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## PESANTREN IN THE DIGITAL ERA: LOOKING FOR THE CHANCES AND THE CHALLENGES

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### *Abstract*

#### **Keywords:**

*Pesantren Virtual, Five Pillars of Pesantren, Digital Society*

*This study aims to review the opportunities and challenges of pesantren in the digital era. As an Islamic educational institution that has survived for centuries, pesantren should adapt to the development of science and technology. Some of the questions that arise include: Do pesantrens have opportunities in the digital era? What are the challenges that must be faced in the digital era, and how do pesantrens negotiate the five pillars of Islamic boarding schools in the digital era? This study is a library research by looking at articles, journals, and scientific books related to Islamic boarding schools and their developments. By using descriptive analysis, this study shows that Islamic boarding schools can survive and adapt to the development of digital life and are able to develop better pesantren values through maximizing the use of technology and digital in teaching and learning activities to reach a wider community in general and become an inspiration for educational institutions domestically and internationally.*

### *Abstract*

#### **Keywords:**

*Pesantren, Lima Pilar Pesantren, Masyarakat Digital*

Kajian ini bermaksud untuk meninjau peluang dan tantangan pesantren di era digital. Sebagai lembaga pendidikan Islam yang telah bertahan selama berabad-abad, pesantren sudah selayaknya beradaptasi dengan perkembangan ilmu pengetahuan dan teknologi. Beberapa pertanyaan yang muncul antara lain: Apakah pesantren memiliki peluang di era digital? Apa saja tantangan yang harus dihadapi di era digital, dan bagaimana pesantren menegosiasikan lima pilar pesantren di era digital? Penelitian ini merupakan penelitian kepustakaan dengan melihat artikel, jurnal, dan buku-buku ilmiah yang berkaitan dengan pondok pesantren dan perkembangannya. Dengan menggunakan analisis-deskriptif, penelitian ini menunjukkan bahwa pesantren dapat bertahan dan beradaptasi dengan perkembangan kehidupan digital serta mampu mengembangkan nilai-nilai pesantren yang lebih baik melalui maksimalisasi pemanfaatan teknologi dan digital dalam kegiatan belajar mengajar untuk menjangkau masyarakat luas pada umumnya dan menjadi inspirasi bagi lembaga pendidikan di dalam dan luar negeri

## INTRODUCTION

Pesantren is a unique subculture of Indonesian Islamic educational institutions with firm and sticky characteristics and participates in acting as one of the institutions to educate the nation, survive and thrive under challenging times until finally being able to become one of the choices of educational institutions in today's adults. Furthermore, by emphasizing the importance of the kyai figure as a competent person, the pesantren is also colored by how the kyai's management cultivates and directs the pesantren to bring its vision and mission to be able to survive against the times without being eroded by the existence of the kyai itself (Dhofier, 1980). Pesantren, in its development, has become one of the educational institutions that contribute alumni with a distinctive Indonesian character and is also able to compete with alumni of other educational institutions, both in academic contests and careers, because of the development of character during their education at the pesantren (Zuhriy, 2011). The world's attention to this institution is no less significant, especially after a series of humanitarian incidents that happened to Bali about two decades ago, thus creating a stigma that is quite a challenge for all pesantren in Indonesia to enforce the statement that it is not representing all pesantren in Indonesia (Pohl, 2006). However, pesantren still exist, and even now, pesantren can develop with variations and innovations made by pesantren managers, ranging from reforming the education and teaching system, updating its infrastructure, and increasing early collaboration with several other educational institutions in order to support the future of alumni to the use of technology in the education and teaching process.

Five essential pillars in pesantren become a point of discussion for scholars when conducting further research on pesantren, namely Pondok (Boarding School), Mosque, Santri (Students of Pesantren), the teaching of classical Islamic text, and the kyai (the leader of pesantren) (Dhofier, 1980), where each of the five pillars has a role and influence on each other so that the understanding of the pesantren is more substantial and thicker with the mention of the conditions for the existence of the five pillars, pondok, as facilities and infrastructure that supports the implementation of teaching and educational activities, is a vital requirement for how the dynamics of activities in pesantren run, mosques, as the main axis of pesantren activities and as a central place for most of the teaching in pesantren, especially worship, students who are the part of the object of teaching and educational activities of the pesantren which is also the purpose of carrying out the activities of the

pesantren with the hopes that the pesantren aspires to, classical Islamic text, which is the legacy of the predecessors of the founders of Islamic sciences who became role models for the younger generation of students with all Islamic values and traditions that have been preserved and preserved in the writings of their predecessors, and the kyai, who is the leader of the pesantren, has a vision and mission for the management of his pesantren, laying out ideals for the future of the pesantren and the sustainability of the existence of the pesantren in Indonesia (Dhofier, 1980).

Pesantrens' development is now improving with various innovations and creativity of each pesantren as a power of competence with other pesantren. On the one hand, this positively increases the number of pesantren so that they can reach all levels of society, both the lower, middle, and upper classes, religious communities, and people unfamiliar with religious knowledge. However, on the other hand, it impacts the quality of education and teaching compiled and designed by each pesantren, if the focus of development is only on facilities and infrastructure (Muttaqin, 2014). At the end of 2019, with the outbreak of the COVID-19 pandemic, the education process in Indonesia had a significant impact. Even more so, after the government's preventive measures to prevent the spread of this cluster more widely, the Ministry of Education issued an appeal No. 15/2020 that the learning and teaching process should be held online and the importance of social distancing (Supriyono, 2022). This starting point, pesantren, as educational institutions that have adapted since the 19th century, must be able to position itself once again as an institution that can survive with these conditions, of course with a strategy that can adapt to the decisions of the government, by optimizing the use of technology. Supriyono (2022) then underlined that this pandemic has accelerated digital change in pesantren without denying the shortcomings and difficulties in its implementation. Likewise, Manan (2019) also realizes that in this 4.0 era, pesantren should appear and maintain their position as contributors to excellent academic candidates for the state and nation, especially in the next few years era 4.0 will pass by the renewable era.

## RESEARCH METHODS

In this study, I will analyze the literatures and the journals with the best effort to link the data and ideas with the main idea of this study. To the best of my knowledge, this research will have at least two main contributions. First, to help increase public literacy on

the development of pesantren regarding its contribution in the digital era and is expected to be able to encourage people to promote pesantren as well. Second, to increase public knowledge about the pesantren as a competence educational institution and to open the public sphere to begin the study of the possibility of the pesantren's existence during the era digital's development.

Author organizes this research as follows; the second part will contain a literature review on history of pesantren and its development of technology during the Industrial era in Indonesia. Furthermore, in section 3, the data and methods used to analyze and review each source. Section 4 contains the results and discussion, while the last section will contain conclusions and directions for future research.

In this study, I took several previous sources of literature that have the same object of discussion, both related to pesantren, pesantren's technology, and pesantren's digital developments, which led to deeper analysis in their studies. Therefore, this research was conducted with a descriptive qualitative approach by reviewing the scientific work of previous authors and analyzing the main ideas contained therein. In addition, I obtained factual data from journal articles, several online journals, and other media to see the gaps in differences between previous and future research; then will describe what has been learned by integrating the findings of different studies to answer research questions (Gough, 2015).

Through a study of previous literature, I found much research on technological developments and the digitalization of pesantren, especially in the 4.0 era. However, until this research was conducted, no studies had been conducted on the challenges and opportunities of pesantren in facing the further digital era in the future. Therefore, it is the point of the novelty of this research, with the hope that it can be one of the latest studies under the theme of pesantren in the further digital era and can provide an overview of how further research related to this theme can be carried out.

## **RESULT AND DISCUSSION**

### **Pesantren and Its Development History**

Pesantren is the oldest and unique education system in Indonesia, a never-dry source of inspiration for science lovers and researchers to unravel its anatomy from various dimensions. The extensive Indonesian dictionary defines pesantren as a dormitory, a place for students, or a place where students learn the Koran. Meanwhile, pesantren is where

students usually live in boarding houses (dormitory) with teaching materials of classical and general books, aiming to master Islamic religious knowledge in detail (Sukawi & Haryanto, 2020). Furthermore, Sukawi & Haryanto (2020) explain that definitively, the meaning of pesantren cannot be explained concretely. Even with the development and dynamics of the times, the definition and perception of pesantren have changed too, so that pesantren can no longer be interpreted as a traditional educational institution.

Since its presence, the pesantren has survived in all situations and conditions. However, in specific circumstances, the characteristics of the pesantren never die, and all the components support its existence (Mu'id, 2019). Initially, the Pesantren was only a place for religious education, mental education, and social interaction delivered by the kyai, who managed to convey the teachings of the Islamic religion he received while studying elsewhere (Mujab, 2013). However, the rapid development of pesantren has made many variations of pesantren, ranging from traditional pesantren, which still maintain the teaching of classical Islamic books, modern pesantren, which have a new concept of education and teaching curriculum, and semi-modern pesantren, which tries to combine the tradition of teaching of classical Islamic books and pesantren modern's curriculum. Even now, several Islamic educational institutions call themselves international standard pesantren or International Pesantren (IIBS) with the characteristic of adopting the Azhariy curriculum for Arabic lessons and the Cambridge curriculum for English lessons.

### **Maintaining the existence of pesantren through five pillars**

A big idea emerged in 1980, through the dissertation of an Indonesian Muslim scholar about limiting the essential elements for religious education institutions to be called pesantren. Dhofier (1980) explains that the five pillars of pesantren in the development of the pesantren itself seem to show developments towards a brighter and better direction in the future. The five pillars are the hut (place), the mosque, the santri, the teaching of classical Islamic books, and the kyai (Dhofier, 1980).

Pondok is a place for santri to take shelter as students from a pesantren while studying at a pesantren and as a means of supporting pesantren activities requiring space. Furthermore, the existence of the pondok can distinguish the pesantren tradition from talaqqi education, which is usually held in mosques. It is also a differentiator for other da'wah activities, such as recitations for specific communities. Moreover, as an educational institution, the need for

pesantren is substantial to support the learning activities in pesantren (Sukawi & Haryanto, 2020).

The mosque is an inseparable part of the pesantren and is considered the centre of the main activities of the santri based on religion and worship. The mosque was originally the forerunner of the existence of teaching and learning activities in Islamic history until it developed and is now a characteristic of the pesantren, where it is also the axis of the activities of the pesantren.

An educational institution certainly needs the object of learning and a pesantren, where the object is the santri. Santri is a manifestation of the success of the vision and mission of the pesantren and its management as an educational institution. In the pesantren tradition, there are two types of santri, santri who live in the pesantren and live the life of the pesantren as a whole. Some students do not live, only following the learning process organized by the pesantren.

Because the basis of pesantren education is Islamic religious education, it is only natural that pesantren, in their initial appearance, make learning classical Islamic books one of the material contents delivered to students. It is inseparable from how much attention the previous scholars paid to the quality of education for the next generation. Thus, passing on the values contained therein to the leaders of the boarding school, so they can be conveyed as a form of preaching Islamic teachings.

The most influential and essential element in the pesantren is the kyai, the leader, and manager, who becomes the captain of the vision and mission of the pesantren. Therefore, the better the leadership ability in managing the pesantren, the future will also be better and more focused.

### **Pesantren's Survival during Digital Era**

There is much different information about the first pesantren in Indonesia. Some say that the forerunner of pesantren in Indonesia was the Tegal Sari pesantren in East Java which was founded in 1742. Of course, this was long before the start of the industrial revolution. However, others argue that pesantren have existed in the archipelago since the 13th century. This difference cannot be separated from the role of pesantren and their existence which has survived to this day (Syaifuddin, Mujahidin, Rahman, Saleh, & Halim, 2021). By the era of industry 4.0, the need for adjustment to the environment and demands for future

orientation is substantial. Even in the field of education, it invites educational institutions to be even more active in making improvements and renewals starting from facilities and infrastructure that must be more adapted to technological developments, teacher capabilities to a dynamic curriculum by optimizing the use of technology (Manan, 2019).

Present as one of the educational institutions that still exist in this 4.0 era, pesantren are challenged to participate and contribute to adjustments that arise as a result of the development of the digital revolution, especially in the world of education. Although based on religious education, pesantren have succeeded in realizing the adjustments expected by today's millennial society by carrying out updates in various data collection systems, financial management systems, learning systems and even information distribution systems from the pesantren for the community (Manan, 2019).

The development of pesantren in the renewal of digitalization provides opportunities for many necessary parties to support the activities of the pesantren itself (Basuki, 2007). Teachers competent in their respective fields must be able to operate computers to increase teaching preparation so that the material presented later is not only glued to the handbook. The pesantren administrators, financial staff, secretarial staff, and others are also not spared the duty and call to upgrade themselves, thus facilitating their work and maximizing the time available for more valuable activities. As learning objects in pesantren, the students cannot be left alone with religious education. However, they must also be given sufficient knowledge about technology to compete with other school alumni after becoming alumni in the future (Palvia et al., 2018).

With the outbreak of the COVID-19 virus at the end of 2019, the government urges the elimination of face-to-face learning in all educational institutions, including pesantren. In this case, the research conducted by Supriyono (2020) can represent how pesantren adapts to maintain its existence as an educational institution by continuing to carry out online teaching and learning activities, although there are still many obstacles.

### **Between Chances and challenges: Pesantren to be Developed**

Along with the passing of the WTC tower terrorism incident in September 2001, Islam received quite a lot of attention, especially after the Bali bombing incident that occurred in 2002, resulting in the emergence and spread of negative stigma in the world community in general towards Islamic educational institutions, in this case, pesantren. It is where a

challenge comes from on how do pesantren deal with non-violence, interfaith tolerance, pluralism, secular institutionalization, human rights, gender equality, democracy, and political and social justice? (Pohl, 2006)

Moreover, Pohl (2006) stated in his study, that pesantren as a political protest movement against the colonial regime. As a result, the role of the pesantren's opposition to the cultural impact of colonial rule is highlighted, and the integrative aspect is not mentioned.

To answer this challenge, pesantren has a powerful and dominant role since its presence in the community, especially in the lower middle class. During the struggle against the invaders, the pesantren emerged as one of the front lines in the fight against the invaders, for example, the resistance in Kalisalak, Central Java, led by Kyai Ahmad Ripangi Kalisalak, the leader of the Kalisalak pesantren. In addition, Pesantren also play a fairly active role in being a role model for social life for the surrounding social community, as pesantren are also able to become the centre of socio-religious activities of the community. The role of the alumni of the pesantren is no less significant. Not a few high-ranking officials in the government are alumni of the pesantren, such as KH. Wahid Hasyim, Abdurrahman Wahid, Abdul Somad, and others (Syarifuddin, Mujahidin, Rahman, Saleh, & Halim, 2021).

In term of education, pesantren certainly have an essential role in producing quality alumni, both academically and non-academic. It is supported by the development of the advanced level of the pesantren itself, where some pesantren can establish higher education institutions as a form of continued attention to the importance of education and teaching based on pesantren. Moreover, several pesantren also collaborate with domestic and foreign universities to ensure the future of their alumni's educational careers and as a forum for the development of teaching and education that has been obtained in pesantren (Syarifuddin, Mujahidin, Rahman, Saleh, & Halim, 2021).

Concluding from the results of the analysis of previous literature studies, the author can draw some similarities with the idea of research that will be carried out by the author later. Previous research has mainly focused on the development of pesantren and the role of pesantren in the digital era 4.0 as educational institutions that still exist. However, the authors have not found any research involving an analysis of the opportunities and challenges of pesantren in the upcoming further digital era. Therefore, this study was conducted to fill the gaps between previous literature studies.



## **Pesantren as an Educational Institution**

The journey of the development of pesantren in Indonesia from its inception until now has a long and varied history. The pesantren, which at that time emerged as one of the movements for spreading Islamic da'wah brought by Muslim scholars to Indonesia, including Walisongo, began to develop into a renewal movement that contributed to the fight against the colonialists. Until then, it became a religious, educational institution in the early 20th century (Arif, 2013). The development of pesantren through various reforms since independence until the issuance of Law number 20 of 2003 concerning the National Education System (Sisdiknas) provides considerable opportunities and hopes for the development of pesantren, with the government's recognition that pesantren are legal, educational institutions in the field of religion in Indonesia. It has encouraged pesantren observers with various proposals, including the modernization of the pesantren curriculum as a guide for developing pesantren in educational institutions in Indonesia (Muttaqin, 2014).

With an integrated curriculum, several pesantren have succeeded in proving the competence of their alumni as graduates who are ready to face the challenges of the times and continue their studies even though they are not majoring in religion as studied in pesantren. However, nowadays, the challenges of pesantren alumni to take part as academics and practitioners by making pesantren the basis for their life experiences are more and more varied, especially in an era where everything is integrated with the internet (Mu'id, 2019).

The uniqueness of pesantren as an educational institution lies in its teaching curriculum, which is more religious in content and in their daily activities. Some pesantren add life skills learning which is expected to be useful for their students after graduation. For example, some pesantren educate their students to participate in managing their pesantren business units, intending to be able to learn how to organize and manage these business units so that they can provide reasonably good profits. In addition, Pesantren involve their students in agricultural activities or other skills (Mujab, 2013). It is certainly an advantage for pesantren, where graduates are expected to be not only familiar with the subject matter but also to be able to take advantage of their valuable experience while being students at pesantren for the wider community (Isbah, 2020).

Another advantage in pesantren education is the character education that students get through the dynamics of life in the pesantren along with contact with the educators, either

directly or indirectly. Character education in pesantren can also be used as a benchmark for the success of pesantren in educating their students through the design of daily activities and additional agendas as well as curriculum formulation. Both intra-curricular, co-curricular, and extra-curricular have a role in shaping students' character by the expectations of pesantren. It can be seen from how students live their daily lives at the boarding school, act on all the events that happen to them, communicate with their fellow friends, and respect older people. Even how students assess their achievements are manifestations of character education in the pesantren (Zuhriy, 2011).

### **Pesantren “Virtual”, the Challenge and the Chance**

Today's technological developments have affected almost all aspects of human life: working, interacting, managing data and information, analyzing data, entertainment, and others. The emergence of the E-revolution has given birth to e-mail, e-commerce, and others. Even now, e-education or online education has emerged that changes how we analyze the teaching and learning process (Palvia, et al., 2018). Online education is becoming more technologically, economically and operationally viable as information and communication technologies evolve. Incentives for universities to offer online programs include financial constraints and rewards (e.g., reduced infrastructure for classrooms, offices, cafeterias, dormitories, and libraries), an increase in non-traditional students working full-time, and technological advances that make implementation easier.

As an educational institution that has managed to survive to this day, facing the rise of online education, Islamic boarding schools are faced with the challenge of once again testing their adaptability to the progress of the times without losing their identity. Therefore, the Islamic boarding school is again questioned whether it can survive in adjusting the identity of the pesantren education through online education? Furthermore, what challenges must the pesantren face if it is able? These two questions represent most of the questions regarding the pesantren version of online education.

The adaptation of Islamic boarding schools to technological developments has been carried out since time immemorial when technology in the form of computers entered Indonesia, which means the adjustment of the pesantren environment to the entry of technology can be done and based on its evaluation, it has a positive impact, it can be seen by the number of pesantren that is improving its public information center system to make

it easier and faster to be consumed by the public wherever and whenever. In addition, with the significant influence and trust given by the community, Islamic boarding schools are challenged to be able to reach anyone, anytime and anywhere, based on the community's need for the presence of pesantren, both as educational institutions and as mobilizing social institutions (Qudsy, 2019).

In 1999, a virtual pesantren website appeared online, which was well received by the public. With its "virtual" face, this website succeeded in attracting the attention of the people who at that time were new to the virtual world and wanted a new form of pesantren as an educational institution that could be reached efficiently and effectively. In its development, this pesantren presents all its activities virtually, starting from the presentation of material, the virtual learning process by teachers, to the administrative process carried out without direct face to face (Fakhrurrozi, 2021). Even though it is done virtually, the entire teaching and learning process can be carried out as varied and cooperative as online learning is today. However, because this is still new and foreign to the public, it is not surprising that in the future, this "virtual" pesantren is better known as a means of providing online courses for materials taught in pesantren (Qudsy, 2019). In addition, the emergence of this "virtual" pesantren is a big steppingstone for the digitalization of pesantren, where one day later, the pesantren will develop into a real "virtual" pesantren.

Through the development of pesantren, which was initially only a process of learning religious knowledge by kyai to their students without a specific method and curriculum, pesantren then turned into an educational institution with an essential role in producing quality academics who can compete with alumni of schools other than pesantren. Like the legality obtained by pesantren at the beginning of the 21st century, followed by several births of the muadalah curriculum, which was equated with formal education without having to take state exams, and a series of support and assistance and recognition from the government for pesantren. Therefore, the author argues that the emergence of "virtual" pesantren, which is still underestimated at this time, will get a better response in the future and be able to become one of the new variants of pesantren that will enrich the treasures of pesantren in Indonesia.

## **Negotiating the Five Pillars of Pesantren**

Departing from the issue of the emergence of “virtual” pesantren above, previous research emphasized that “virtual” pesantren is impossible to replace the existence of real pesantren that already exist at this time. It is because “virtual” pesantren do not meet the requirements for naming pesantren, as previously mentioned as the five pillars of pesantren. In this context, the author realizes the absence of the five pillars of the pesantren in real terms. However, suppose the point of view of the emergence of this “virtual” pesantren is not to replace but to add new variants of existing pesantren. In that case, this is still acceptable as long as it can prove ownership of the five pillars of the pesantren that have been approved by the ministry of religion. It is where the analysis of the five pillars of the pesantren must be tried to prove whether the five pillars can be “virtualized” as well?

The “virtual” pesantren does not have a significant difference in ownership of the five pillars of the pesantren with other real pesantren; at least, several pillars can be compared. The first is the form of kyai, santri, and classical Islamic book learning. For “virtual” pesantren, this can be displayed and managed virtually, without taking the arrangement. The presence of the kyai can be arranged in several moments of the togetherness schedule of students, teachers and kyai in one virtual space, as well as students. Meanwhile, for classical Islamic book learning, both teachers who will deliver the material and students who are ready to listen to the teacher’s delivery can use e-books and other supporting tools during the online learning period. Of course, in practice, the activity management and schedule of “virtual” pesantren activities must also be arranged so that they are not much different from real pesantren.

The second thing is the cottage (infrastructure) form and the mosque. In its form, of course, both cannot be found in “virtual” pesantren, but that does not mean that a solution cannot be found. For example, the existence of a website and other online learning support programs, such as e-libraries, for online libraries can be an alternative to libraries in the real world. Then, for mosques which are the central point of Islamic boarding school activities, especially worship activities, such as fardlu prayers and other prayers, it can still be carried out in the mosque around which the santri are located, but with a “virtual” direction and escort from the teacher about what must be done.

To support this virtual learning process, the “virtual” pesantren and the “virtual” students will face several obstacles if not appropriately handled. These include adequate

internet network strength, appropriate and exciting programs and applications, and possible errors occurring during the online learning process. Another thing that can be maximized in this online learning is using Augmented Reality (AR) technology. Finally, of course, the “virtual” pesantren must be able to provide suitable learning modules that their “virtual” students can use with the right escort.

In the end, all these analyzes are only temporary assumptions because, in reality, the implications have not been found for any “virtual” pesantren, so they have not been able to provide clear answers about how the opportunities for pesantren to appear in “virtual” are real and contribute like real pesantren in general.

## CONCLUSION

As an educational institution that existed even before the birth of the Indonesian state, I argued that pesantren contributes significantly to the country’s development and has become one of the milestones in the success of the nation’s competence in national and international arenas. Moreover, it is inseparable from the existence of a special education that is only owned by pesantren in educating their students to become alumni who can compete with any party in any field, including science and technology. Furthermore, I argued that pesantren can survive and adapt to the rapid development of the times, especially after the entry of technology and digital life. Therefore, it is essential that pesantren can always answer all the challenges of the times with their unique strategies and become one of the right and superior educational institutions throughout the ages.

With the development of types of pesantren and the presence of government support for their activities and development through the five pillars of pesantren, the quality of pesantren can be adequately improved and integrated with the presence of technological developments. Even further, pesantren can still develop to a better point through maximizing the use of technology and digital in learning and teaching activities so that they can reach a broader range of people in general and be an inspiration for educational institutions domestically and internationally.

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