

Implementation of a Digital Leadership Model in Improving the Quality of Islamic Boarding Schools

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ABSTRACT. This research is focused on exploring the impact of implementing a digital leadership model by school principals on enhancing the quality of education. The methodology employed in this study is descriptive, utilizing qualitative data collection techniques. The research was explicitly conducted at Al Kamil Cianjur Modern Islamic Boarding School. The findings shed light on how school principals integrate digital leadership models within their educational institutions, showcasing their effectiveness in enhancing instructional standards. Moreover, it highlights the transformative potential of digital leadership in fostering a more inclusive, participatory, and innovative educational atmosphere within Islamic boarding schools. The study suggests that by embracing digital leadership, these institutions can leverage technology to optimize teaching and administrative processes, thereby improving the overall quality of education.

Keywords: Digital Leadership, Islamic Boarding School, Education Quality.

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INTRODUCTION

Religiously affiliated schools, like Islamic boarding schools (*Pesantren*), are frequently connected with conventional approaches to teaching and daily life (Fathullah et al., 2023; Hanafi et al., 2021). As a result, it is often believed that these institutions use technology and digitalization in the classroom less frequently (Aziz et al., 2022). *Pesantren* tends to favor teaching methods that emphasize religious and traditional values over those that emphasize technology which is one of the main reasons why it is frequently believed that they underuse technology (Aryati & Suradi, 2022; Jubba et al., 2022). Reading, memorizing, and comprehending religious texts are everyday activities in Islamic boarding schools (Taufik et al., 2022). Using technology or digitization detracts from the fundamental components of religious and conventional education.

The phenomenon of globalization tests the leadership philosophy of school administrators. If school administrators want to remain competitive in education, they must keep the future in mind (Brooks & Ezzani, 2022; Hariri et al., 2016). Future-oriented leaders must have the courage to foresee how evolving technological capabilities will enhance school leadership techniques (Mohammed et al., 2013). Digital technology has recently become a reality, creating a new phenomenon in everyday communication. New forms of virtual communication are becoming more common in society (Fernández-Batanero et al., 2021). The most well-known

programs include communication tools such as Twitter, Telegram, and WhatsApp. Scholars have also coined many new terminologies about the environment for leadership in schools due to this global phenomenon, including electronic leadership, remote leadership, digital leadership, and virtual leadership (Prahmana et al., 2021; Waruwu et al., 2023). School administrators are now using new virtual communication platforms like Telegram and WhatsApp.

In the current era of globalization, digital skills are a prerequisite for every activity (Haleem et al., 2022). Similar to how digital capabilities are the primary support in the face of an uncertain pandemic in education. The world of education expects more digital leadership abilities, sometimes known as "*digital leadership*," than merely digital skills (Hensellek, 2020; McCarthy et al., 2022). It is complex to improve digital leadership abilities in school. In the digital age, the ideal principal's leadership keeps up with technological advancements where the principal is responsible for motivating, persuading, and directing his staff to carry out educational initiatives that are in line with technological advancements throughout the revolutionary age of 4.0 (Eberl & Drews, 2021, 2021). According to the Regulation of the Minister of National Education Number 13 of 2007 concerning School Principal Standards, school principals must possess various competencies, including personality, supervision, managerial, entrepreneurial, and social competencies.

Several relevant studies have also examined digital leadership in schools, such as the research conducted by (Kusumawati, 2023) on Digital Leadership in Education: A Bibliometric Analysis, which discusses the Principal's Digital Leadership in the Digital Age: A Mini Review Article, (Karakose et al., 2021) conducted research on the Combinative Policy of Technology-Based Elementary School Principal Digital Leadership during the Covid-19 Pandemic, and (Hai et al., 2021; Sudika, 2020) conducted research on Elementary School Principal Leadership in the Era of the Industrial Revolution 4.0 and the Covid 19 Pandemic. From some of these studies, an understanding of the importance of implementing digital leadership in education, especially in public schools (Claassen et al., 2021). This study provides an overview of how to implement digital leadership in detail in educational institutions, especially Islamic boarding school-based educational institutions.

This research is significant to discuss considering the developments in technology and communication that are increasingly developing in the era of globalization and the community's stigma about religion-based schools, such as Islamic boarding schools, which are often considered to be left behind because of the general perception that they are not in line with the times and technological advances. Several factors may have contributed to this perception, including traditional approaches to learning methods, the lack of technology in the educational process, and limited resources (Halomoan et al., 2023). The effectiveness of one's leadership is if a leader combines situations and conditions with behavior patterns or leadership styles (Aisyah et al., 2022; Arifin et al., 2018; Eva et al., 2019). As a result, digital leadership pushes a leader to think through the circumstances before making a choice. How schools actively enhance their digital capabilities is one way to observe how the digital world is changing. Naturally, schools that can adapt to the times will stay caught up. With that in mind, a leader must have strong digital abilities.

When compared to earlier studies in the setting of Islamic boarding schools, this research is significantly innovative. First, this research is among the pioneering studies that integrate digital leadership with pesantren education. Today's digital era has expanded the definition of leadership beyond its traditional definition to include employing technology and digital techniques to advance educational objectives. This research offers new insights into how leadership in the pesantren environment might be maximized with a more contemporary approach by fusing traditional leadership components with digital technologies. This study offers a significant contribution to improving the quality of religious education by recognizing the advantages and difficulties of using technology in the setting of Islamic boarding schools. It also demonstrates how this research is current with modern needs. The originality of this research offers a novel perspective and a

foundation for continued advancement in Islamic boarding schools in line with societal demands and technological advancements.

METHOD

This study employs descriptive methods within its qualitative methodology. Purposeful sampling is utilized to gain a comprehensive understanding of the phenomenon or research subject, wherein the researcher intentionally selects individuals and locations. Descriptive techniques are used to portray the subject as it is. Data collection is facilitated through one-on-one interviews, wherein each participant is individually interviewed, and their responses are recorded. The research took place at Al Kamil Cianjur Modern Islamic Boarding School in Cianjur, West Java, located at Jl. Raya Bandung-Cianjur No. 53 Kp. Mekarsari Village Hegarmanah Kec. Sukaluyu Regency.

To ensure the accuracy of the data, the researchers employed a triangulation method. Triangulation, as a means of data validation, involves using alternative sources or methods for cross-referencing. In this study, researchers utilized source triangulation and technique triangulation to validate the data regarding leadership styles. This involved gathering data from both subordinates and superiors, as well as assessing the consistency of interview and observation results. Subsequently, the collected data underwent analysis following the interactive analysis model proposed by (Miles et al., 2018) Huberman, which includes stages such as data collection, data reduction, data presentation, and conclusion.

RESULT AND DISCUSSION

Result

This study focuses on managing the digital leadership style from planning to evaluation and how the digital leadership style influences raising the standard of Islamic boarding schools. This action will conclude the use of digital leadership and its influence. The principal is a professional or teacher tasked with overseeing a school, which serves as a hub for interactions between parents as sources of hope, graduates as receivers of satisfaction, and the broader public as a source of pride. When principals can fulfill their responsibilities as the person overseeing the school and understand the school's existence as a complex and distinctive institution, they are effective. The principal is the person who establishes the focal point and rhythm of a school, according to studies on the effectiveness of school principals.

Digital leadership is a disposition for leaders and prospective leaders to be able to direct the organizations they lead toward digital transformation (Laufer et al., 2021). Within the organization, this leadership directs, facilitates, and coordinates the digital work and knowledge processes. Digital leadership necessitates not only an understanding of how information and communication technology can support company leadership but also an understanding of their limitations and possible applications. A method for displaying leadership in all companies. The ability to manage the digital operations of the businesses one leads is known as digital leadership. Some of the school's digital change initiatives include the following:

Table 1. Results and Discussion

Stages of digital leadership development	Digital Management and Services
	Planning Preparation
	Development
	Evaluation
Aspects of digital leadership	Personality and Social Changes

development	Learning Change School Development Changes Change Management Resources Changes in Learning Supervision Changes in Technology and Information
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Digital Management and Services

The Al Kamil Cianjur, Modern Islamic Boarding School principal, initially evaluated the demands and problems faced by in-depth measures on actual concerns that are now occurring in the field of education and society to improve and adopt digital leadership in his school. The principal invites sharing with the school community (deputy head, teachers, staff, parents, and students) through various platforms and possibilities. From the results of this sharing with various elements within the school, the principal then makes and compiles essential points that will be studied further in detail and depth. The sharing process carried out by the principal occurs not only in formal (official) forums but also in informal settings. Not only that, but the discussion process can also take place relaxed in the WhatsApp group forum. The results of these formal, non-formal, and offline or online discussions are then followed up in a particular forum, which is tasked with studying and exploring various issues that are relevant to the development goals to be carried out by the school.

Thus, the head of the Al Kamil Cianjur Modern Islamic Boarding School has good leadership in school development based on technological development and the use of technology. The school principal takes advantage of technology as a means of communication and interaction and seeks to develop school institutional management with technology-based development. This action indicates that the head of Modern Al Kamil Cianjur Islamic Boarding School is trying to integrate school management and services based on technology (school management-based technology).

Planning Preparation

After the head of the school conducted an elaboration related to the various problems faced by the school, as well as the school's challenges in dealing with developments that occur in the community. The next stage is a concrete form of how school principals develop strategic formulations that will be taken to become a policy. The strategic formulation of school principals at the Al Kamil Cianjur Modern Islamic Boarding School can be seen in the arrangement of a School Plan Activity Plan and School Budget.

The compilation of these documents is an indicator of the principal's commitment to carrying out his leadership vision consistently. While its relation to the vision of the school principal's digital leadership can be seen from the principal's commitment to preparing activity plans and budgets that focus on developing school resources that are based on technology and information development, When viewed from the point of view of the commitment of the head of Modern Al Kamil Cianjur Islamic Boarding School to develop resources based on technology development, the strategic plans, work plans, and budget plans that have been determined will be apparent. In his planning, the head of the Al Kamil Cianjur Modern Islamic Boarding School has prepared strategic steps to develop human and non-human resources based on digital technology (strategic planning base technology). Technology-based strategic planning prepared by the school principal will become a reference and guideline for the entire school community in implementing education.

Development

The implementation of technology-based school management developed by the head of the Al Kamil Cianjur Modern Islamic Boarding School is manifested in institutional activities in general. As is daily practice in the Al Kamil Cianjur Modern Islamic Boarding School environment, which always develops group forums to solve various existing problems.

The groups developed are not only related to efforts to solve school problems but are also used for self-development for all existing human resources. Such as student councils, entrepreneurship groups, homeroom groups, and parents of students, all of which are managed through the use of technology, namely communication media such as the web and WhatsApp. The existence of group forums based on this technology, greatly simplifies and makes the education management process more effective and efficient. Various issues can be coordinated and communicated quickly, and policies can be adopted quickly too. so the effort to form groups with technology-based development is a real form of digital leadership that integrates leadership based on developing technology trends. These groups can be said to be a means of discussion for existing resources (group discussion forums) based on technology.

Evaluation

The school principal evaluates periodically the implementation of the plans that have been set. Technically the implementation is carried out within a period of weeks, months, semesters, and annually. Weekly evaluations are carried out by the management team, specifically to evaluate short-term educational progress, after which it is continued with monthly evaluations which are carried out as a whole between the principal, deputy principal, and teacher to evaluate the overall implementation of the activity program in one month. Semester evaluation is carried out to determine the implementation of program activities carried out within a period of one semester and the last evaluation is an annual evaluation. The annual evaluation in schools is called the School Self-Evaluation to evaluate the overall program of activities based on 8 educational standards.

Discussion

Based on the study and data analysis conducted by researchers at the Modern Al Kamil Cianjur Islamic Boarding School, it can be explained that there were several activities carried out by the principal of the Modern Al Kamil Cianjur Islamic Boarding School in implementing a digital leadership model in his school to improve the quality and quality of the school. Some of the aspects that have been changed towards digitalization by school principals are:

Personality and Social Changes

As the head of the Al Kamil Cianjur Modern Islamic Boarding School, he advised students to "start with yourself" to affect personal and social change. A school principal must be willing to make adjustments in his own behavior and social life before he can make changes in his institution. The Role of the Principal in Personality and Social Change as the head of the Al Kamil Cianjur Modern Islamic Boarding School said "Start from yourself", he said. Before making changes in his school, a school principal must be willing to initiate changes in himself and his social life.

According to the gathered data, the initiatives undertaken by the school principal to effect changes in this area involve several key steps. Firstly, collaboration is emphasized with the foundation, parents, teachers, and experts. This collaboration manifests through regular meetings convened between the school principal and committees, parents, and the faculty assembly. These meetings serve to reinforce relationships, disseminate information, and address pertinent issues. Additionally, besides in-person gatherings, these routine meetings are occasionally conducted online. Secondly, the principal emphasizes the importance of discipline within the school community, exemplified by punctuality, such as arriving on time before

classes commence. Interviews with multiple teachers indicate that the principal's commitment to discipline serves as motivation for punctuality among staff and evokes a sense of accountability when tardiness occurs. Thirdly, the school principal and foundation frequently organize activities involving experts to deliver training sessions and workshops aimed at enhancing the skills of existing staff members.

Learning Change

The Principal's Role in Driving Educational Change (Cultural Catalyst). At the core of any educational institution lies its commitment to learning. When learning stagnates, the essence of the school diminishes. Haphazard learning practices yield mediocre student outcomes. The principal has initiated several innovative approaches to foster change in school learning. Firstly, the collaboration between school principals and foundations frequently involves hosting practical learning workshops to adapt to evolving educational landscapes, including integrating online learning through available information technology platforms. Secondly, the principal actively oversees and evaluates the learning curriculum, annual and semester programs, and lesson plans crafted by teachers, aiming to enhance the quality of learning within the school. Teachers highly value the principal's involvement and support, especially when encountering challenges during the teaching process (Boyle et al., 2021). Thirdly, principals and foundations recognize and acknowledge teachers who exhibit strong competence and excel in their teaching roles beyond technical matters. This recognition has yielded positive outcomes; as noted by one interviewed teacher, feeling valued and appreciated has boosted teacher morale and productivity.

School Development Changes

The Principal's Role in Nurturing School Growth (Community Builder). Schools are not merely centers for individual growth but also require institutional advancement. Despite having long-standing histories, many schools may have achieved minimal accomplishments. Therefore, there is a pressing need for institutional transformations. The principal assumes a crucial role in guiding school members and committees in crafting the school's vision and mission. This task entails not only conceptualization but also devising practical steps and initiatives to actualize the envisioned objectives (Lai, 2015). With support from the foundation, the principal ensures the provision and enhancement of the school's physical infrastructure to align with the established vision and mission. This includes facilitating the procurement of essential technology, computers, and network facilities crucial for teachers in the educational process. Furthermore, concerted efforts are made by the principal and the school community to promote environmental sustainability, such as launching initiatives for a green and clean school to uphold the Adiwiyata school award previously earned. Additionally, beyond physical and academic development, the school emphasizes cultivating positive habits through initiatives like the morning prayer movement and post-lesson closing prayers.

Change Management Resources

The Principal's Role in Transforming Resource Management (Framework Developer). Enhancing the productivity and quality of educational staff is paramount for advancing human resource management within an educational institution. Educational staff serve as crucial assets for the school's development. As asserted by the principal, the caliber of students directly influences the school's success. Consequently, when a school changes, its student body also transforms (Brooks & Ezzani, 2022). By prioritizing the professional development of educational staff through competency assessments, the principal ensures optimal performance from the staff.

The principal of Al Kamil Cianjur Modern Islamic Boarding School aims to enhance the institution by focusing on its human resources. Engaging in international activities for teachers

and educational professionals has fostered newfound camaraderie among the teaching staff. Despite the ongoing pandemic, efforts to nurture positive relationships between the principal and teachers persist, with hybrid meetings being held regularly, often followed by communal meals. Moreover, all educators participate in emotional and spiritual questioning (ESQ) sessions, which consist of morning prayers and reflective sessions at the end of each teaching day. Furthermore, roles and responsibilities are delegated to subject matter experts throughout the school, fostering a sense of collective accountability and participation in school improvement initiatives.

Changes in Learning Supervision

The principal's role in overseeing changes in learning is closely tied to leadership quality aligned with national education standards, aiming to enhance the overall quality of education. At Pondok Pesantren Modern Al Kamil Cianjur, the principal is actively engaged in initiatives to elevate learning standards by enhancing the professional development of both school principals and teachers, fostering an innovative atmosphere, and conducting consistent academic supervision. Through change leadership, the principal endeavors to foster ongoing academic supervision for all teachers across all classes, aiming for continuous improvement in teaching quality (Bazhenov et al., 2015). Additionally, managerial supervision is carried out to enhance the service quality provided by administrative staff, librarians, janitorial and security personnel, as well as guidance and counseling teachers. Regular observation of work performance and guidance are integral aspects of the principal's responsibilities, aimed at ensuring optimal performance and service delivery (Armstrong, 2022). The principal emphasizes a constructive approach to addressing mistakes, viewing them as opportunities for correction and improvement rather than as grounds for reprimand (Boone & Kurtz, 1984). Thus, guiding, teaching, reminding, advising, and mentoring all school community members serve as pathways to enhancing both the learning experience and service quality within the school.

Changes in Technology and Information

The Principal's Role in Technology and Information Transformation (Technological Influencer). Clayton Christensen, a prominent figure in business administration at Harvard Business School, has described the current period as an era of disruption, wherein rapid advancements in information technology are reshaping traditional paradigms (Anwar et al., 2023). In this disruptive era, it has become imperative for educators to acquire proficiency in technology, utilizing it as an essential tool to enhance learning experiences. Utilizing various learning media is crucial for educators to deliver educational content to students effectively—the advancements in technology today present opportunities to address challenges encountered in the learning process.

According to the findings of the author's research, the principal of the Al Kamil Cianjur Modern Islamic Boarding School is acutely aware that digital literacy is one of the abilities that instructors in the 21st century need to learn. The Al Kamil Cianjur Modern Islamic Boarding School's principal, therefore, requested qualified resource persons to educate teachers in creating PowerPoint presentations, utilizing the internet, and e-learning to enhance their ICT proficiency. Because it came out that learning ICT may make it simpler to convey material, the teachers were pleased with the training (Rojiyah et al., 2023). Additionally, this exercise effectively satisfies the requirements of curriculum implementation, which stipulate that students must be able to access learning resources other than their teachers. With the use of the school's wifi, the teacher helps students locate additional educational resources online.

CONCLUSION

Based on the author's research on the implementation of the digital leadership model by the principal of the Modren Al Kamil Cianjur Islamic Boarding School, it has been appropriately implemented. Some of the activities carried out by the principal include carrying out digital change management, starting from the stages of planning and implementation to evaluating activities. Some of the changes made internally in the school include changes in personality, learning, development, HR, supervision, and the use of technology. However, school principals still have to motivate and encourage teachers to use technology effectively to achieve school goals effectively and efficiently. The results of this study obtained information about how school principals implement digital leadership models in their schools. This study demonstrates how efficiently the digital leadership model can be used to raise the standard of instruction at Islamic boarding schools. Islamic boarding schools have successfully established a more participatory, inclusive, and creative educational environment by incorporating technology into the learning and administration process. This research has implications for improving the quality of Islamic boarding schools. By implementing a digital leadership model, Islamic boarding schools can optimize the use of technology in the learning and management process, thereby increasing effectiveness and efficiency in delivering religious and general education materials. The researcher realizes that this research still has limitations in terms of its comprehensiveness, as it was only conducted in one school. The researcher suggests that further research be carried out comprehensively, involving a more comprehensive range of schools and more complex variables.

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