or digitalization".(Fitriawati, 2017) Therefore, sometimes the limitations of pesantren digital infrastructure become a little obstacle. Thus, limited infrastructure in the digitalization section can hinder the progress of quality educational institutions towards modern educational institutions.

## 2. Limited Funds

Limited funding is an obstacle to realizing modern quality education. So that the procurement of technology infrastructure and training for educators is not achieved with limited funds. Many educational institutions have limited funds for this investment. Furthermore, financial resources, lack of financial support from the government or private sector for digitization projects in educational institutions.

Thus, limited funding can hinder the progress of digitalization in educational institutions, so that later education will be outdated, therefore funding is needed to realize quality educational institutions towards modern education.

## 3. Curriculum Development Challenges

Challenges in curriculum development at Nahdlatul Wathan Qur'an house Lombok, namely Curriculum Integration, develop and integrate a technology-based curriculum that is in accordance with the values in the Nahdlatul Wathan Qur'an house and the needs of students. Material adjustment  teach, adapting teaching materials that are usually textual and traditional in nature into an attractive and interactive digital format. In line with the research written by, Lalu Abdurrahman Wahid and Tasman Hamami: "Research shows the challenges faced by Islamic education today come from internal and external areas of education. Internal challenges that must be achieved by Islamic education are the achievement of eight national standards of education, Indonesia's population growth that grows demographic bonuses, and character problems. Islamic education is required to prepare human resources in accordance with the demands of the times so as to produce alumni who survive and are able to be competent in the era of globalization. The external challenges facing Islamic education are more  future-oriented challenges".(Wahid & Hamami, 2021)

Thus the challenge faced by the institution, Rumah Qur'an Nahdlatul Wathan, is curriculum development. And in the development of the curriculum, these educational institutions must be able to combine Islamic education in accordance with the demands of the times and competencies, so that later they can realize educational institutions of modern quality.

### Conclusion

The management of digitalization at Rumah Qur'an Nahdlatul Wathan Lombok shows that the adoption of information and communication technology can significantly improve the quality of education in pesantren. Through the development of adequate technology infrastructure, the development of digital-based curricula, and the improvement of digital competence of educators and students, this pesantren is able to provide wider and more efficient access to learning, as well as improve the effectiveness of education administration management. However, the implementation of digitalization in the Nahdlatul Wathan Lombok Qur'an House cannot be separated from various challenges.

Starting from limited infrastructure, technology and funds are the main obstacles in the digitization process. In addition, resistance to the change from traditional to digital teaching methods is still an obstacle that needs to be overcome. To meet this challenge, strong cooperation between Islamic boarding schools, the government, and the private sector is needed to provide adequate financial and technical support. In addition, continuous

training programs for educators and students are essential to ensure adequate digital literacy.

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