

Digitalization of Private Islamic Universities in West Java: A Case Study of Leadership and Transformation

Ramlan Rosyad^{*1}, Dinn Wahyudin², Efrita Norman³, Abdul Karim⁴, Maftuhah Dewi⁵, Anna Ropitasari⁶

¹ Universitas Islam Bunga Bangsa Cirebon, Indonesia; drsramlanrosyadmsi@gmail.com

² Universitas Islam Bunga Bangsa Cirebon, Indonesia; dinn_wahyudin@upi.edu

³ Universitas Islam Bunga Bangsa Cirebon, Indonesia; efritanorman@gmail.com

⁴ Universitas Muhammadiyah Cirebon, Indonesia; abdul.karim@umc.ac.id

⁵ Universitas Islam Bunga Bangsa Cirebon, Indonesia; maftukhadewi77@gmail.com

⁶ Universitas Islam Bunga Bangsa Cirebon, Indonesia; annamutazakky@gmail.com

ARTICLE INFO

Keywords:

Digitalization;
Private Islamic Universities;
Transformational Leadership;

Article history:

Received 2025-03-21

Revised 2025-05-24

Accepted 2025-06-06

ABSTRACT

This research examines the role of transformational leadership in driving digitalization at Universitas Islam Bunga Bangsa Cirebon (UI BBC) in West Java, Indonesia. Private Islamic universities in Indonesia face challenges in adopting digital technology due to limited resources and infrastructure. However, digitalization provides a great opportunity to improve education quality and administrative efficiency. UI BBC successfully transitioned from manual to digital systems thanks to the visionary leadership of the rector who was able to motivate the academic community. This research uses a qualitative approach with a case study, collecting data through in-depth interviews, observation, and documentation analysis. The findings show that transformational leadership plays an important role in developing digital infrastructure and improving digital literacy. Despite budget constraints, UI BBC successfully developed an integrated learning and administration platform. This research suggests that the transformational leadership model at UI BBC is a reference for other private Islamic universities and the importance of policy support from the government.

This is an open access article under the [CC BY-NC-SA](#) license.



Corresponding Author:

Ramlan Rosyad

Universitas Islam Bunga Bangsa Cirebon, Indonesia; drsramlanrosyadmsi@gmail.com

1. INTRODUCTION

The digital era has brought great impact to various sectors, especially in education. Digital transformation in higher education has created new opportunities and challenges, affecting the way institutions are managed, academic interactions, and the delivery of learning materials (Malik et al., 2024). Private Islamic universities in Indonesia, the majority of which have limited resources, face

significant barriers in adopting digital technology to its full potential. Nonetheless, digitalization can improve operational efficiency, expand access to education, and strengthen the campus' position in the global education market (Ismunandar, 2022) . Effective leadership in the digitalization process is needed, especially transformational leadership. Transformational leaders have the ability to motivate and inspire their followers to face change with passion and innovation (Poszytek, 2024) . In private Islamic universities, visionary leaders not only lead in administrative matters, but also play a role in developing a digital culture, strengthening technological infrastructure, and improving digital skills among the academic community. This research focuses on how transformational leadership can overcome the obstacles faced by private Islamic universities in the face of digitalization. In this context, digital leadership models are important to understand and apply. The Digital 4.0 leadership model emphasizes that leaders in the digital era must have technical, managerial, and innovation skills to ensure organizational continuity (Mihardjo et al., 2019) . Likewise, the transformational digital leadership model emphasizes the integration of technology in every aspect of college operations, from learning to administration (Lee et al., 2023) . These models provide a strong theoretical foundation for this research.

Thus, the digital era has brought great transformation, especially in the world of education. Universities, which are institutions of higher education, are required to be adaptive to these changes in order to remain relevant and competitive. In this condition, the role of campus leaders is one of the most important aspects in leading the development of their campuses in the digital era (Gatell & Avella, 2024) . Transformational leadership emphasizes the leader's ability to inspire and motivate followers to achieve common goals. Transformational leaders have a clear vision, are charismatic, and are able to build trust with their followers, (Sohu et al., 2023) . In the context of digital campus development, transformational leadership theory is that higher education leaders must have a clear vision and mission for campus development in the digital era, and a leader is able to build a digital campus culture, strive to develop qualified digital infrastructure, improve the digital literacy of the academic community, build collaboration with various parties both at home and abroad (Godsk & Møller, 2024) . Leaders become role models in the use of digital technology, this can be done by demonstrating the use of technology in daily activities, such as when teaching, research and community service.

Leaders who are adaptive to change and support innovation and creativity in the development and use of digital technology by providing space for the academic community to develop creative and innovative ideas in the use of digital technology. Digital leadership explains how leaders can lead organizations in a digital environment, which emphasizes the importance of digital vision, digital skills, and adaptability of leaders in digital transformation, (Meity H. Idris, 2024) .

The following are the results of previous research relevant to this research, the first research is by Sukandi, (2024) with the research title "Transformation of higher education through digital leadership (systematic literature review)". the results of this study indicate that digital leadership, especially in the form of transformational leadership, has the ability to transform the global challenges faced by universities into strategic opportunities by using technological advances as the main driver. Transformational leaders in this digital leadership context not only utilize technology to improve operational and educational efficiency, but also play a role in integrating digital innovation into the vision and mission of the institution so that it can respond to the dynamics of global competition proactively in implementing digital leadership (Ghamrawi & M. Tamim, 2023) . The second research is by Ismunandar, (2022) with the research title "Higher Education Development Paradigm in Facing the Era of the Industrial Revolution 4.0". The results of this study obtained the conclusion that Higher Education will be faced by the Era of the Industrial Revolution 4.0 education starting to construct a system that has become a technology-centered system. The third research by Bambang Pranggono, (2021) with the research title "Higher Education in the Digital Era and Challenges for UNISBA. The conclusion of this research is to change a management pattern to be able to mobilize internal and external potential to achieve Unisba's goal as an Islamic, reliable and prosperous "Center of Excellent" in the digital era. Other previous research by Aji, (2016) with the research title "Digitalization, Era of

Media Challenges" the results of this study concluded that the change from analog to digital systems mostly attracted public attention from print media because it was considered that the use of online technology was more flexible.

Of the four previous studies which certainly have relevance to how to adapt in the digital era with various efforts and new knowledge found, but in this study researchers focused on the digitalization of private universities in the digital era with the role of campus leaders. Based on data from the Ministry of Education, Culture, Research and Technology (Kemendikbudristek), it states that in 2023 there will be 4,500 universities in Indonesia, of which only 20% have a clear vision and mission for campus development in the digital era. This shows that there are still many universities in Indonesia that are not ready to face the digital era.

Researchers have conducted pre-observation in several universities in West Java. The results of the pre-observation show that there are several indications of problems related to leadership in campus development in the digital era, including college leaders who do not have a clear vision and mission for campus development in the digital era. Digital culture has not been well developed, the digital infrastructure in Islamic religious universities is inadequate. Digital literacy of the academic community is still low. College leaders who have not been open to change and have not supported innovation and creativity towards change in the digital era.

This research takes a case study of UI BBC, which has successfully undertaken digital transformation despite facing various challenges. This success shows that with the right leadership, digital change can be achieved, even in universities with limited resources. Therefore, this study aims to explore the application of transformational leadership in the digitalization process and its impact on the development of UI BBC. The researcher assumes that the leadership model that has been implemented by the rector plays an important role in the development of a digital-based campus that brings changes to the campus atmosphere in services to students and the organization of lecture schedules with the blended learning system. Administrative services and student academic tasks are all digitized.

Several previous studies have examined leadership in the development of digitalization in higher education. However, their research generally focuses on state campuses whose budgets are provided by the state, plus fixed tuition fees from students who number tens of thousands to hundreds of thousands. The rectors in state universities only need to manage the incoming budget to run the digital system on their respective campuses without having to dig up the required budget from other parties. This research is different from previous research because it focuses on the Chancellor's leadership model in developing digital systems in private Islamic universities whose funding sources are very limited so that the Chancellor must think about how to get it and how to divide it for routine needs such as lecturers' salaries, employees, lecture facilities and infrastructure plus for financing campus digitalization.

This research focuses on the digital transformation at UI BBC led by its rector. The three main aspects studied are the leadership model applied to transform the campus into digital, the obstacles faced during the digitalization process, and the efforts made to improve the effectiveness of digitalization. This research aims to understand the strategies and challenges in implementing digitalization in an academic environment. This research is expected to contribute to science, especially in the field of Islamic Education management regarding a deeper understanding of the role of leaders in campus development in the digital era. And become a recommendation to improve leadership effectiveness in digital era campus development as well as an ideal leadership model to achieve competitive campus development in the digital era.

2. METHODS

This research uses a qualitative approach with a case study method to gain an in-depth understanding of how transformational leadership is applied in the digitalization of private Islamic universities. UI BBC was chosen as a case study because this institution has successfully implemented

a digital system amidst budget and infrastructure limitations (Sugiyono, 2017) . Data were collected through in-depth interviews with leaders, lecturers, students, and administrative staff. These interviews aimed to understand their experiences in the digitization process and the role of leadership in facing these challenges (Sugiyono, 2023) . Observations are also made in several spaces on campus, including classrooms, laboratories, and administrative offices, to assess the extent to which technology has been applied in various aspects of campus life. The interview instrument will be developed based on the concepts of leadership in digital campus development in private Islamic religious colleges. The interviews will include open-ended questions that allow participants to explain their experiences, opinions and perceptions about campus digitalization. Interview transcripts and researcher notes while in the field will be analyzed using a content approach. According to Komariah, A and Satori, (2011) defines that a qualitative research approach is a research procedure that produces descriptive data in the form of written or spoken words from people and observable behavior.

The data analysis model used in this research is the Miles and Huberman model, which involves three main steps: data reduction, data display, and data verification (Sugiyono, 2023) . Data reduction is done to filter out relevant information. Finally, verification was conducted to ensure the validity of the data obtained through triangulation between interviews, observations, and documents. Verification and conclusions of this study contain a description of the analysis of the rector's leadership model in the campus digitalization process and the indications obtained by the campus in campus digitalization. In addition, documentation such as annual reports, meeting notes, and information on the university website were also analyzed to provide a broader perspective on the digitization process taking place at UI BBC (Meity H. Idris, 2024) . The use of the case study method allowed the researcher to gain deeper insights into the dynamics of digitization at a private Islamic university, as well as understand the role of leadership in the transformation. Researchers also pay attention to external factors that influence the success or failure of technology implementation, such as government policies and cooperation with the private sector (Sugiyono, 2017) .

This research is motivated by the significant digital transformation at Bunga Bangsa Islamic University Cirebon (UI BBC). As an institution that previously relied on manual systems, the change towards digitalization under the leadership of the current rector is the main focus. The purpose of this study is to understand the leadership model applied in the campus digitalization process and its impact on various stakeholders at the university. The objects of this research include campus leaders, lecturers, students, and education personnel at UI BBC. The selection of this object is based on its central role in the implementation and adaptation to the new digital system. The UI BBC campus was chosen because of its rapid transformation from manual to digital systems, which makes it an interesting case study to research.

This research was conducted at Bunga Bangsa Islamic University Cirebon (UI BBC) which is located at Jalan Widarasari III, Sutawinangun, Kedaung District, Cirebon Regency 45153. With the object of research campus leaders, lecturers, students and education personnel who are in the campus area. This campus attracted the attention of researchers. In the past, this campus was only a College with a limited number of study programs and not many students like similar Private Islamic Religious Higher Education (PTKIS) campuses in West Java. At that time it was still running a manual system in its services. With the passage of time under the leadership of the Chancellor, this campus continues to develop and experience rapid progress after the Chancellor decided to use a digital system, no longer manual in administrative services and lectures since before Covid-19.

3. FINDINGS AND DISCUSSION

Digital Transformation in Private Islamic Universities: Impacts and Opportunities

The current era of digitalization has brought significant transformations in the governance of people's lives as well as in the academic environment. This transformation not only affects the way people interact but also provides a faster and more efficient alternative in accessing information and knowledge. According to Suwardana, the development of digital technology in the context of the

Industrial Revolution 4.0 will affect around 52 million types of jobs within the next five years, thus forcing individuals to improve their skills and mentality to remain relevant in the world of work (Suwardana, 2018). In the academic context, digitalization brings changes in the way education is managed and academic interactions. For example, the use of information technology in managing the education system is becoming increasingly important. Research conducted by Nasution and Fauzi shows that a web-based attendance system not only improves efficiency but also increases accuracy in attendance management (Nasution & Fauzi, 2023). In addition, the importance of innovation in using artificial intelligence to support the educational process in the school environment, which shows that digitalization has become an urgent need in the education sector (Lindawati et al., 2023).

Digitalization also has a wide impact on the dissemination of knowledge and information. Amir and Wrahatnala note that with the advent of digitalization, society, including the arts sector, is required to understand and adjust to the ever-evolving information flow (Amir & Wrahatnala, 2023). Therefore, not a few academic communities choose the culture of digitalization. According to Arif Bijaksana Prawira Negara, (2024) states that technological progress and development make everything easily accessible anytime and anywhere. Of course, with changes like this, it becomes a new challenge for academic activists, especially campus leaders, in adapting to digital changes that are so rapid and fast. Based on the results of this study, it was found that leadership has a significant impact on the productivity of an organization. Data analysis conducted by researchers shows that transformational leadership has an important role in the transformation process of a private Islamic university. This is in line with the concept presented by Urbinati et al., (2022) that transformational leadership refers not only to the ability to lead, but also to the ability to motivate, inspire, and guide organizational members towards higher goals.

Thus digitalization has brought significant changes in the world of higher education, including in private Islamic universities in West Java. The digital era is changing not only the way information and knowledge are accessed, but also introducing new methods of managing education. Private Islamic universities are faced with the impacts and opportunities offered by digitalization, which include the use of online learning platforms, digital-based management information systems, and the integration of technology in learning and administration. While digitalization provides various benefits, there are limitations in terms of infrastructure and human resources, especially in private Islamic universities which generally have limited budgets. Not all private Islamic colleges can access the latest technology or have adequate supporting facilities, which hinders the maximum implementation of digitalization.

Transformational Leadership in the Digitalization of Private Islamic Universities

According to Matt et al., (2015) said that clear leadership vision, the ability to build trust, and support for technology skills development are proven to be key factors that increase productivity in the digital campus environment. Leaders with an inspiring vision will be able to create support in achieving common goals. In addition, trust built by leaders will be able to create a positive work environment, where all individuals within the organization will feel comfortable and able to innovate and share ideas. Supporting the development of technological skills will provide a competitive advantage, and make it easier for resources to adopt new changes quickly and optimize their use. This has been demonstrated by a strong commitment as a leader role in an Islamic university in UI BBC West Java where in an effort to develop the campus in the digital era. The rector of the UI BBC campus has pursued various policies and programs that have been developed, such as the development of an online learning platform. The UI BBC Islamic college has developed a web-based learning platform application to facilitate students in accessing academic information, such as class schedules, grades, attendance, lecture materials and lecture history and administration. Everything has been integrated in one web-based platform, this platform can be accessed by students and lecturers through the website.

Digital Culture on Campus: Character Building and Digital Literacy

In addition, the UI BBC Islamic University regularly holds training and workshops on digital technology for lecturers, students, and staff. The training and workshops aim to improve the digital literacy of the academic community and encourage the academic community to use digital technology in various lecture, research, and community service activities. The leaders of this university have also succeeded in building a digital culture on campus (Behie et al., 2023) . This can be seen from the enthusiasm of the academic community in various lecture, research, and community service activities using digital technology, where lecturers use digital technology in the teaching process and students use digital technology in the learning process, and employees do all their work activities with the help of digital technology.

Collaborations and Partnerships to Support Campus Digitalization

In the process of developing campuses in this digital era, university leaders are also seen collaborating with various parties. This is so that campus development in the digital era can be realized quickly, and through these cooperation and collaboration efforts provide many benefits for universities, including the rapid exchange of information and knowledge of digital technology, joint program development, and increased access to resources. The results show that the leadership of the BBC UI Islamic University has played an important role in the development of the campus in the digital era. Where the leadership has created a digital-oriented vision and mission, built a digital culture on campus, developed a digital infrastructure that is starting to be qualified, and is able to increase the digital literacy of the academic community, as well as build collaborations with various parties, such as other agencies, companies and governments, become role models in the use of digital technology, leaders who are able to open themselves to change and be able to support innovation and creativity (Harbani et al., 2021) .

Based on the results of the study, there is a theory that is in line with previous researchers, namely by Wujarso et al., (2023) with the research title "The Role of Digital Leadership in the Digital Age" which states that digital leadership is very important for organizations to survive in the new digital era by adapting and changing business strategies. In addition, according to Oludare & Sarah, (2014) convey that the characteristics of digital leadership consist of Technology leadership, digital visioning and digital execution. Zhang & Huang, (2024) said that digital leadership consists of 5 (five) characteristic criteria: Thought leaders, creative leaders, Global Visionary leaders, Inquisitive Leaders and deep leaders where digital leaders have deep knowledge and understanding in terms of policy. Because, the digital era of information is increasingly open and everyone has the ability to access and analyze information comprehensively by using their interpretations, assumptions, and syntheses. Information can deepen knowledge in decision-making. Overall, in this study, researchers highlighted how important transformational leadership is in the digitalization process of private Islamic universities in this digital era. Leaders who apply transformational leadership will be able to create an environment where creativity and collaboration are valued, and encourage their human resources to continue to learn and develop themselves in the face of technological change, and this will affect the development of private Islamic universities in achieving the goal of digitalization. According to Demmanggasa Yultan et al., (2023) states that organizations that invest in the development of transformational leadership and create an environment that supports innovation and collaboration can gain a sustainable competitive advantage in this changing market.

This research underlines that the digitalization of private Islamic universities is considered necessary and the role of transformational leadership has a key role in shaping digital campuses in this digital era so that their existence can continue to increase. By understanding and implementing the principles of transformational leadership in order to create a productive, innovative and adaptive private Islamic college digitalization environment so that it can survive in the long term. This research makes an important contribution to the understanding of the role of transformational leadership in the digitalization of private Islamic universities (Poszytek, 2024) . The findings can be used by other higher

education leaders to develop effective strategies to lead their organizations in the digital era. Digitalization in higher education, especially in private Islamic universities, has become an important issue in the era of globalization and the rapid development of information technology. Private Islamic universities in Indonesia, which are increasing in number, are faced with the challenge of adapting to these changes in order to remain relevant and competitive. Digitalization includes not only the use of technology in the learning process, but also in management, marketing, and interaction with students and other stakeholders. Digitalization in private Islamic universities covers various aspects, from online learning to administrative management.

In the context of learning, the use of e-learning platforms is becoming increasingly common, especially since the COVID-19 pandemic forced educational institutions to shift to distance learning. According to Khin & Ho, (2019) shows that online learning provides flexibility of time and place, which is very important in the context of higher education. In addition, the use of information technology in administrative management has also become crucial to improve the efficiency and effectiveness of services to students (Aagaard et al., 2019) . However, the challenges faced by private Islamic universities in this digitalization process are quite complex. Many institutions still do not have adequate infrastructure to support online learning and digital management. This is in line with the findings of Dionisio et al., (2022) , which shows that college selection by new students is often influenced by the institution's branding and reputation, which are now strongly linked to their digital presence.

One of the main goals of digitization is to improve the quality of education and the competence of graduates. According to Ajahari et al., (2023) emphasizes the importance of preparing competent graduates in accordance with the needs of the world of work. In this context, digitalization can help private Islamic universities to develop a curriculum that is more relevant and responsive to industry developments. For example, the implementation of the Merdeka Learning Campus Merdeka Curriculum (MBKM) which allows students to take courses outside their study program can improve their skills and knowledge (Baharuddin, 2021) . Furthermore, Hidayah, (2017) underlines the importance of entrepreneurship education in Islamic higher education, which can be supported by digital technology. By utilizing digital platforms, universities can offer entrepreneurship programs that are more interactive and engaging for students, thus increasing the competitiveness of graduates in the job market.

Digital Marketing and Branding of Private Islamic Universities

Digitalization also plays an important role in higher education management and marketing. The use of social media and websites as promotional tools has become a common strategy used by universities to attract prospective students. According to Nambisan et al., (2019) noted that private universities need to build a strong brand through digital marketing to compete with other public and private universities. In addition, good information system management is essential to support decision making in higher education. In addition, according to Nahdi et al., (2022) emphasizes the importance of integrated payroll systems and alumni data management to improve service quality and transparency in higher education. By utilizing information technology, universities can manage student and alumni data more efficiently, which in turn can improve the student and alumni experience. While digitalization offers many opportunities, there are a number of challenges that private Islamic colleges must face. One of them is the lack of readiness of human resources in adopting new technologies.

Infrastructure and Accessibility Challenges of Digital Technology

According to Hinings et al., (2018) shows that improving the quality of education in the industrial era 4.0 requires attention to people, structures, and organizational processes. This means that training and developing digital skills for lecturers and administrative staff should be a priority. In addition, accessibility issues are also a challenge. Many private Islamic universities located in remote areas may not have adequate internet infrastructure, which may hinder the online learning process (Kamaruddin

et al., 2024). Therefore, there needs to be a collaborative effort between the government and educational institutions to ensure that all tertiary institutions, especially those in remote areas, can access the necessary technology. Digitalization also opens up opportunities for innovation in higher education. For example, the use of augmented reality (AR) and virtual reality (VR) technologies in learning can enhance students' learning experience (Zulmi et al., 2024). By integrating these technologies into the curriculum, private Islamic colleges can offer a more engaging and interactive learning experience. Furthermore, digitalization allows colleges to establish partnerships with industry and research institutions.

This can give students the opportunity to engage in real projects and gain valuable practical experience. Hidayatussaliki, (2023) notes that effective marketing of educational services can assist universities in establishing mutually beneficial partnerships with various parties. The digitalization of private Islamic universities is an important step in facing the challenges of globalization and technological development. While there are various challenges to overcome, such as human resource readiness and accessibility, digitalization also offers many opportunities to improve the quality of education, management, and marketing. By utilizing technology effectively, private Islamic universities can improve their competitiveness and make a greater contribution to educational development in Indonesia.

Safety and Privacy in Online Learning

Digitalization in private Islamic universities in Indonesia is an increasingly dominating phenomenon in the context of higher education. This transformation not only involves the application of information and communication technology (ICT) in the learning process, but also includes changes in management, curriculum, and interaction between lecturers and students. In this discussion, we will explore various aspects of digitalization in private Islamic higher education, including its challenges, opportunities and impact on the quality of education. First of all, it is important to understand that digitalization in private Islamic universities is inseparable from the context of globalization and rapid technological development. Since the COVID-19 pandemic, many universities in Indonesia, including private Islamic universities, have been forced to adapt to online learning as a response to social restrictions. This has encouraged institutions to adopt e-learning platforms and other digital technologies to ensure educational continuity (Permatasari et al., 2021; Putra et al., 2022; Wiwitan et al., 2022). In this context, security in e-learning becomes an important issue, as data protection and student privacy must be maintained (Afifah, 2022).

Digitalization also plays a role in increasing the accessibility of education for students. With online learning platforms, students from different backgrounds can access course materials and participate in discussions flexibly. This is particularly important for private Islamic universities which often have students from remote areas or with limited mobility (Suti et al., 2020). However, a challenge faced is the digital divide, where not all students have equal access to technology and the internet (Meilana et al., 2024). The curriculum in private Islamic universities has also undergone significant changes due to digitalization.

Digital Curriculum Integration in Islamic Education

The concept of Merdeka Belajar-Kampus Merdeka (MBKM) introduced by the Indonesian government provides space for universities to develop a curriculum that is more flexible and relevant to the needs of the world of work (Annas, 2022; Dewi et al., 2024; Mursyid et al., 2023). In this context, private Islamic universities are required to integrate digital competencies in their curriculum, so that graduates can compete in an increasingly competitive job market (Baharuddin, 2021; Herawati et al., 2023; Taufik & Suprpto, 2021). In addition, digitalization also opens up opportunities for the development of innovations in teaching methods. Private Islamic universities can utilize technology to create a more interactive and engaging learning experience. For example, the use of learning videos, simulations, and gamification can increase student engagement in the learning process (Ardiansyah,

2023; Mashudi, 2021; T et al., 2024) . However, lecturers also need to be trained to master these technologies in order to effectively implement them in learning (Affandi et al., 2021) .

The management aspect in private Islamic universities is also not spared from the impact of digitalization. The use of digital-based management information systems can improve operational efficiency and transparency in institutional management (Fathurohman et al., 2023; Maulani & Mubarak, 2020) . With this system, better management of student data, finances, and other resources can be done, thus supporting more precise and rapid decision making (Karim & Wajdi, 2019) . However, the challenge faced is the need for investment in technological infrastructure and human resource training (Mayang et al., 2024) . The importance of strengthening religious character in Islamic higher education must also be considered in the context of digitalization. Although technology can improve efficiency and accessibility, Islamic values must remain the foundation of the learning process (Rahmat, 2023; Sodikin & Ma`arif, 2021; Syabibi et al., 2021) . Therefore, private Islamic universities need to develop teaching materials that are not only based on academic knowledge, but also integrate Islamic moral and ethical values in every aspect of education (Karim et al., 2019) .

Furthermore, digitalization can also be a tool to strengthen religious moderation in private Islamic universities. Through social media and other digital platforms, students can engage in constructive discussions on religious and social issues, thus creating an inclusive and tolerant academic environment (Lazulfa & Faristiana, 2023; Umbar, 2023) . However, it should be remembered that the use of social media also carries risks, such as the spread of misinformation and radicalization, so there needs to be proper supervision and guidance from the university (Sapalakkai, 2021) . In facing the challenges of digitalization, collaboration between universities, government, and the private sector is crucial. This collaboration can create an educational ecosystem that supports innovation and the development of digital competencies among students (Roihanun, 2023) . In addition, support from the government in the form of policies and funding is also needed to ensure that all universities, including private ones, can adapt to the changes that occur (Mulyadi, 2015) .

Digitalization has opened up significant opportunities for private Islamic universities to strengthen religious moderation through the use of social media and digital platforms. In the digital era, online interaction spaces allow students to engage in constructive discussions on religious and social issues, thus creating a more inclusive and tolerant academic environment. The use of digital spaces, such as online forums and discussion groups on social media, not only supports the rapid exchange of information but also encourages the emergence of moderate narratives that can suppress the potential for polarization and radicalism (Lazulfa & Faristiana, 2023; T et al., 2024) . Studies show that the use of social media in the context of higher education acts as an agent of moderation, where students can easily access various perspectives and engage in open dialogue that emphasizes the values of tolerance and justice. This, according to Umbar and Bulgini (Umbar, 2023) , makes the digital space an interactive laboratory for testing and developing the concept of religious moderation, which in turn strengthens the inclusive culture on campus. Along with that, policy strategies implemented by some universities, as outlined by Ajahari et al., (2023) integrate moderation values in the curriculum and academic activities that utilize digital platforms as a medium to support the learning process and critical discussions. The role of the millennial generation in spreading moderate messages through social media also cannot be ignored. Elvinaro & Syarif, (2022) asserts that the younger generation actively utilizes digital media to promote messages of religious moderation and tolerance, which is a crucial aspect in building a foundation of critical and inclusive thinking among university students. Thus, digitalization not only helps expand access to information, but also supports the formation of a discourse ecosystem that supports the strengthening of religious moderation in private Islamic universities. Overall, digitalization in private Islamic universities in Indonesia offers many opportunities to improve the quality of education and the relevance of graduates in the job market. However, the challenges cannot be ignored. Therefore, a holistic and integrated approach is needed to ensure that digitalization can provide maximum benefits for all parties involved in Islamic higher education.

Effective leaders in digitalization must have a clear vision and the ability to build a digital culture on campus. The findings from UI BBC show that transformational leadership enables the rector and staff to overcome infrastructure constraints and human resource limitations through increased external and internal collaboration. This study focuses on one institution, UI BBC. Therefore, generalization of the findings needs to be done with caution, especially in relation to differences between private and public universities, as well as differences between regions in Indonesia. It can thus be concluded that digital transformation in private Islamic universities is strongly influenced by transformational leadership. Leaders who prioritize digital infrastructure development, technology skills training, and building a digital culture can increase the effectiveness of digitalization, despite budget and resource constraints. The results show that transformational leadership plays an important role in driving digitalization at UI BBC. Leaders who have a clear digital vision and are able to build trust can create an environment that supports innovation and technology adoption (Matt et al., 2015). The Rector of UI BBC, for example, acts as a role model in the use of digital technology, motivating the academic community to develop creative ideas in the use of technology. However, despite the many benefits of digitization, challenges related to limited infrastructure and human resources remain a major obstacle. UI BBC, as a private Islamic university, has a limited budget, which requires leaders to think creatively to find solutions, such as collaborating with external parties for technical and financial support (Zhang & Huang, 2024). This collaboration helps accelerate the digital transformation process and ensures the sustainability of the technology used. In addition, increasing digital literacy among the academic community is also a challenge. Although technology has been introduced, not all lecturers and students have sufficient skills to utilize it to its full potential. Therefore, regular training and workshops on the use of digital technology are needed to ensure all parties can adapt to the changes (Lindawati et al., 2023). In response to this challenge, UI BBC conducts training and seminars to improve the digital skills of lecturers and administrative staff. It also developed a web-based learning platform to make it easier for students to access academic and administrative information online. This platform has improved efficiency and transparency in education management at UI BBC.

This research provides important theoretical implications for the development of digitalization in private Islamic universities. First, the transformational leadership model applied at UI BBC can serve as an example for other private Islamic universities. Leaders who have a strong digital vision, are able to build a digital culture, and support the development of technological infrastructure can accelerate the digitization process on campus. Therefore, it is important for private Islamic universities to select leaders who have digital skills and leadership that is adaptive to technological change (Wujarso et al., 2023). Thus, practical implications for the government and education associations need to provide greater support for digitalization in private universities. This could include providing funds for the development of technological infrastructure and training programs for lecturers and administrative staff. In addition, collaboration between universities and the private sector is also crucial to accelerate digital transformation and improve access to the latest technology. Finally, this study suggests that private Islamic universities need to do more evaluation and adjustment in the application of technology to ensure that digitalization can truly improve the quality of education and campus operations. Going forward, it is important for further research to identify other factors that may influence the success of digitalization, such as organizational culture and human resource readiness (Oludare & Sarah, 2014).

4. CONCLUSION

Transformational leadership has a significant impact on campus productivity. It can be seen from the transformational leaders at Bunga Bangsa Islamic University Cirebon who have shown their commitment to developing a digital campus through various policies and programs, such as the construction of online learning platforms, training and workshops on digital technology, and the development of digital culture. Transformational leaders of Bunga Bangsa Islamic University Cirebon have also been able to establish cooperation with various parties to accelerate campus development in the digital era. This study found that transformational leadership has an important role in the

digitalization of private Islamic universities in the digital era. Transformational leaders are able to create an environment that supports creativity, collaboration, and continuous learning, which encourages the academic community to adapt to technological changes in achieving digitalization goals.

However, resistance to change and lack of effective communication can be barriers to implementing transformational leadership. Therefore, it is necessary to overcome these challenges through training, mentoring, and building an organizational culture that supports change in the current digital era. This research can be continued by further examining other factors that can also affect the digitalization of private Islamic universities, such as organizational culture, human resources, and technological infrastructure. This research can also be conducted in examining the effectiveness of digitalization programs implemented in private Islamic universities.

REFERENCES

- Aagaard, A., Andersen, T. C., & Presser, M. (2019). Driving business model innovation and digital transformation through Internet-of- Things. *Proceedings of ISPIM Conferences, June*, 1–15. <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip&db=bsu&AN=139830663&sit e=ehost-live>
- Affandi, N., Supriyati, Y., & Kadir, K. (2021). Pengaruh Kepemimpinan Transformasional, Komitmen Organisasional, Budaya Organisasi Dan Tata Kelola Terhadap Kinerja Dosen Perguruan Tinggi Swasta Di Provinsi Banten. *National Conference on Applied Business Education & Technology (Ncabet)*, 1(1), 719–729. <https://doi.org/10.46306/ncabet.v1i1.59>
- Afifah, U. F. (2022). Analysis of the Platform E-Learning Utilization on DSS05 Domain Using the COBIT 5 Framework at Private Universities in Riau Archipelago. *Sistemasi*, 11(1), 179. <https://doi.org/10.32520/stmsi.v11i1.1679>
- Ajahari, A., Puspita, P., Teddy, T., Husna, N., & Iriantara, Y. (2023). Implementasi Kebijakan Penguatan Moderasi Beragama (PMB) Dalam Kurikulum Pada Perguruan Tinggi Keagamaan: (Studi Kasus Pada IAIN, IAKN Dan IAHN Tampung Penyang Palangka Raya). *Transformatif*, 7(1), 41–58. <https://doi.org/10.23971/tf.v7i1.5408>
- Aji, R. (2016). DIGITALISASI, ERA TANTANGAN MEDIA (Analisis Kritis Kesiapan Fakultas Dakwah Dan Komunikasi Menyongsong Era Digital). *Islamic Communication Journal*, 1(1), 43–54. <https://doi.org/10.21580/icj.2016.1.1.1245>
- Amir, F., & Wrahatnala, B. (2023). Inovasi Dan Transformasi Musikal Dalam Grup Patrol Bhâkch Kêrrêng Rampak Pandhalungan. *Deskovi Art and Design Journal*, 6(1), 15. <https://doi.org/10.51804/deskovi.v6i1.9348>
- Annas, A. (2022). Perbandingan Implementasi Kebijakan Kurikulum Merdeka Belajar Kampus Merdeka (MBKM) Perguruan Tinggi Swasta (PTS) Kota Makassar. *Journal of Government and Politics (Jgop)*, 4(2), 231. <https://doi.org/10.31764/jgop.v4i2.11152>
- Ardiansyah, D. (2023). Transformasi Digital Perguruan Tinggi Menggunakan Prinsip Smart Education. *Fahma*, 20(1), 42–55. <https://doi.org/10.61805/fahma.v20i1.43>
- Arif Bijaksana Prawira Negara. (2024). Digital Transformation and Innovation Strategies in Classification Societies. *Journal of Electrical Systems*, 20(4s), 1042–1053. <https://doi.org/10.52783/jes.2149>
- Baharuddin, M. R. (2021). Adaptasi Kurikulum Merdeka Belajar Kampus Merdeka (Fokus: Model MBKM Program Studi). *Jurnal Studi Guru Dan Pembelajaran*, 4(1), 195–205. <https://doi.org/10.30605/jsdp.4.1.2021.591>
- Bambang Pranggono. (2021). Pendidikan Tinggi Di Era Digital Dan Tantangan Bagi Unisba. *Mimbar, XVII*, 1–19. <https://media.neliti.com/media/publications/153679-ID-pendidikan-tinggi-di-era-digital-dan-tan.pdf>
- Behie, S. W., Pasman, H. J., Khan, F. I., Shell, K., Alarfaj, A., El-Kady, A. H., & Hernandez, M. (2023). Leadership 4.0: The changing landscape of industry management in the smart digital era. *Process*

- Safety and Environmental Protection*, 172, 317–328.
<https://doi.org/https://doi.org/10.1016/j.psep.2023.02.014>
- Demmanggasa Yultan, Sabilaturrizqi Mashudah, Kasnawati, Mardikawati Budi, Ramli Akhmad, & Arifin Nofri Yudi. (2023). Digitalisasi Pendidikan: Akselerasi Literasi Digital Pelajar Melalui Eksplorasi Teknologi Pendidikan. *Community Development Journal*, 4(5), 11158–11167.
- Dewi, M., Naim, S., & Azizah, S. N. (2024). *Strategic Convergence : How Knowledge Sharing , Cross-Functional Collaboration , and Adaptive Leadership Drive Innovation Success*. 5(2), 2483–2494.
- Dionisio, M., Paula, F., & Junior, S. J. de S. (2022). Innovation and digital transformation in Healthcare: A systematic review. *ISPIM Conference Proceedings*, June, 1–23.
https://www.proquest.com/conference-papers-proceedings/innovation-digital-transformation-healthcare/docview/2694494540/se-2?accountid=17242%0Ahttps://media.proquest.com/media/hms/PFT/1/kkSIN?_a=ChgyMDIzMDYwNjA4MDk1NzE3NT03OTEwODASBTkxMTAwGgpPTkVfU0VBukNII
- Elvinaro, Q., & Syarif, D. (2022). Generasi Milenial Dan Moderasi Beragama: Promosi Moderasi Beragama Oleh Peace Generation Di Media Sosial. *Jispo Jurnal Ilmu Sosial Dan Ilmu Politik*, 11(2), 195–218. <https://doi.org/10.15575/jispo.v11i2.14411>
- Fathurohman, O., Marliani, L., Muhammadun, Mahdiyan, M., & Karim, A. (2023). Integration of Entrepreneurship Education in the Pondok Pesantren Curriculum : A Case Study at Hidayatul Mubtadi-ien in Indramayu. *Jurnal Pendidikan Islam*, 12(2), 153–160.
<https://doi.org/10.14421/jpi.2023.122.153-160>
- Gatell, I. S., & Avella, L. (2024). Impact of Industry 4.0 and circular economy on lean culture and leadership: Assessing digital green lean as a new concept. *European Research on Management and Business Economics*, 30(1), 100232. <https://doi.org/10.1016/j.iedeen.2023.100232>
- Ghamrawi, N., & M. Tamim, R. (2023). A typology for digital leadership in higher education: the case of a large-scale mobile technology initiative (using tablets). *Education and Information Technologies*, 28(6), 7089–7110. <https://doi.org/10.1007/s10639-022-11483-w>
- Godsk, M., & Møller, K. L. (2024). Engaging students in higher education with educational technology. In *Education and Information Technologies* (Vol. 30, Issue 3). Springer US.
<https://doi.org/10.1007/s10639-024-12901-x>
- Harbani, Muna, N., & Judiarni, J. A. (2021). Digital Leadership in Facing Challenges in the Era Industrial Revolution 4.0. *Webology*, 18(SI05), 975–990. <https://doi.org/10.14704/WEB/V18SI05/WEB18275>
- Herawati, T., Jalaludin, Muhammadun, Widiyanti, D., & Karim, A. (2023). Character building management in improving personality competence teacher. *Asia-Pacific Journal of Educational Management Research*, 8(2), 49–64. <https://doi.org/http://dx.doi.org/10.21742/ajemr.2023.8.2.04>
- Hidayah, N. (2017). Menggagas Pendidikan Berwawasan Kewirausahaan Di Perguruan Tinggi Islam. *Al Qalam*, 34(1), 1. <https://doi.org/10.32678/alqalam.v34i1.1796>
- Hidayatussaliki, H. (2023). Pemasaran Jasa Pendidikan Sebagai Strategi Peningkatan Mutu Pendidikan Di Perguruan Tinggi Islam. *Ar-Rosikhun Jurnal Manajemen Pendidikan Islam*, 3(1), 69–81.
<https://doi.org/10.18860/rosikhun.v3i1.21630>
- Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). Digital innovation and transformation: An institutional perspective. *Information and Organization*, 28(1), 52–61.
<https://doi.org/10.1016/j.infoandorg.2018.02.004>
- Ismunandar, A. (2022). Paradigma Pengembangan Perguruan Tinggi Dalam Menghadapi Era Revolusi Industri 4.0. *An Najah (Jurnal Pendidikan Islam Dan Sosial ...)*, 1(1), 47–56.
<https://journal.nabest.id/index.php/annajah/article/view/7%0Ahttps://journal.nabest.id/index.php/annajah/article/download/7/7>
- Kamaruddin, E., Salman, I., Annahidl, N. A., Munawiroh, Siswanto, H. W., Siregar, I., Suprpto, Habibullah, A., Purwoko, D., Haudi, & Purwanto, A. (2024). Investigating the role of digital transformation and digital innovation on school performance. *International Journal of Data and Network Science*, 8(3), 1557–1566. <https://doi.org/10.5267/j.ijdns.2024.3.011>

- Karim, A., Mardhotillah, N. F., & Samadi, M. I. (2019). Ethical leadership transforms into ethnic: Exploring new leader's style of Indonesia. *Journal of Leadership in Organizations*, 1(2), 146–157. <https://doi.org/10.22146/jlo.44625>
- Karim, A., & Wajdi, F. (2019). Propaganda and da'wah in digital era (A case of hoax cyber-bullying against ulama). *KARSA: Jurnal Sosial Dan Budaya Keislaman*, 27(1), 171–202. <https://doi.org/10.19105/karsa.v27i1.1921>
- Khin, S., & Ho, T. C. F. (2019). Digital technology, digital capability and organizational performance: A mediating role of digital innovation. *International Journal of Innovation Science*, 11(2), 177–195. <https://doi.org/10.1108/IJIS-08-2018-0083>
- Komariah, A dan Satori, D. (2011). *Metode Penelitian Kualitatif*. Alfabeta.
- Lazulfa, H. L., & Faristiana, A. R. (2023). Strategi Mainstreaming Moderasi Beragama Di Perguruan Tinggi Keagamaan Islam Melalui Media Sosial. *Dewantara Jurnal Pendidikan Sosial Humaniora*, 2(1), 16–33. <https://doi.org/10.30640/dewantara.v2i1.606>
- Lee, M. C. C., Lin, M.-H., Srinivasan, P. M., & Carr, S. C. (2023). Transformational leadership and organizational citizenship behavior: new mediating roles for trustworthiness and trust in team leaders. *Current Psychology*, 43(11), 9567–9582. <https://doi.org/10.1007/s12144-023-05095-x>
- Lindawati, L., Salamah, I., Valerie, M., & Kusumanto, R. D. (2023). Inovasi AI: Sosialisasi Robot Personal Assistant Untuk Digitalisasi KIR 03. *Jurdimas (Jurnal Pengabdian Kepada Masyarakat) Royal*, 6(4), 524–530. <https://doi.org/10.33330/jurdimas.v6i4.2600>
- Malik, M., Raziq, M. M., Sarwar, N., & Tariq, A. (2024). Digital leadership, business model innovation and organizational change: role of leader in steering digital transformation. *Benchmarking*. <https://doi.org/10.1108/BIJ-04-2023-0283>
- Mashudi, M. (2021). Inovasi Pembelajaran Aktif Di Perguruan Tinggi : Studi Kasus Di Institut Agama Islam Negeri Jember. *Southeast Asian Journal of Islamic Education*, 4(1), 13–29. <https://doi.org/10.21093/sajie.v0i0.3765>
- Matt, C., Hess, T., & Benlian, A. (2015). Digital Transformation Strategies. *Business and Information Systems Engineering*, 57(5), 339–343. <https://doi.org/10.1007/s12599-015-0401-5>
- Maulani, G. A. F., & Mubarak, T. M. S. (2020). Analisis Pengaruh Teknologi Informasi Pada Iklim Organisasi Dan Dampaknya Terhadap Komitmen Organisasi Perguruan Tinggi Swasta. *Journal Civics & Social Studies*, 4(2), 12–24. <https://doi.org/10.31980/civicos.v4i2.912>
- Mayang, N., Sirait, K., Dewi, M., Islam, U., & Bangsa, B. (2024). The Effectiveness Of The Website-Based Inquiry Learning Model Assisted By Video Media In Elementary Schools. *International Journal of Teaching and Learning (INJOTEL)*, 2(7), 2000–2011.
- Meilana, S. F., Prastawa, S., Dewi, M., Ahmad, F., Merakati, I., & Rosidin, R. (2024). Analisis Kebutuhan Pengembangan Profesional Berkelanjutan Bagi Guru Sekolah Dasar. *Jurnal Review Pendidikan Dan Pengajaran*, 7(3), 7798–7804. <https://doi.org/10.31004/jrpp.v7i3.29867>
- Meity H. Idris. (2024). Strategi Peningkatan Profesionalisme Tenaga Pendidik Berwawasan Teknologi Informasi Menuju Masa Depan Digitalisasi Pendidikan . *Jurnal Basicedu*, 8(2), 1086–1093.
- Mihardjo, L. W. W., Sasmoko, S., Alamsjah, F., & Elidjen, E. (2019). Digital leadership role in developing business model innovation and customer experience orientation in industry 4.0. *Management Science Letters*, 9(11), 1749–1762. <https://doi.org/10.5267/j.msl.2019.6.015>
- Mulyadi, D. (2015). *Study Kebijakan Publik Dan Pelayanan Publik*. Alfabeta.
- Mursyid, A., Ahmad, C. F., Dewi, A. K., & Tianti, A. Y. (2023). Penerapan Kurikulum Merdeka Dalam Rencana Pelaksanaan Pembelajaran Di Purwakarta. *Al-Fahim Jurnal Manajemen Pendidikan Islam*, 5(1), 173–187. <https://doi.org/10.54396/alfahim.v5i1.566>
- Nahdi, D. S., Rasyid, A., & Cahyaningsih, U. (2022). Meningkatkan Kompetensi Pedagogik Guru Melalui Digitalisasi Pembelajaran. *Papanda Journal of Community Service*, 1(1), 1–6. <https://doi.org/10.56916/pjcs.v1i1.49>
- Nambisan, S., Wright, M., & Feldman, M. (2019). The digital transformation of innovation and entrepreneurship: Progress, challenges and key themes. *Research Policy*, 48(8), 103773.

- <https://doi.org/10.1016/j.respol.2019.03.018>
- Nasution, M. R., & Fauzi, A. (2023). Perekaman Kehadiran Karyawan Dengan Akses Geolokasi: Inovasi Sistem Absensi Berbasis Web. *Rabit Jurnal Teknologi Dan Sistem Informasi Univrab*, 9(1), 91–102. <https://doi.org/10.36341/rabit.v9i1.4037>
- Oludare, A., & Sarah, A. (2014). *Digital Transformation And Innovation Of Academic Libraries: A Content Analysis*. 14(1&2), 13–19.
- Permatasari, D., Amirudin, A., & Sittika, A. J. (2021). Persepsi Mahasiswa Terhadap Pembelajaran Daring Mata Kuliah Pendidikan Agama Islam Di Masa Pandemi Covid-19. *Edukatif Jurnal Ilmu Pendidikan*, 3(6), 3704–3714. <https://doi.org/10.31004/edukatif.v3i6.1082>
- Poszytek, P. (2024). *Digital Transformation in Educational Organizations*. Routledge. <https://doi.org/10.4324/9781003482246>
- Putra, B. A., Salsabila, A. I., Nabila, K. R., & Zakiah, R. (2022). Peluang Dan Tantangan Kebijakan Merdeka Belajar-Kampus Merdeka Pada Prodi Ilmu Komunikasi Universitas Pembangunan Jaya. *Edu Cendikia Jurnal Ilmiah Kependidikan*, 2(01), 6–13. <https://doi.org/10.47709/educendikia.v2i01.1399>
- Rahmat, R. (2023). Moderasi Dalam Pembelajaran Agama Islam Di Madrasah Dan Perguruan Tinggi. *Al-Liqo Jurnal Pendidikan Islam*, 8(1), 121–148. <https://doi.org/10.46963/alliqo.v8i1.835>
- Roihanun, R. (2023). Pengaruh Kepemimpinan Kepala Madrasah Wanita Dan Manajemen Sekolah Berbasis Digital Terhadap Kompetensi Guru Madrasah. *Edusaintek Jurnal Pendidikan Sains Dan Teknologi*, 11(1), 159–173. <https://doi.org/10.47668/edusaintek.v11i1.1000>
- Sapalakkai, R. S. (2021). *Trik Dan Tips Meningkatkan Mutu Pendidikan Di Era Industri 4.0 Dalam Mewujudkan Perguruan Tinggi Yang Transformatif*. <https://doi.org/10.31219/osf.io/fw7xk>
- Sodikin, A., & Ma'arif, M. A. (2021). Penerapan Nilai Islam Moderat Dalam Pembelajaran Pendidikan Agama Islam Di Perguruan Tinggi. *Edukasi Jurnal Penelitian Pendidikan Agama Dan Keagamaan*, 19(2), 188–203. <https://doi.org/10.32729/edukasi.v19i2.702>
- Sohu, J. M., Hongyun, T., Hussain, F., & Akbar, U. S. (2023). Digital Innovation, Digital Transformation, and Digital Platform Capability: Detrimental Impact of Big Data Analytics Capability on Innovation Performance. *International Research Journal of Management and Social Sciences*, IV(September), 265–281. <https://doi.org/10.5281/zenodo.10498159>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta, CV.
- Sugiyono. (2023). *Metode Penelitian Pendidikan (Kuantitatif, Kualitatif, Kombinasi, R & D dan Penelitian Tindakan)*. Alfabeta.
- Sukandi, P. (2024). Transformation of Higher Education Through Digital Leadership (Systematic Literature Review). *Ilomata International Journal of Management*, 5(4), 1379–1389. <https://doi.org/10.61194/ijjm.v5i4.1239>
- Suti, M., Syahdi, M. Z., & Didiharyono, D. (2020). Tata Kelola Perguruan Tinggi Dalam Era Teknologi Informasi Dan Digitalisasi. *Jemma (Journal of Economic Management and Accounting)*, 3(2), 203. <https://doi.org/10.35914/jemma.v3i2.635>
- Suwardana, H. (2018). Revolusi Industri 4. 0 Berbasis Revolusi Mental. *Jati Unik Jurnal Ilmiah Teknik Dan Manajemen Industri*, 1(2), 109–118. <https://doi.org/10.30737/jatiunik.v1i2.117>
- Syabibi, M. R., Karim, A., Kulkarni, S., & Sahil, A. (2021). Communicative cultural dakwah of Abdurrahman Wahid in pluralistic society. *Karsa: Journal of Social and Islamic Culture*, 29(2), 1–33. <https://doi.org/10.19105/karsa.v29i2.5220>
- T, M. Y., Retnowati, E., Dewi, M., Mere, K., & Purbha, B. (2024). *Analysis of the Implementation of Training and Development Programs for Teachers in the Context of Curriculum Change : Evaluation and Recommendations*. 5(6), 1868–1876.
- Taufik, O. A., & Suprpto, S. (2021). Mewujudkan Lulusan Prodi Pai Berkompeten Sesuai Kebutuhan Dunia Kerja. *Al-Tarbiyah Jurnal Pendidikan (The Educational Journal)*, 31(1), 57. <https://doi.org/10.24235/ath.v31i1.8468>
- Umbar, K. (2023). Pengarusutamaan Beragama Dalam Ruang Lingkup Digital Bagi Mahasiswa

- Perguruan Tinggi. *J.of Religious Policy*, 1(2), 193–210. <https://doi.org/10.31330/repo.v1i2.10>
- Urbinati, A., Manelli, L., Frattini, F., & Bogers, M. L. A. M. (2022). The digital transformation of the innovation process: orchestration mechanisms and future research directions. *Innovation: Organization and Management*, 24(1), 65–85. <https://doi.org/10.1080/14479338.2021.1963736>
- Wiwitan, T., Yulianita, N., & Novita, S. (2022). Model Dialogis Dalam Komunikasi Pelayanan Perguruan Tinggi Swasta Di Masa Pandemi Covid-19. *Perspektif Komunikasi Jurnal Ilmu Komunikasi Politik Dan Komunikasi Bisnis*, 6(2), 175. <https://doi.org/10.24853/pk.6.2.175-182>
- Wujarso, R., Seno Pitoyo, B., Prakoso, R., Studi Manajemen, P., Tinggi Ilmu Ekonomi Jayakarta, S., Bhayangkara Jakarta Raya, U., & Pancasila, U. (2023). Peran Kepemimpinan Digital Dalam Era Digital. *Journal of Information System, Applied, Management, Accounting and Research*, 7(1), 1–9. <https://doi.org/10.52362/jisamar.v7i1.720>
- Zhang, D., & Huang, M. (2024). A Meta-Analytic Examination of the Synergistic Effects of Open Innovation Networks and Digital Transformation on Enterprise Innovation Capabilities. *Journal of Information Systems Engineering and Management*, 9(1), 1–17. <https://doi.org/10.55267/iadt.07.14674>
- Zulmi, R., Noza, A. P., Wandira, R. A., & Gusmaneli, G. (2024). Pendidikan Islam Berbasis Digitalisasi. *JMPAI: Jurnal Manajemen Dan Pendidikan Agama Islam*, 2(2), 192–205. <https://doi.org/10.61132/jmpai.v2i2.181>

