Digital Transformation Based On Local Wisdom; (Smart Strategy To Realize Superior Governance System)

Lukman Sholeh[1*]

[1] Universitas Islam Negeri Maulana Malik Ibrahim Malang
Email: lukmansholeh@gmail.com.

Abstract:

This research aims to analyze and understand about analyzing the form of digital transformation strategies at Pondok Pesanatren Nurul Jadid which has the ability to transform into a leading pesantren in Indonesia. This pesantren was founded in 1948 and is quite old. At the age of 75, Nurul Jadid Islamic Boarding School has proven its existence through a fairly rapid digital transformation. This research uses a qualitative approach of case study type. The data collection technique was carried out through observation, interviews and documentation. The data analysis starts from data presentation, data reduction and ends with conclusion drawing. The results showed that local wisdom-based digital transformation emphasizes the importance of respecting cultural identity and local traditions when developing and implementing digital technology by respecting, understanding, and integrating the values, culture, and local traditions of the community or society.

Keywords: *Islamic Boarding School; Strategy; Digital Transformation*

Abstrak:

Penelitian ini bertujuan untuk menganalisis dan memahami tentang menganalisis bentuk strategi transformasi digital di Pondok Pesanatren Nurul Jadid yang memiliki kemampuan dalam bertranformasi menjadi pesantren yang terkemuka di Indonesia. Pesantren ini didirikan pada tahun 1948 dan usianya sudah cukup tua. Di usia 75 tahun, Pesantren Nurul Jadid telah membuktikan eksistensinya melalui transformasi digital yang cukup pesat. Penelitian ini menggunakan pendekatan kualitatif jenis studi kasus. Teknik pengumpulan datanya dilakukan melalui observasi, interview dan dokumentasi. Analisis datanya dimulai dari penyajian data, reduksi data dan diakhiri dengan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa transformasi digital berbasis kearifan lokal menekankan pentingnya menghormati identitas budaya dan tradisi lokal saat mengembangkan dan menerapkan teknologi digital dengan menghormati, memahami, dan mengintegrasikan nilai-nilai, budaya, dan tradisi lokal komunitas atau masyarakat.

Kata Kunci: *Pondok Pesantren; Strategi; Transformasi Digital*

INTRODUCTION

This era is one in which there are massive and comprehensive changes to all areas that make up the fabric of human life. The new order of life comes to replace the old order of life because it is considered no longer in accordance with

the demands of the times. Not everyone considers that digital transformation is a phenomenon that can be an opportunity for life, there are some people who consider digital transformation a threat. Because seeing this digital transformation era is a phenomenon when people replace activities that were originally carried out directly, into activities that are carried out indirectly.(Hidayati, 2023).

However, whatever the views of the community, the era of digital transformation cannot be avoided, it cannot blame the situation without any effort to formulate strategies in order to survive in the frenetic era of digital transformation. Theoretically, digital transformation is a shift from analog to digital. We have been doing this process unconsciously for quite some time. The use of technology in business processes can be described as digital transformation, from the use of cassettes to compact discs (CDs) to the use of paper to digital documents such as PDFs. (Kominfo, 2020). Seeing the rapid advancement of technology where it has become part of the changes that will occur, then of course the positive and negative things are inevitable. In the contemporary context, digital transformation is considered a very critical process, where the production of knowledge in information occurs through information technology such as virtual reality, learning integration and big data.(Institutions, 2021).

Digital transformation is a response to the rapid advancement of technology, which has changed the entire landscape of human life. In this rapidly evolving era, digital transformation becomes essential for humans to stay relevant, adapt to change, and take advantage of new opportunities offered by digital technology because digital technology can turn everything old into new.(Panggabean, 2018). Digital transformation involves human, cultural and technological aspects to radically increase the reach of an institution or company. (Kraus et al., 2021). The application of digital technology includes the use of artificial intelligence, data analytics, Internet of Things (IoT), and other technologies to improve efficiency, human productivity in everyday life. (Bozkurt & Sharma, 2022) Digital transformation is not just a process where humans use transformation tools but goes further than that.

However, digital transformation is not only about adopting technology, but also involves changes in mindset, skills, so as to utilize it in life. Digital transformation can occur in various sectors and industries, including business, education, health, government. For example, in education, digital transformation in education as a whole involves the use of technology in the learning process, such as online learning and virtual classes(Puja Ainun et al., 2022). Digital transformation is understood as a change in the way work is done using information technology to be more effective and efficient(Farhani & Chaniago, 2021). Digital transformation itself also includes the use of technology that radically improves the performance or achievement of an organization's goals. Digital transformation brings with it many challenges that organizations must consider more carefully in its utilization(Royyana, 2021). An institution or company is said to be digitally transformed when information technology is not only used as a digitization process, but also serves to bring change by generating new resources and generating added value for the company. There are several phases in the digital transformation process: active, formal, strategic, convergent,

innovative and adaptive.(Putri et al., 2021).

Research on digital transformation in educational institutions has been done quite a lot but few are relevant. Research relevant to digital transformation for educational institutions was conducted by(Puja Ainun et al., 2022) which resulted in the finding that digital transformation in education in the era of change creates its own opportunities and challenges experienced by the community, especially teachers and students. The opportunities and challenges of digital change in education are influenced by many factors. One of them is the geographical location factor that makes it difficult for people in Indonesian regions to follow the ongoing digital transformation, and there are communities in Indonesian regions that greatly benefit from the digital transformation of the world of education, as we know for ourselves that education in Indonesia is still uneven for each region.

Kristhophorus Hadiono's research, Rina Chandra Nur Santi with the title welcoming digital transformation, concluded that digital transformation is needed if organizations want to survive and compete. Organizations must prepare themselves well and the implementation of digital transformation must be in line with the organization's strategy. Please note that implementing digital transformation has positive and negative implications. Regarding the positive effects, it definitely brings many benefits to the organization, but the negative effects must be overcome by creating new opportunities by trying to adopt new trends in competency/skill development (Hadiono & Noor Santi, 2020).

Based on the above background, the researcher's aim is to analyze the digital transformation based on local wisdom; Smart Strategy towards superior governance. This research was conducted at Pondok Pesantren Nurul Jadid which has the ability to transform into a leading pesantren in Indonesia. This pesantren was founded in 1948 and is quite old. At the age of 75, Nurul Jadid Islamic Boarding School has proven its existence through a fairly rapid digital transformation. Until now, Pesantren Nurul Jadid has utilized technology for the benefit of the teaching and learning process. One of them is the creation of cross-platform digital media as a knowledge center.

RESEARCH METHOD

This research uses qualitative which is described descriptively with a case study approach, this research is expected to describe as a whole and thoroughly related to Digital Transformation Based on Local Wisdom; (Smart Strategy to Realize superior governance). The data collection techniques used in this research are observation, interview, and documentation study. Where observation is used to find out the steps taken related to the Utilization of the eNJe Student Supply Application System. Interviews are used to obtain data directly. Documentation is used to obtain data related to the focus of research. This research in its data analysis uses qualitative data analysis techniques. While data analysis techniques use qualitative descriptive analysis techniques and use achievement criteria as described in the following table:

Table 1: Research Informant Sources

Number	Element	Sum	Initials
1	Boarding School Caregivers	1	ZZ
2	Head of Pesantren	1	HW
3	Development Bureau	2	FZ, FM
4	Pesantren IT Team	2	AH,HM
5	Management	2	ZK,TH
6	Guardian	2	RF,ZI
7	Students	2	HS,UM

From the table, it can be explained that there are twelve research informants consisting of Pesantren Caregivers, Head of Pesantren, Pesantren Development Bureau, Pesantren IT, Regional Administrators/foster guardians, Santri Guardians and Santri, all data obtained are classified and made taxonomically and reduced according to needs, at the initial stage, namely data collection, then data reduction is sorted in the form of notes, and then done by drawing conclusions from the data studied.

Figure 2: Data Collection Process

Where in the view of miles and hubberman qualitative analysis consists of reducing data, presenting data, and drawing conclusions. Data analysis is carried out together during data collection.(Sugiyono, 2016)

RESULTS AND DISCUSSION

Realizing Digital Transformation Based on Local Wisdom is a matter of combining rich cultural heritage with innovative policies. Understanding and utilizing local wisdom in today's computer and internet age is a strategic policy that is more important than tradition. We can create innovative solutions that advance society and maintain and strengthen the cultural heritage that has existed since ancient times by combining advanced technology with local values. Local wisdom requires a digital transformation that respects and values each community in addition to technology adoption. As a response to facing digital transformation, Nurul Jadid Islamic boarding school created several programs that are expected to be able to adapt to the times. The following are the programs implemented at the Nurul Jadid boarding school as a response to digital transformation;

New student admission website

Through this platform, parents or prospective santri guardians can find out various kinds of information about boarding schools such as: the registration process, registration requirements, registration schedule, and procedures that

must be followed by prospective students to enroll in boarding schools.

Figure 3: New student registration page

With this website, the santri guardians can find out in full regarding the profile of the boarding school including history, curriculum, facilities and religious activities offered. Through the website, prospective students or parents can also ask questions if there are things that need to be asked. Before the new santri registration website, new santri registration was only carried out in a manual way, namely, if there were 1000 new santri who registered, the new santri admission committee would record the santri one by one, which would certainly take a lot of time. As stated by(Ichsan et al., 2021) in his research that because this manual system makes the process of registering new santri admissions slower because new students who have registered have not been synchronized and managed properly. This was also conveyed by(Ordila et al., 2022) This conventional system causes the administrative process of admitting new students to be slower because the data of new students who have been registered has not been integrated and managed properly. In addition, the physical archives used by the system can still be damaged or even lost.

Therefore, the concept and procedure for admitting new students using technology is needed. This is supported by research(Bismi et al., 2020) If the registration system is manual, prospective students are asked to fill out forms using sheets provided by the committee. Because the forms are handwritten manually, the committee often has difficulty reading the writing. In addition, the data processing process takes a long time, which can lead to slow information. In addition, the admission results are still announced on the pesantren information board. This causes the new santri registration committee to spend a long time compiling the santri admission report.

Therefore, the pesantren administrators rack their brains to minimize the time required in admitting new students, in addition, the pesantren must adjust to the development of the machine age. So with the website, prospective students and parents can access the information they need from home without coming to the registration site directly, this can certainly save time and costs(Ariani et al., 2019). Website is one form of management information system that is often used in educational institutions. The management information system itself is a machine system that presents information to support the operations and decision-

making functions of the organization. Stoner defines management information systems as a method for conveying accurate information to facilitate effective decision making.(Almaziyyah, 2019).

E-bekal santri NJ

E-Bekal Santri is an electronic payment system intended to fulfill the daily needs of students in boarding schools or boarding-based schools. By using electronic card technology, namely smart cards or RFID cards, the system manages payments and transactions related to daily needs, such as buying food, textbooks, school equipment, and other items in the pesantren environment. Nadiyah in her research said that e-bekal was initially named SBS (Simpanan Bekal Santri), and was done manually using Microsoft Excel. In the end, a system or application in collaboration with BNI Shari'ah Bank was found. In early November, Bekal Santri was officially launched. Since the return of the santris, the Development Bureau has worked closely with the Boarding Bureau and the Finance Bureau to organize the santris' provisions. Due to the COVID-19 pandemic, the santri's guardians cannot meet directly with the santris. So, the idea to create a system that allows guardians to send money to the provision came up.

Finally, santri do not need to carry cash when using E-Bekal Santri. Instead, they only need to have an electronic card (e-bekal) linked to their account or their virtual balance, so santri can simply use the card to pay by debiting their electronic balance when they want to buy something.(Yelvita, 2022) in his research explained that the e-bekal application helps students pay and gives student guardians more control over their finances. Guardians can see what students buy and how much balance they have.

Figure 4: NJ E-Bekal Card

The santri financial system prior to E-Bekal tended to be less efficient, less structured, and had high risks related to security. The implementation of E-Bekal Santri aims to address these challenges by introducing a more modern, secure, and efficient approach to pesantren financial management in meeting the daily needs of santri. E-Bekal Santri also supports administrative efficiency to help create a more organized and controlled environment in the pesantren. With this system in place, santri can focus more on their education and spiritual development without having to worry about their daily finances. By utilizing technology, pesantren can provide a better learning and living experience for students, while simplifying pesantren financial management and building trust with parents or guardians. In line with research(Emilia Rosa & Sugiono, 2022) The purpose of the mobile application that can be accessed anywhere, E-Bekal, is to make it easier for santri

guardians to send santri shopping money and pay santri meal fees digitally without having to visit the santri directly at the boarding school. With E-Bekal, students can directly make digital transactions.

With the E-Bekal Santri system, there are many benefits for pesantren, students, and parents or guardians of students including: financial security: transactions are carried out electronically, thus preventing theft or loss of cash. Transparency and accountability: detailed records of each transaction create transparency and accountability in money management. Real-time spending can be monitored and verified by parents or guardians.Financial Education: Provides knowledge about financial management to students from the start. Convenience and Accessibility: Students and their parents or guardians can access their balance and transaction history at any time through the app or online platform. As stated in the research(Nadiyah et al., 2021) E-Bekal makes it easier for administrators, caregivers, and santri guardians to assess and monitor santri expenses every day. E-Bekal is also a practical and effective transaction tool, and parents can make transactions (sending) student provision money online and directly receive notifications about student expenses.

The results obtained from the study are in line with research conducted by (Saifuddin & Fathony, 2022) which states that the use of e-bekal in pesantren itself is one of the service efforts provided by pesantren to facilitate all forms of santri transactions. E-bekal service itself is included in risk management theory which aims to monitor and evaluate the effectiveness of the implementation of e-bekal.

Pedatren NJ

Along with the development of information technology, especially in the era of the industrial revolution 4.0, the world of education faces many challenges, including Islamic boarding schools which are Islamic educational institutions with all their distinctiveness. As part of the impact of the development of information and communication technology, Pondok Pesantren Nurul Jadid, Paiton, Probolinggo seeks to adapt to existing developments and meet the complex needs of society as a result of advances in information technology. One of the adjustment processes carried out by Pondok Pesantren Nurul Jadid, Paiton, Probolinggo is to modernize the pesantren service system through the creation of the Pedatren application as a means of improving the quality of pesantren services to the community. This application is used to input pesantren data, including data about students and their development while in the pesantren, so that teachers and guardians of students can easily find out the information through an integrated management information system (SIM).

The beginning of the Pedatren application at Pondok Pesantren Nurul Jadid in Paiton, Probolinggo, began with the deliberation of the board of caregivers and the consideration of the Head of Pondok Pesantren Nurul Jadid KH. Abdul Hamid Wahid M. Ag, which received positive responses from various parties. The IT team of Pondok Pesantren Nurul Jadid created this application to help students, administrators, board of caregivers, and guardians of students in conveying their information. (Literasi, 2023). The application presented at Nurul Jadid Islamic Boarding School has indirectly solved the problems faced by the guardians of students such as permission to enter the Islamic Boarding School which cannot be

known by the parties involved. Through this application system, student guardians, host families, managers and can directly and periodically ask about the progress of their students.

Figure 5. Pedatren login view

In addition, the Pedatren application system aims to optimize the operational system of the pesantren, such as the development of the number of active students, the health status of students, the academic level of students and even their attitudes and behavior.(Agus R & Aliah, 2020). This will be monitored by the relevant parties. Of course, this will bring convenience, speed of access, does not cause significant costs and can even save time. In addition, this teacher also has the advantage that students can be accessed easily. With the existence of this application system at Nurul Jadid Islamic Boarding School is the establishment of a reciprocal relationship between all components of the Islamic Boarding School, be it students, foster parents, caregivers and guardians of students, because this system provides convenience, provides excellence, fast and efficient service and does not complicate the task of parents of students in taking care of student policies regarding the different rights of their sons.

In addition, students and pesantren administrators can easily monitor the various daily activities of students and develop modern thinking skills for the community and students.(Muhibuddin, 2005) in his research also said that the presence of the Pedatren application in the Nurul Jadid pesantren made it easier for the pesantren to monitor how the character education of students was carried out. In addition, this application can help santri guardians to be more open about the education process of their children in the pesantren. The modernization of Nurul Jadid Islamic Boarding School management through this application system aims to improve the quality of Islamic Boarding School services in order to achieve a common vision and mission.

The pedatren application is one of the solutions to improve the quality of data processing and storage in boarding schools. It is the same as research (Amin & Adhimy, 2020) an application for data management of pesantren Nurul Jadid is designed to meet the data needs of all institutions and organizations incorporated in the pesantren. Pedatren was developed using the jami' wal mani' system to solve complex data problems. The data of students, administrators, teachers, lecturers, and employees are integrated, but no one can access it as a whole because data confidentiality and security are very important. Data processing and storage itself

is a function of the management information system (SIM).

SIM itself is a system intended to assist organizations in managing, storing, processing information needed to support the decision-making process. This is in line with what Soetedjo Moeljodiharjo said that SIM is a technique that produces fast information for use in the decision-making process to improve planning and control. Likewise, the opinion of Robert W. Holmes describes management information systems as a system created to plan, supervise, and assess organizational activities by providing decision-oriented information options.(Ii et al., 2014).

The results obtained from this research are an online platform that allows parents or prospective student guardians to obtain complete information about the process, requirements, time and procedures. This website also presents information about the pesantren profile, history, programs, facilities, and religious activities. Before this website, new student registration was done manually, causing the new admission committee to spend a lot of time.

With this website you can save time and money. Electronic payment system using electronic cards (smart cards or RFID cards) to fulfill the daily needs of students in pesantren. This system organizes the payment of food, textbooks, study materials and other items in the pesantren. Students do not need to carry cash because transactions are made through electronic cards. The system helps improve financial security, transparency, accountability, financial education, convenience and accessibility for students and their parents/guardians.

This application is used to manage boarding school data, including information about students and their development. Teachers and guardians can easily access the information through the integrated management information system. This application facilitates the relationship between students, host families, caregivers, and students. By using this technology, data management in pesantren becomes more efficient and modern.

By utilizing information technology, pesantren can provide better services, improve operational efficiency and create an organized and controlled environment. The results of the above research confirm that local wisdom-based digital transformation emphasizes the importance of respecting cultural identity and local traditions by developing and implementing digital technology by respecting, understanding, and integrating the values, culture, and local traditions of a community or society. In this approach, digital technology is used as a tool to strengthen and preserve local wisdom, not to replace it.

These findings include websites, e-bekal and pedatren are part of digital transformation based on local wisdom, because in the design, creation, management there is local wisdom included in each of these findings. The PSB website is a solution to facilitate santri guardians in registering their children to become students at the boarding school, santri guardians can register their children online. This makes the process of registering students more efficient and easy for everyone to access. E-bekal can make all goods transactions easier, this can also strengthen the relationship between the boarding school and the parents of students because they can directly find out what the needs or transactions of students are. while the pedatren application becomes a vital point in data

collection, management and storage of all student data. with this application, student data becomes safer and can be accessed by the pesantren management guardian to see all the activities of students at the boarding school. These findings are a concrete form of digital transformation in the Nurul Jadid boarding school, which in this case is called digital transformation based on local wisdom. The three findings are included in the forms of digital transformation, where digital transformation itself is a process of change by adopting pesantren-based digital technology so as to get new things that can increase innovation and efficiency.

The pesantren digital transformation process above is carried out in the form of cloud computing, which is a computing model that makes access easier and more flexible to computing and storage resources via the internet, which is a cloud-cultural transformation. Thus, the digitization process is carried out in the form of migrating the use of digital applications in the process of managing pesantren administration and information systems to a cloud computing environment. Pesantren can also take advantage of the public cloud, which is a third-party data center operated by a cloud provider and others prepare their own infrastructure called a private cloud. By utilizing cloud culture, pesantren will be able to revolutionize their industry, with a data-driven approach and provide experiences to customers and employees. Boarding schools can also store data very efficiently, effective marketing and high flexibility.

CONCLUSION

Based on the discussion above, it can be concluded that Digital Transformation Based on Local Wisdom appears in the PSB Website, E-bekal and Pedatren to be a form of transformation in Nurul Jadid Islamic boarding school. Digital transformation in pesantren does not only include the adoption of information and communication technology to improve pesantren management, improve teaching quality, and optimize the benefits of information technology. Pesantren can use technology wisely to improve education and overall management. The website, e-bekal and pedatren are applications that help manage student data at the Nurul Jadid boarding school. This application is very helpful for all parties, such as pesantren who can more easily control and monitor the development of students in general and specifically, regional and local administrators who can complete tasks more quickly and formal and non-formal institutions. The application is a solution to the effective and efficient management of Nurul Jadid Islamic Boarding School with indicators that provide maximum service quickly and completely.

REFERENCES

Agus R, A. H., & Aliah, F. J. (2020). Reinforcement Furudul 'Ainiyah Santri melalui Intensifikasi Wali Asuh di Pondok Pesantren Nurul Jadid. *Islamika*, 2(2), 312–327. https://doi.org/10.36088/islamika.v2i2.797

Almaziyyah, Z. (2019). *Pengembangan sistem informasi manajemen berbasis website di Ma'had Dar al Hikmah Singosari*.

Amin, M. B., & Adhimy, S. (2020). Pedatren: Manajemen Pesantren Berbasis Paperless Office. *Re-JIEM (Research Journal of Islamic Education Management)*. https://doi.org/10.19105/re-jiem.v3i1.3363

Ariani, F., Fahmi, M., & Taufik, A. (2019). *Inti Nusa Mandiri Deng. 14*(1), 21–26.

Bismi, W., Setiawan, A., Selawati, A., Armawan Sandi, T. A., & Darma Astuti, R. (2020). Sistem Informasi Pendaftaran Santri Baru Dipondok Pesantren Modern Darunn'aim Berbasis Website. *Indonesian Journal on Software Engineering (IJSE)*, *6*(2), 163–171. https://doi.org/10.31294/ijse.v6i2.8958

Bozkurt, A., & Sharma, R. (2022). Digital transformation and the way we (mis)interpret technology. *Asian Journal of Distance Education*, *17*(1), i–viii.

Emilia Rosa, & Sugiono. (2022). Penerapan E-Bekal Dalam Menekan Perilaku Konsumtif Santri Di Pondok Pesantren Nurul Jadid. *Jurnal E-Bis (Ekonomi-Bisnis)*, *6*(1), 171–183. https://doi.org/10.37339/e-bis.v6i1.884

Farhani, I., & Chaniago, H. (2021). Faktor Penentu Transformasi Digital UMKM: Bukti dari Indonesia. *Irwns*, 1011–1012.

Hadiono, K., & Noor Santi, R. C. (2020). Menyongsong Transformasi Digital. *Proceeding Sendiu*, *July*, 978–979.

Hidayati. (2023). *View of Manajemen Kolaborasi: Mengembangkan Ide dan Gagasan Kreatif untuk Membangun Inovasi di Era Industri 4.0*. Literaksi Jurnal Manajemen Pendidika.

Ichsan, N., Alfarizi, S., Gunawan, D., Mulyawan, A. R., & Basri, H. (2021). Sistem Informasi Pendaftaran Santri Baru Berbasis WEB dengan Pemanfaatan UML Pada PONPES Daarun Nizham. *Profitabilitas*, *1*(1), 1–11. https://doi.org/10.31294/profitabilitas.v1i1.318

Ii, B. A. B., Informasi, A. S., Sim, M., Teknologi, B., & Ti, I. (2014). *Sistem Informasi dan Implementasinya: Teori dan Konsep Sistem Informasi Disertai Berbagai Contoh Praktiknya Munggunakan Perangkat Lunak Open Source , (Bandung: Informatia, 2014), 10. 11*. 11–36.

Institutions, E. (2021). Deep Dive into Digital Transformation in Higher Education Institutions. *Education Sciences*, *11*(770), 1–13.

Kominfo, T. R. (2020). Transformasi Digital. In *Kominfo next*.

Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital Transformation: An Overview of the Current State of the Art of Research. *SAGE Open*, *11*(3). https://doi.org/10.1177/21582440211047576

Literasi, P. P. (2023). *PKM Legal Counseling about the Dangers of Drugs for the Youth Generation. 4*(1).

Muhibuddin. (2005). Modernisasi Manajemen Pendidikan Pesantren. *Mozaik Pesantren, I*(1), 36.

Nadiyah, N., Syafiih, M., Dianita, D., Arifah, M., Saniyah, M., Fu'adi, S. Q., Agustin, T., Putri, V. V., & Hidayati, N. (2021). Pemahaman Aplikasi E-Bekal bagi Wali Asuh Santri sebagai Upaya Pencegahan Penyalahgunaan Uang Belanja Santri di Pesantren. *GUYUB: Journal of Community Engagement*, *2*(1), 126–140. https://doi.org/10.33650/guyub.v2i1.2087

Ordila, R., Wahyuni, R., & Nasution, S. (2022). Rancang Sistem Penerimaan Santri Baru Pondok Pesantren Bahrul Ulum Berbasis Web. *Jurnal Ilmu Komputer*, *11*(1), 51–56. https://doi.org/10.33060/jik/2022/vol11.iss1.254

Panggabean, A. N. (2018). Memahami dan mengelola transformasi digital. *E-Business Strategi and Implementation*, 2018–2020.

Puja Ainun, F., Setya Mawarni, H., Sakinah, L., Lestari, N. A., Tebi, &, Purna, H.,

Studi, P., Pancasila, P., Kewarganegaraan, D., Keguruan, F., Pendidikan, I., Sultan, U., & Tirtayasa, A. (2022). Identifikasi Transformasi Digital Dalam Dunia Pendidikan Mengenai Peluang Dan Tantangan Di Era Disrupsi. *Jurnal Kewarganegaraan*, *6*(1).

Putri, N. I., Herdiana, Y., Munawar, Z., & Komalasari, R. (2021). Teknologi Pendidikan dan Transformasi Digital di Masa Pandemi COVID-19. *Jurnal ICT: Information Communication & Technology*, *21*(1), 53–57.

Royyana, A. (2021). Strategi transformasi digital pada pt. Kimia farma (persero) tbk. *Journal of Information Systems for Public Health*, *5*(2), 15–32. https://doi.org/10.22146/JISPH.34179

Saifuddin, S., & Fathony, A. (2022). Risk Menejemen E–Bekal untuk Meningkatkan Pelayanan pada Santri di Pondok Pesantren Nurul Jadid. *Reslaj : Religion Education Social Laa Roiba Journal*, *5*(2), 293–307. https://doi.org/10.47467/reslaj.v5i2.1444

Sugiyono. (2016). Metode Penelitian Kuantitatif, Kualitatif dan R &Metode Penelitian Kuantitatif, Kualitatif Dan R & D.Bandung:Alfabeta. *Bandung:Alfabeta*.