

The Existence of Pesantren Based Technology: Digitalization of Learning in Pondok Pesantren Darul Ulum Kudus

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Abstract

This research is motivated by developing technology. Pesantren have the choice to adapt to technology or reject it. Both choices have their respective impacts. This study aims to explain the adaptation to the use of technology in the Darul Ulum Pesantren in Kudus and how the position of the Pesantren Kyai after the use of technology. The research method used is a qualitative research method through the process of data collection, data reduction, data presentation, conclusion, and data verification. Search data using interviews, observation, and documentation. The object of this research is the Pesantren program related to the application of technology and the communication process of Kyai with Pesantren residents. The findings of this study state that Darul Ulum Kudus Pesantren is conducting an adaptation process to technological advances by approaching education, digital literacy, and the virtual Qur'an. Pesantren utilizes Whatsapp, Facebook, Instagram, and Youtube. This causes the existence of Pesantren outside to be better, meaning that more people know and know about the programs Pesantren. However, it causes a decrease in the sacredness of the Kyai for his santri. Kyai becomes dialogic and democratic rather than authoritarian. This research implies that Islamic boarding schools that choose to adapt to technological developments will change the authority of the Kyai. But the Kyai also has the authority to make his Pesantren adapt to technology or reject technology.

Keywords: *The Existence of Pesantren, Kyai, Pesantren, Technology*

Abstrak

Penelitian ini dilatarbelakangi dari teknologi yang semakin berkembang. Pesantren memiliki pilihan untuk beradaptasi dengan teknologi atau menolaknya. Kedua pilihan tersebut memiliki dampak masing-masing. Penelitian ini bertujuan



menjelaskan adaptasi terhadap penggunaan teknologi di Pondok *Pesantren* Darul Ulum Kudus dan bagaimana kedudukan Kyai *Pesantren* pasca penggunaan teknologi. Metode penelitian yang digunakan adalah metode penelitian kualitatif melalui proses pengumpulan data, reduksi data, penyajian data, penarikan kesimpulan dan verifikasi data. Pencarian data menggunakan wawancara, observasi dan dokumentasi. Obyek penelitian ini adalah program *Pesantren* yang berhubungan dengan penerapan teknologi dan proses komunikasi Kyai dengan warga *Pesantren*. Temuan penelitian ini menyatakan bahwa Pondok *Pesantren* Darul Ulum Kudus melakukan proses adaptasi terhadap kemajuan teknologi dengan melakukan pendekatan edukasi, literasi digital dan ngaji virtual. *Pesantren* memanfaatkan Whatsapp, Facebook, Instagram dan Youtube. Hal tersebut menyebabkan eksistensi pondok *Pesantren* di luar semakin baik, artinya semakin banyak orang yang mengenal dan mengetahui program di pondok *Pesantren*. Namun menyebabkan berkurangnya kesakralan Kyai bagi santrinya. Kyai menjadi bersikap dialogis dan demokratis daripada otoriter. Implikasi dari penelitian ini adalah pondok pesantren yang memilih untuk beradaptasi dengan perkembangan teknologi akan mengubah wibawa kiai. Namun Kyai juga memiliki kewenangan untuk membuat pesantrennya beradaptasi dengan teknologi atau menolak teknologi.

Kata kunci: Eksistensi *Pesantren*, Kyai, Pondok *Pesantren*, Teknologi

Introduction

Pesantren education in terms of its institutional role is a sub-system of national education and historically has made a significant contribution to the progress of Islamic civilization in Indonesia. Pesantren is a traditional Islamic educational institution to understand, appreciate, and practice the teachings of Islam (*tafaqquh fi al-din*) by prioritizing the importance of Islamic religious morality as a guide for people's daily lives. In Indonesia, it is a form of *indigenous culture* or the original form of Indonesian culture, because educational institutions with the pattern of Kyai, santri, and dormitories have been known in Indonesian folklore and stories, especially on the island of Java (Zhofier, 2016). Therefore, Pesantren is one of the national wealth. As an educational institution that was born from the womb of the village community's culture, in its journey until now, Pesantren as a place of religious education has a clear social base because its existence is integrated with the community.

Pesantren has strong roots *socio-historical*, thus enabling it to occupy a relatively central position in the scientific world of Indonesian society, as well as survive and adapt to the changing tides of the times. Many national and even international figures were born from Pesantren, such as KH Hasyim Asyari, Wahid Hasyim and Natsir. This proves that Pesantren has strategic strengths and abilities to produce quality human beings, have

broad knowledge, is forward-thinking, and has a strong national perspective (Baso, 2016).

Since the beginning of the 20th century, the development of *Pesantren* has begun its transformation, starting by incorporating elements of generic education into its curriculum. With these reforms, *Pesantren* which initially had a traditional character changed to using a way of adapting themselves and adopting a system that had been antithetical to its sustainability, this was done using updating the institutional structure or adopting the form of a formal school. The principle of modern education arises because the existing and established *Pesantren* education model during the colonial period was felt to be no longer by the times, so it was hoped that *Pesantren* could adapt to current conditions (Thohir, 2017).

Pesantren has a new problem. *Pesantren* are required to quickly accelerate in various aspects, as a logical consequence of the application of *high-tech* (high-tech). In this phase of the information society, *Pesantren* is increasingly facing challenges that are not light and more complex than in previous times (Bisri & Husni, 2020; Indra, 2018). Therefore, a breakthrough is needed to start introducing and implementing information and communication technology in *Pesantren* through various appropriate methods. Technological developments can change all aspects of life, including the public's perspective on *Pesantren*. Indirectly, *Pesantren* is faced with two choices, namely having to show a "new face" as a response to the reality that is happening or staying with the situation that maintains the traditional, distinctive, and unique side. If the *Pesantren* presents something new and leaves its traditional side, there will be consequences. It could be that people no longer believe in the sacredness of *Pesantren* which can galvanize the morals of their santri.

Technological advances interfere with the independence of *Pesantren*. *Pesantren* is a non-formal Islamic educational institution that has independence. Even that independence sometimes becomes a strong authority. The authority of *Pesantren* is reflected in the unwillingness of *Pesantren* to become part of institutions under government control. The decisions of the *Pesantren* are usually the '*dawuh*' of the Kyai and cannot be disputed. With the advancement of technology, the existence of *Pesantren* may be reduced because it is no longer actual. Or even the reduced existence of *Pesantren* is caused by the loss of the sacredness of *Pesantren* (Kyai) in the eyes of their santri.

There are several studies on the existence of *Pesantren*. Research conducted by Abd. Hadi Rohmani with the research title "*Learning System Transformation in Sidogiri Pesantren*", this research concludes that this *Pesantren* is one of the *Pesantren* that has begun to make changes and improvements in all aspects of education (education) (Rohmani, 2017). Other research was conducted by Hasan Basri under the title "*The Existence of Pesantren: Between Tradition Cultivation and Educational Transformation*". This study tries to reconceptualize the disclosure of the characteristics of *Pesantren* as a center of learning and also character building (Basri, 2017). Another example is a study conducted by Hanwin Muzzakki and Khoirul Mudawinun Nisa 'under the title "*BaseTransformation of Tradition Pesantren Salaf Modern Era*" the study concluded that tradition in *Pesantren Salaf* is an accumulation of interpretations that have been made by the ancestors of the guidelines and tools in the environment. And the characteristics of the tradition that must be maintained include the teaching of the Kitab Kuning, social control, the formation of a complete Muslim personality, and the emphasis on the moral aspect (Muzakki & Nisa', 2020). The three studies have not shown any research that focuses on studying *Pesantren*-based Technology by looking at the ways of adaptation and the sacredness of the Kyai. Therefore, it is necessary to research the existence of *Pesantren* based on technology. One of the *Pesantren* that has implemented various technologies is the *Pesantren Darul Ulum Kudus*. The formulation of the research problem is how the adaptation of the *Pesantren Darul Ulum Kudus* to the use of technology and how the position of Kyai after the use of technology.

Research Method

This research is qualitative. The research was conducted from February to March 2020 at the *Pesantren Darul Ulum Bae Kudus*. Collecting data use interviews, observation, and documentation. The *Pesantren* has 1 Kyai, 3 ustadz and 200 santri. Interviews were conducted with Kyai, 3 ustadz, and 7 santri. The selection of respondents using *purposive sampling*. The interviews conveyed the contents of the *Pesantren* program related to the use of technology, the daily activities of santri, the way of communication among the *Pesantren* residents, and the media used by the *Pesantren*, and the views of the community towards the *Pesantren*. Observations were made by observing the activities of Kyai, ustadz, and santri who had become programs in the *Pesantren*. Documentation is done by taking pictures and drafts of *Pesantren*'s activities. Data analysis went

through the data reduction stage, data presentation, and conclusion drawing. Meanwhile, data validation uses source triangulation.

Results and Discussion

Pesantren Adaptation to Technology

Schools to Effective Learning is required by every educational institution, including *Pesantren*. Technology needs to be a support to maximize learning. If without technology, santri need half an hour to find a theme in three types of books, with the help of technology such as *maktabah syamilah*, santri only need about five minutes (Astuti, 2014; Damanhuri et al., 2013). The contribution of technology in the learning process is related to time efficiency. This has a positive impact related to time efficiency.

Technology, Information, and Communication in *Pesantren* will provide many conveniences. Such as the flexibility of educational programs, Islamic preaching and scientific study materials that can be made more interesting and memorable. The integration of information and communication technology in education in *Pesantren* can improve the quality of education and the ease of da'wah in *Pesantren*. In addition, it will encourage the acceleration of *computer literacy* in Indonesian society. *Pesantren* is a community that is not just a gathering place for santri. The interaction between the Kyai and the santri or the santri and the cleric is a transaction of exchanging ideas and ideas. This can be seen in the *Pesantren* learning tradition called *mudzakarah* (Sholihah, 2012). This is where the need for ICT to expand the scope of *Pesantren* as a medium of da'wah, exchanging ideas and ideas with the outside world who wants to make *Pesantren* a place of learning. Technology helps keep science intact. *Pesantren* needs to use technology to broaden the horizons of da'wah and Islamic scholarship. Technology-friendly *Pesantren* design is a necessity, considering that among positive things there will always be a negative side.

The choice to survive in traditional conditions causes *Pesantren* to be left behind in civilization. Thus, *Pesantren* must respond to these advances wisely. One of them is that the advancement of ICT can be a medium to maximize santri in developing knowledge. Thus, santri as a product of *Pesantren* are required to learn technology. Santri is expected to comply with social demands. They must understand the reality, understand the current situation, and be able to solve social problems with a wise attitude and based on the right law, without being separated from the traditions

held by previous scholars. This is where the role of *Pesantren* is to produce the expected santri (Mita Silfiyasari & Ashif Az Zhafi, 2020; Suryati & Adisel, 2020).

Pesantren can use information technology to make it easier for santri to study, expand the *Pesantren*'s preaching space and consider learning effectiveness. Because with technology, knowledge can be absorbed or presented without limits. There are three positive things, namely (1) As a learning tool. Learning materials in digital format make it easy to read anywhere and anytime without limits; (2) As a learning resource. The development of science takes place very quickly, requiring a fast process of learning. Without learning technology, it *up-to-date* takes a long time; (3) Learning aid facilities. Santri can provide illustrations related to the material presented using technology so that it is easy to understand (Sholihah, 2012).

The arguments above explain that *Pesantren* cannot avoid technological advances. *Pesantren* compromise with technology. This is done at the *Pesantren* Darul Ulum. *Pesantren* Darul Ulum adapts to technological advances. The method used by the *Pesantren* Darul Ulum is by adjusting the learning system. There are three ways of adaptation carried out by the *Pesantren* Darul Ulum, namely by using an educational approach, digital literacy, and learning *Kitab Kuning* virtually.

Educational Approach

Pesantren Darul Ulum is one of the oldest *Pesantrens* in the Kudus area which has approximately 500 santri. *Pesantren* has a different approach to learning and is maintained without being affected by modern educational theories that are always changing from time to time. *Pesantren* choose to develop youth education that emphasizes the moral aspect rather than knowledge. Conceptually, this teaching, indoctrination, and supervision are the characteristics of a typical education in *Pesantren* in addition to the technical form of education. *Pesantren* Darul Ulum also applies a teaching, indoctrination, and supervision approach (Raya, 2017). The concept of teaching is oriented to the activities of the teachers (Abah/Ustadz) in providing knowledge, and the concept of learning is more oriented to the activation of santris in acquiring knowledge (Junaidi, 2017). The concept of teaching at *Pesantren* Darul Ulum is sourced from the Islamic teachings of the previous founders who were knowledgeable, in this educational process it can bring up inner nuances between teachers and

santris. In this approach, the position of the two parties can have an effective impact on education and will continue, even to the point of becoming alumni or having become a teacher, the two have never reversed their position, there is no former Kyai even though he is no longer teaching. Based on the results of interviews, the adaptation carried out at the *Pesantren* Darul Ulum is by opening the widest possible learning resources. Learning resources are not only from Kyai or Ustadz. The santri was asked by Ustadz to look for current problems (especially fiqh) through internet access. Communication between santri and Kyai or Ustadz is not entirely done face-to-face but can also use social media, namely WhatsApp.

This indoctrination is intended as material taught by the Kyai to be internalized to santri. This indoctrination is a continuation of the teaching concept (Malik et al., 2017). Almost all *Pesantren* apply this indoctrination approach, one of which is the *Pesantren* Darul Ulum, here the indoctrination approach of all knowledge in the fields of *aqidah*, *fiqh*, morals, worship, and language is applied. This is done so that the education in its interpretation becomes uniform towards religious concepts and is in line with the understanding of the teacher, it can measure the extent to which a *Pesantren* is easily traceable and can measure the extent to which a *Pesantren* deviates from its ideological parent. Technological adaptation is carried out with this indoctrination approach by indoctrinating through social media such as Facebook and Instagram.

Living in a *Pesantren* is certainly no stranger to this supervisory approach, this approach is carried out to enforce norms or rules in *Pesantren*, these rules are in the form of Islamic ethics and discipline towards behavior imposed in *Pesantren* (Ma'arif, 2017). At *Pesantren* Darul Ulum have regulations that are explicitly written along with sanctions if violated and posted on the wall where the santri gather for curfew (compulsory education). If someone violates it, they will get sanctions, in the form of *ta'zir*, the *Pesantren's ta'zir* system also has several levels, if the violation is minor, it will be *ta'zir* by doing *takhrijul hadith* according to the theme given by the Kyai digitally, but if the violation is serious, it will get double *ta'zir*. This is done so that santri can use technology and not repeat their mistakes. The policies and rules have been approved and set by Abah.

Digital Literacy

Information search skills can be a carrying capacity and become a kind of facility for learning more persistently and efficiently. Someone

literate (information literate) is able to explore the vast ocean of information that is getting wider and more complex, both using printed and electronic sources. In addition, someone who can search for information will ease himself to learn independently and interact with various information wherever he is. Because at this time everyone is faced with various types of information sources that are growing very rapidly, but not necessarily all the information that exists and is created can be trusted and by the information needs of information seekers (In'amurrohman, 2019).

Information literacy is very useful in the world of education to support the implementation of a competency-based curriculum that emphasizes that santri can take advantage of information from various sources of information for themselves. In addition, with their literacy skills, santri can think critically, and logically and not easily believe in the information they get until they evaluate and verify the information before using it (Mohammad Naufal Zabidi & Abd. Bassith Tamami, 2021; Mukhlisin et al., 2021). The information literacy mastery program at Pesantren Darul Ulum can create skills-based literacy. Included in this are the skills to search for information, select information sources intelligently, sort and assess information sources, to be able to use and present information responsibly. In learning, santri applies the principles of educational theory and learning to be a determining factor in achieving educational success.

Specifically, digital literacy in the Pesantren Darul Ulum as part of the transformation of the *Pesantren* is a new term that emerged after the advent of the internet, however, the investigation of the origins of this literacy transformation has been developed by many experts. The transformation of Pesantren at the end of the 20th century was very significant, this is suspected to be the pattern of education which initially was *sorogan* and *bandongan* then adopted the class system and madrasah, this transformation was carried out continuously as a process of adaptation of Pesantren to the development of education. In addition to the class system, Pesantren has also experienced significant changes to the curriculum. Pesantren experienced a massive transformation, which peaked in the post-reformation period when many *Salaf Pesantren* were transplanting Pesantren knowledge based on the Salaf book with a modern knowledge-based national curriculum (Zhofier, 2016). As a result, there is a diversification of literacy in which Pesantren is not only focused on studying *al-kutub al-sofro* 'kitab kuning' as the main book of *Pesantren* (*turast*),

but also *al-kutub al-baidho* 'white book', magazines, and newspapers. This shows the openness of *Pesantren* to progressive contemporary scholarship and modern learning tools (Bruinessen, 1995).

Digital literacy carried out at the *Pesantren Darul Ulum Islamic* as a change and transformation in the *Pesantren* education model brings a new direction of literacy where santri can freely access information, whether in the form of news, e-books, journals, or video tutorials that are widely circulated outside the walls of the *Pesantren*. It should be explained that the presence of digital literacy in *Pesantren Darul Ulum* is still a new thing where not all *Pesantren* has the same policy. Some salaf *Pesantren* that still rely on the classical tradition of *Pesantren* limit access to public information freely. This prohibition is by not allowing santri to bring portable communication devices (either cellphones or laptops) as the main tools in digital literacy. However, in some modern *Pesantren*, portable communication devices are allowed to access information more broadly. This policy change became an important milestone in the study of *Pesantren* (*Pesantren studies*) that *Pesantren* is trying to open themselves in a more transformative and progressive direction, as well as being open to the outside world (Ja'far, 2019).

This openness is presented to develop *Pesantren's* tradition of the academic salaf and modern scholarship. Digital literacy in *Pesantren* has a starting point as a bridge for academic encounters between santris and the outside world of boarding schools and provides opportunities for santris to manage as much and as good information as possible. Here, santris are given the freedom to choose and sort out what literature they will read as a reference for their understanding of Islamic studies and *Pesantren*. However, digital literacy also has a critical point, namely massive Islamism, hoaxes, and religious conservatives wrapped in religious popular studies. Furthermore, the dead point of digital literacy in *Pesantren* is when santris are unable to manage and filter existing Islamic discourses, then at a certain point, digital literacy will be more dominant than turats literacy developed by *Pesantren* (Muhamad Abdul Manan & Mahmudi Bajuri, 2020).

Learn Kitab Kuning Virtually

Santri Kalong is santris or santri who come from the villages around the *Pesantren*. Santri Kalong is santri who does not stay at the boarding school, they only come when attending lessons delivered by a Kyai or *ustadz*. *Santri Kalong* only carry out formal learning in *Pesantren*. In the

current context that is full of virtual learning, the meaning of *Santri Kalong* can change to the wider community who access websites or *Pesantren* sites to seek knowledge, or even learn religion virtually (Rifa'i, 2009). This kind of virtual learning model has become increasingly massive with policies from the government of distance teaching, especially santri classes who execute in the application area, although *Pesantren* persist with face-to-face

The distance learning policy cannot be avoided along with the Covid-19 disaster. With government policies related to covid-19, and the zoom meet facility or other online applications, the routine recitation of *Pesantren* in assisting the community should not be off. If in the past radio and television provided recitation of *Pesantren* Kyai so that they could be accessed by the public, now there are more applications, such as YouTube. The study of *Al-Hikam* by Ibn Athaillah As-Sakandari was supervised by KH. Mochammad Djamaluddin Ahmad at the Bumi Damai Al-Muhibbin *Pesantren* can be enjoyed even through the NU Channel account. *Pesantren* Tebuireng also does the same thing through the official account of the Tebuireng *Pesantren* (Tebuireng Official) which is empowered by KH. Musta'in Shafi'i, KH. Kamuli Chudlori, Agus Ahmad Sulhan, KH. Taufiqurrohmah, and other kiai. the same thing is done by many *Pesantren*, including the *Pesantren* Darul Ulum through its YouTube account (Mukhibat & Ghafar, 2019).

This "virtual *Pesantren*" class that examines the *Kitab Kuning* is important considering the data from the Minister of Research, Technology and Higher Education presented by Mohammad Nasir, that the challenges for universities and the younger generation are intolerance, radicalism, terrorism, and drugs. He even streamlined hoax news that was inputted by Kominfo on as many as 800,000 sites with negative content. Here the function of *Pesantren* is very much needed to minimize the birth of radicalism that comes from religion, that Islam always loves peace, *rahmatan lil alamin*. Although the attribution of violence, radicalism, terrorism, and intolerance is often too reckless to attribute to Islam. However, the majority of non-Muslim countries do not accept this explanation. There is no connection between each person and his religion when committing violence. That is overly simplistic, though it still holds. Therefore, the breeding of santri must be accelerated and more massive, so that one possible alternative is, not only cadre in the real world, but also to give birth to them in cyberspace, the internet, or what is termed the "global village". If the santri in the *Pesantren* is a manifestation of the essence of the teachings

of the *Kitab Kuning*, then how to realize or give birth to the appearance of the *Kitab Kuning* in digital society (digital society, digital village) (Musthofa et al., 2021), so that what appears in cyberspace is the tranquility of the Islamic boarding school. This is a challenge for Islamic boarding schools that have created a digital domain, such as the *Pesantren Darul Ulum*.

The Position of Kyai after The Use of Technology

Pesantren is no stranger to the community in their learning process which is still traditional by using the *Kitab Kuning* as the main teaching material. A Pesantren is led by a Kyai and the references to the books used are from classical books, classics here are defined as knowledge that has been taught and practiced since ancient times by the Prophet Muhammad.

Kyai leadership cannot be separated from ability, authority, and power. What is meant by ability is all the power, ability, wealth, skills, and strengths contained in individuals to behave, especially as leaders. While authority is a leader who has authority that has advantages, so that he has the power to bring others to do certain actions, or he can give his leadership influences to his subordinates or followers. Because of that, authority is a technical need or necessity, because it will lead to normative adherence to behavior and what is meant by power is power, authority, and influence to regulate and direct followers (Kesuma, 2014; Musaropah, 2018).

The position of the Kyai who is all-determining in the learning system and the life of the santri tends to lead to the establishment of absolute authority. Zamakhsari money lender in his book entitled *The tradition of Pesantren Study on Worldview Kyai*, indicated that most clerics in Java assume that boarding can be likened to a small kingdom where clerics are the absolute source of power and authority in the life and environment of Pesantren (Zhofier, 2016). So that all Pesantren policies, both in terms of objectives, implementation, and evaluation, become the authority of the Kyai caregivers. Kyai control and controls all sectors of Pesantren's life. Ustadz especially santri, only dare to do something out of the ordinary after receiving the blessing of the Kyai (Fadhilah, 2011).

Kyai, in the Pesantren tradition, is the central figure. In addition to leading a Pesantren, the term Kyai is related to a title that emphasizes the nobility and voluntary recognition of someone who is qualified in Islamic knowledge as a cultural leader of society. In other words, the term can be interpreted as an educated Muslim who devotes himself to God and deepens and disseminates Islamic teachings to the community. Thus, the

figure of the Kyai can be said to be a central figure in the spread of Islam and a cultural leader of community groups and has its authority (Aziz & Taja, 2016).

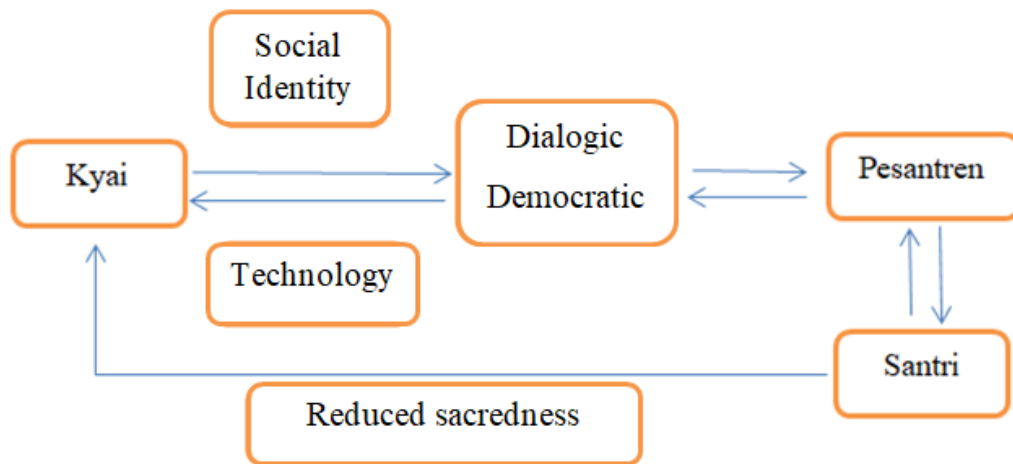
The organizational communication model of a Kyai and his santri at the Pesantren Darul Ulum is the focus of the discussion in this section. Organizational communication has a theory of organizational culture as described by Littlejohn and Karen A. Foss, namely theories about organizational culture that emphasize how humans shape organizational reality. As a study of the way organizations live, this approach looks at the meaning and value of members. This approach examines how individuals use stories, rituals, symbols, and other activities to regenerate understanding (restructuring) (Littlejohn et al., 2012). Kyai is the culmination of an organization in the *Pesantren*. Where the role of the Kyai is very influential on the existence of a *Pesantren*. This is because the communication pattern of a Kyai cannot be fully explained by the previous western communication theory (Hidayat, 2017).

In the case of the Pesantren Darul Ulum, when referring to the distribution of santri, the santris at the *Pesantren* when the research was conducted were *Santri Mukim* and *Santri Kalong*. The large number of Santri Mukim is due to the criteria that the existing santri come from outside the city or region, they live in the *Pesantren* while studying in the afternoon and return to the *Pesantren* to take part in *Pesantren* activities before sunset.

In general, in many ways, the structural and functional approach to an organization only emphasizes productivity and the completion of work tasks, while the human factor is seen as a variable in a broader sense. Santri, in this case, is a component of the communication target in the communication model of Kyai and santri, who is the main audience in the context of teaching communication at the Pesantren Darul Ulum. The efforts made by the Kyai are basically to be able to convey messages effectively to the santri. The existence and quality of santri is a means of proving and confirming the quality of the Kyai from a social point of view.

Some of the things that the researchers asked and observed in the daily lives of the Darul Ulum santri showed that several factors made a Kyai's attitude change to become more democratic and dialogical to his santri when technology was used in *Pesantren*, among others, namely; (1) The existence of charisma that cannot be explained by the santri, (2) The breadth of knowledge possessed by the Kyai, especially the knowledge of

Islam, so that they can conduct discussions freely after the disclosure of information, (3) The existence of a fatherly attitude possessed by the Kyai so that it is more prioritizing dialogue, (4) the noble character of the Kyai so that it can be used as a *role model* for his santri.



Picture 1. Pesantren Darul Ulum Communication Model

Based on the explanation above, the Kyai's communication model to santri can be described as follows: (1) The position of a Kyai is as a *sender* (communicator) who can form communication patterns under him; (2) In the context of communication, the Kyai is strongly influenced by social status in society and the technology used, with this the Kyai's position is as a *role model* for *receivers* (administrators and santri); (3) The communication pattern is dialogical and democratic; (4) Organizations under the Kyai are organizations that function as media and extensions of the Kyai to their santri; (5) Santri as *receivers* (recipients of messages), and in communicating upwards (*senders*) are flexible.

Conclusions

Pesantren carries out an adaptation process to technological advances by doing three things, namely an educational approach, digital literacy programs for santri, and Learn *Kitab Kuning* virtually. *Pesantren* utilizes social media in the form of Whatsapp, Facebook, Instagram, and Youtube. This causes the existence of *Pesantren* outside to be better, meaning that more people know and know about the programs in *Pesantren*. However, regarding the position of the Kyai, the Kyai must adapt to the use of technology to reduce the sacredness of the Kyai for his santri. Kyai became dialogic and democratic with his santri rather than authoritarian. This research implies that Islamic boarding schools that choose to adapt to technological developments will change the authority of the Kyai. But the

Kyai also has the authority to make his pesantren adapt to technology or reject technology.

Suggestion

Based on the conclusions, it is hoped that further research can examine the technology-based *Pesantren* development model because each *Pesantren* must have its model for utilizing technology.

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