

# BENCHMARKING

JURNAL MANAJEMEN PENDIDIKAN ISLAM

## DIGITALIZATION AND EFFECTIVE COMMUNICATION IN STRENGTHENING ISLAMIC EDUCATION MANAGEMENT IN THE ERA OF DISRUPTION

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### Abstract

Digital developments in the ecosystem of Islamic educational institutions have resulted in significant changes in organizational communication patterns, especially related to the effectiveness of information delivery, coordination, and collaboration. Digital transformation not only presents a new communication platform, but also demands more adaptive and responsive digital communication competencies. This study aims to analyze how digitalization affects effective communication in Islamic educational institutions and identify relevant organizational communication strategies to improve the quality of education management in the era of disruption. The study was conducted using a literature study method using credible national and international sources, including Hasri and Sohiron's research on adaptive leadership and digital transformation in Islamic educational institutions. The results of the study show that effective communication in the digital context is influenced by three main factors: the digital competence of educators and leaders, the organizational culture that supports technology-based collaboration, and the digital leadership model that is able to integrate technology with learning needs. Digitalization has been proven to increase the speed of information flow, decision-making transparency, and coordination effectiveness, but it also presents challenges in the form of digital literacy gaps, resistance to change, and information overload. This research emphasizes that Islamic educational institutions require a systematic technology-based communication strategy, including strengthening digital leadership, developing digital communication competencies, and optimizing integrated communication platforms. The findings of this study enrich the literature on contemporary Islamic education management and provide recommendations for madrasah and pesantren leaders in developing effective communication patterns in the era of the Industrial Revolution 4.0 and Society 5.0.

**Keywords:** Digitization; Effective Communication; Islamic Education Management; Digital Leadership; Transformation of Education.

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### INTRODUCTION

The changes in digital technology in the last two decades have brought about major transformations in almost all sectors of life, including education. Islamic educational institutions such as madrasahs, Islamic boarding schools, and Islamic-based schools are now in an important phase where the quality of governance and the effectiveness of organizational communication are highly dependent on the ability of institutions to adopt digitalization. This flow of change is not only caused by the penetration of digital devices and the internet, but also by the evolution of social

paradigms such as the Industrial Revolution 4.0 and the shift towards Society 5.0 which places technology as a medium to strengthen human interaction, not simply replace it. In the midst of this condition, Islamic education management is required to rearrange its communication approach to remain relevant, adaptive, and responsive to the dynamics of the times.

Effective communication is the main foundation for the implementation of quality education, because all policies, coordination, and educational services will run optimally if information can be conveyed clearly and received appropriately. In the past, communication in educational institutions took place through conventional mechanisms such as face-to-face meetings, circulars, or oral delivery. However, the model is no longer considered adequate to meet the needs of modern management that demands speed, accuracy, transparency, and accountability. Digitalization provides solutions through the presence of technology-based communication platforms such as Learning Management System (LMS), WhatsApp Group, e-mail, school management applications, and digital information dashboards that allow information distribution to take place quickly and in a structured manner. This change requires Islamic education leaders to understand how technology can be used as a strategic instrument to strengthen organizational communication.

In the context of Islamic education management, the digitization of communication is not only related to the use of tools or applications, but also the transformation of organizational culture. Islamic educational institutions have unique characteristics, namely a combination of religious values, classical scientific traditions, and the need to respond to modern developments. This condition causes the digitalization process to not always run smoothly. Some institutions face obstacles such as the digital literacy gap of educators and education personnel, limited infrastructure, resistance to change, and concerns that technology can reduce the essence of Islamic education's spiritual values. This is where the role of effective communication becomes very important, not only as a means of disseminating information, but also as a mechanism to build collective understanding and unify the vision of all stakeholders.

In addition, the literature shows that the success of digitalization in Islamic educational institutions is greatly influenced by adaptive leadership and digital leadership. A number of recent studies confirm that madrasah and pesantren leaders who are able to integrate technology with management policies will produce more effective communication, increase school community participation, and encourage learning innovation. At the same time, a study conducted by Salfen Hasri, Sohiron, and their colleagues confirms the strong relationship between adaptive leadership, digital transformation, and improving the quality of Islamic education management in the era of disruption. These findings suggest that communication digitalization cannot stand alone, but rather must be within the framework of overarching managerial change.

In the era of disruption, the main challenge for educational institutions is not only how to adopt technology, but how to utilize it to create effective and meaningful organizational communication. Good communication will strengthen governance, facilitate decision-making, and create a more collaborative learning environment. Therefore, it is important to conduct an in-depth study of how digitalization affects communication patterns in the Islamic education environment, as well as how technology-based communication strategies can be systematically integrated in education management.

Based on this background, this research was compiled to answer the academic and practical needs regarding strengthening organizational communication through digitalization in Islamic educational institutions. This study is expected to make a theoretical contribution to the development of contemporary Islamic education

management literature as well as offer applicative recommendations for leaders of educational institutions in managing effective communication in the midst of the complexity of the digital era.

## **LITERATURE REVIEW**

### **Digitalization in Islamic Education Management**

Digitalization is the process of integrating digital technology into all aspects of educational institution management, including administration, learning, organizational communication, and decision-making. From the perspective of Islamic education, digitalization is not only understood as the adoption of technological devices, but also as an effort to strengthen the effectiveness of governance to be more adaptive to the needs of the times. According to (Mustofa 2022), the digitization of Islamic education is an inevitable demand due to the changing global environment that is increasingly dynamic and competitive. Digital transformation allows madrassas and Islamic boarding schools to improve work efficiency, expand access to information, and optimize interactions between teachers, students, and leaders.

The development of the Industrial Revolution 4.0 has also encouraged the emergence of innovations in education services. (Schwab 2017) emphasizing that technologies such as the Internet of Things (IoT), big data, and artificial intelligence (AI) have changed the way organizations manage information and interact with stakeholders. In the context of Islamic educational institutions, this change requires the ability to integrate Islamic values with modern technology so as to create more effective and relevant educational management. Research (Ifenthaler 2022) emphasized that digital transformation places the leaders of educational institutions as important actors who are tasked with facilitating change and ensuring that all components of the organization have adequate digital competencies.

### **Effective Communication in Educational Organizations**

Effective communication is the process of delivering messages in a clear, precise, and easy-to-understand manner so as to result in a common understanding between the sender and receiver. In educational institutions, effective communication functions to support coordination, resolve conflicts, control the implementation of tasks, and strengthen social relations between school residents. (Haromain 2021) explained that educational communication must be open, transparent, and dialogical so that the learning process and institutional management run harmoniously.

Conventional organizational communication that relies on face-to-face meetings, official letters, and oral deliveries is now starting to shift to digital media. According to (Abidin 2021) The digital learning environment demands improved communication competencies which include the ability to use digital platforms, clarify messages through electronic media, and interact professionally in cyberspace. This confirms that digital communication is a central element in modern education management.

In the context of Islamic education, effective communication has spiritual and ethical dimensions. (Azra 2020) stated that communication in Islamic institutions must reflect the values of honesty, justice, and responsibility as the main foundation of educational interaction. The integration of these values with technology-based communication is a challenge in itself in the era of disruption.

### **Digital Leadership and Communication Competencies of Islamic Education Leaders**

Digital leadership is the ability of leaders to utilize technology to direct organizations towards innovation, change, and quality improvement. (Sheninger 2019) emphasizing that leaders in the digital era must be able to create an organizational culture

that is open to technology and able to manage information quickly and accurately. In Islamic education, digital leadership is not only required to understand technology, but also ensure that its implementation is in line with Islamic values.

(Avolio and Kahai 2020) Explains that digital leadership has a great influence on the effectiveness of organizational communication, especially in terms of speed of information delivery, data-driven decision-making, and the ability to build virtual collaboration. This leadership model is very relevant for madrassas and Islamic boarding schools who want to strengthen internal and external communication through digital platforms.

Salfen Hasri and Sohiron's research is an important reference in this context. (Hasri and Sohiron 2025) found that adaptive leadership based on digital transformation can improve the quality of Islamic education management, especially when leaders succeed in building responsive and collaborative communication. In another study, Hasri, Sohiron, and colleagues (Sari et al. 2025); (Khairunisa et al. 2025), (Harly et al. 2024) concludes that the success of Islamic educational organizations in managing change is largely determined by the ability of leaders to optimize communication technologies and manage knowledge digitally.

### **Society 5.0 and the Direction of Educational Communication Innovation**

The concept of Society 5.0 expands the framework of the Industrial Revolution 4.0 by emphasizing the integration of technology and humanity. (Fukuyama 2018) views Society 5.0 as a society that puts technology to help human life without losing its social and moral value. In Islamic education, this concept is particularly relevant because it emphasizes the balance between technological advances and spiritual values.

(Rahman and Sarker 2022) emphasized that educational institutions must build a leadership strategy that is able to integrate digital technology with humanist and religious values. Communication innovations within the framework of Society 5.0 include the use of digital platforms to strengthen personal interactions, manage more complex information, and support student engagement in learning.

(Li and Wong 2022) It added that effective organizational communication in a digital school system depends on three important aspects: technological infrastructure, collaborative culture, and the digital competence of all members of the organization. In Islamic educational institutions, these three aspects are the basis for creating communication governance that is more transparent, fast, and relevant.

## **RESEARCH METHODS**

This research uses a qualitative approach with the type of library research. This approach was chosen because the focus of the research aims to analyze the concepts of digitalization, effective communication, and Islamic education management practices based on published theories and empirical findings. Literature research allows researchers to examine in depth various relevant scientific sources, both national and international, resulting in a systematic understanding of the phenomenon of communication digitalization in the management of Islamic educational institutions. According to (Zed 2014) Literature study is an analytical method that uses literature as the main source to obtain conceptual and theoretical data.

### **1. Data Sources**

The data sources in this study consist of:

Primary sources, i.e. recent journal articles, including works (Hasri and Sohiron 2025) which discusses adaptive leadership, digital transformation, and improving the quality of

Islamic education management. These articles were chosen because they have direct relevance to the research focus.

Secondary sources are books, articles, proceedings, research reports, and other scientific publications that discuss educational digitalization, organizational communication, digital leadership, Society 5.0, and Islamic education management. References from Avolio & Kahai (2020), Sheninger (2019), Azra (2020), Mustofa (2022), and others are used as the theoretical foundation of the research.

These sources are obtained through Google Scholar, DOAJ, ScienceDirect, ERIC, and national repositories such as Garuda and Moraref. The literature selection criteria are based on: (1) relevance to the research topic; (2) up-to-date, especially publications in the last five years; and (3) the credibility of the author and the journal.

## **2. Data Collection Techniques**

The data collection technique is carried out through documentation, which is collecting, reading, and identifying information from various related literature. To simplify the process of managing data and citations, all sources used are input into the Mendeley Reference Manager. Each article is analyzed based on its theme, conceptual suitability, and contribution to the research focus. This technique is in line with the view of Creswell (2018) who affirms that documentation in qualitative research is an important step to obtain structured and verified data.

## **3. Data Analysis Techniques**

The data was analyzed using content analysis techniques, which is the process of reading in depth, identifying patterns, grouping themes, and compiling interpretations based on the available literature. The analysis is carried out in three stages:

Data reduction, namely selecting relevant literature, eliminating inappropriate information, and compiling data according to the theoretical framework of digitization and effective communication.

Data presentation, namely compiling information in the form of narrative descriptions, concept charts, and thematic structures based on categories such as digital leadership, digital communication, Islamic education transformation, and Society 5.0.

Drawing conclusions, which is compiling research findings that are interpretive in nature to answer the formulation of the problem.

The analysis process refers to the Miles, Huberman, and Saldaña (2014) model which is widely used in qualitative research to produce valid and systematic interpretations. The validity of the data in this study is strengthened through source triangulation, which is comparing data from several references with similar themes to ensure the consistency and accuracy of the information.

## **4. Research Procedure**

The procedure for implementing this study includes:

**Identify problems** related to the need for effective communication in the digitization of Islamic education;

**Collection of literature** from primary and secondary sources;

**Data coding** through recording the main themes of each literature;

**In-depth analysis** based on the theoretical framework of communication, digital leadership, and digital transformation;

**The preparation of discussions** as an integration between theories and findings from various sources;

**Drawing conclusions** that represent the contribution of research to the literature on Islamic education management.

This method allows for a comprehensive analysis and provides a strong theoretical foundation to understand how digitalization affects effective communication in strengthening Islamic education management in the era of disruption.

## **RESULTS OF RESEARCH AND DISCUSSION**

### **1. Digitalization as a Driver of Islamic Education Management Transformation**

Digitalization has been the main catalyst for change in Islamic educational institutions, both in administrative and academic aspects. These changes include the use of school management applications, digital learning platforms, online communication systems, and cloud-based documentation systems. This transformation is not just the adoption of tools, but involves a paradigm shift in managing information, interaction, and educational services. (Mustofa 2022) emphasized that digitalization encourages the creation of more flexible, efficient, and connected education management in real-time.

In the context of Islamic education, digitalization has two main dimensions. First, operational dimensions related to work efficiency, such as administrative automation, student data management, and curriculum management. Second, the strategic dimension that emphasizes improving the quality of educational services through the use of technology as an instrument of communication, collaboration, and innovation. These changes have direct implications for the ability of Islamic educational institutions to compete and adapt to global developments. Institutions that are able to adapt will show increased communication effectiveness and accountability for institutional performance.

Digitalization provides space for Islamic educational institutions to develop data-driven management practices. Information technology allows leaders to analyze reports of attendance, student achievement, and teacher performance more quickly and accurately. This transformation shifts decision-making patterns from traditional intuitive models to more objective, measurable, and evidence-based models. This condition is in accordance with the view (Ifenthaler 2022) that digitalization presents a more adaptive, responsive, and innovative education system.

### **2. Changes in Organizational Communication Patterns in the Digital Era**

One of the most significant changes in digitalization is the shift in organizational communication patterns from a face-to-face model to a digital platform-based communication model. This change has a positive impact on the effectiveness of information delivery. (Abidin 2021) mentioned that digital communication allows messages to be conveyed quickly, structured, and well-documented. Leaders, teachers, education staff, and parents can interact without space and time limits.

In Islamic education management, digital communication patterns generally develop in three forms:

#### **a. Digital vertical communication**

Used to convey instructions, policies, or directions from leaders to teachers and education staff. Platforms such as WhatsApp Group, e-mail, or school applications make it easier to disseminate information simultaneously and uniformly.

#### **b. Digital horizontal communication**

Connect teachers with other teachers or education staff in collaborative activities, online meetings, and program development.

### **c. Digital external communication**

Connect schools with parents, communities, or other institutions through social media, websites, or digital reporting platforms.

This change in communication patterns strengthens transparency and accountability. Activity reports can be published quickly, important decisions can be made in a short time, and the consultation process with parents can be carried out efficiently. This shows that technology not only mediates communication, but improves the quality of education services as a whole.

## **3. Challenges of Digital Communication in Islamic Educational Institutions**

While digitalization offers a wide range of conveniences, Islamic educational institutions also face a number of challenges that affect the effectiveness of communication.

### **a. Digital literacy gap**

Some educators and education staff are not used to using digital applications optimally. This causes the communication process to not run properly, for example misreading information, slow response to messages, or inconsistent use of platforms.

### **b. Resistance to change**

Some members of educational institutions still consider technology as a threat to the traditional values of Islamic education. As stated (Azra 2020) Islamic educational institutions need to maintain a balance between traditional values and the demands of modernity.

### **c. Information overload**

Digital communication often produces a huge volume of information. This condition can cause saturation and reduce the responsiveness of teachers and education staff to important messages.

### **d. Uneven infrastructure**

Some madrasas or pesantren face limited internet access, technology devices, or server capacity.

These constraints show that digitalization requires strong policy support, digital competency training, and adaptive leadership to ensure effective communication.

## **4. Adaptive Leadership and Digital Leadership as the Key to Strengthening Communication**

The success of communication digitalization is inseparable from the strategic role of educational institution leaders. The concept of digital leadership emphasizes the ability of leaders to use technology as a tool to strengthen communication, collaboration, and decision-making. This leadership model is relevant to the view (Sheninger 2019) that digital leaders need to build an organizational culture that is open to technology.

Research (Hasri and Sohiron 2025) strengthen this. They found that adaptive leadership that integrates technology is able to improve the effectiveness of Islamic education quality management. Madrasah leaders who implement digital leadership show better ability to manage conflicts through digital communication, accelerate information flows, increase the transparency of teachers' work, and build a collaborative culture through digital platforms.

In other studies, (Harly et al. 2024) emphasized that technology-based innovation in school leadership plays a direct role in the formation of a superior educational environment.

Thus, digital leadership is the core of the success of communication transformation in Islamic educational institutions.

### **5. Effective Communication in the Framework of Society 5.0**

The concept of Society 5.0 brings a new approach to the relationship between humans and technology. In this concept, technology is not only used for efficiency, but also to improve the quality of human interaction. (Fukuyama 2018) stating that technology should make it easier for humans to achieve a more meaningful life.

In the context of Islamic educational institutions, Society 5.0 directs digital communication to be more personalized, humanistic, and spiritual. Technology is used to strengthen teacher-student relationships through interactive learning platforms, facilitate online religious discussions, expand digital-based counseling guidance services, and develop communication between Islamic boarding schools/madrasas and the community.

(Rahman and Sarker 2022) emphasizing that Islamic educational institutions must develop communication strategies that combine technological aspects and human values. Thus, technology is not only a tool, but a medium to expand the educational and da'wah functions of the institution.

### **6. The Impact of Digitalization on the Work Effectiveness of Teachers and Education Personnel**

Communication digitalization has a direct impact on improving the performance of teachers and education personnel. Digital platforms allow teachers to receive information quickly, coordinate the preparation of lesson plans more efficiently, monitor learning activities more accurately, and make teacher-parent communication easier and more transparent.

Bond (2020) explained that the use of digital tools increases student engagement and makes it easier for teachers to manage learning. This is in line with Kim and Park (2021) who found that the digital competence of school leaders affects the level of innovation that occurs in schools.

In Islamic educational institutions, improving teacher performance through technology also encourages a more systematic religious development process. For example, the study of fiqh, tafsir, or morals can be carried out online through a special platform that expands access to learning.

### **7. Digital Communication Strategy Model for Strengthening Islamic Education Management**

Based on the results of the literature analysis, there are three main strategies that Islamic educational institutions can use to strengthen communication:

#### **1) Strengthening digital capacity (digital competence)**

Includes training on the use of communication applications, digital learning media, and electronic document management.

#### **2) Development of digital organizational culture**

Encourage all school residents to get used to communicating through official platforms, respond quickly, and maintain communication ethics.

#### **3) Development of integrated communication system**

Using one main platform that unites academic, administrative, and announcement information so that information overload does not occur.

This strategy is supported by findings (Li and Wong 2022) which shows that an integrated digital communication system improves the coordination and quality of school services.

## CONCLUSION

This study emphasizes that digitalization and effective communication are two strategic pillars that complement each other in strengthening Islamic education management in the era of disruption. Digitalization brings significant changes in the governance of educational institutions through accelerating access to information, optimizing services, and improving the efficiency of the administrative system. Digital transformation enables Islamic educational institutions to run data-driven managerial processes, strengthen cross-unit coordination, and increase transparency in decision-making.

Meanwhile, effective communication plays a key role as a liaison that ensures that the digitalization process runs in a directional manner, is accepted by all institutional citizens, and is able to build an adaptive work culture. Good communication minimizes resistance, strengthens clarity of instruction, and fosters collaboration between leaders, educators, education staff, and students.

The integration of digitalization and effective communication has been proven to contribute to strengthening the quality of Islamic education management, especially in improving governance, accelerating educational services, developing educator professionalism, and forming an innovative organizational culture.

Thus, the success of Islamic education management in the era of disruption is not only determined by technological readiness, but also by the ability of institutions to build strategic, adaptive, and harmonious communication patterns in harmony with Islamic values.

## SUGGESTION

### **Strengthening Human Resources Digital Competency**

Islamic educational institutions need to organize continuous training related to technology competencies, digital literacy, and digital communication ethics for leaders, teachers, and education personnel so that digital transformation can run more productively.

### **Optimization of Technology Infrastructure**

The development of digital infrastructure must be prioritized, including a stable internet network, learning management platforms, administrative systems, and supporting devices relevant to the needs of the institution.

### **Implementation of an Effective and Structured Communication Model**

Institutions need to build a more open, responsive, and collaborative organizational communication flow. The use of digital platforms such as LMS, school management applications, and internal communication channels needs to be optimized.

### **Integration of Islamic Values in Digitalization**

The development of communication and technology must continue to prioritize the values of honesty, responsibility, trust, and the principle of benefit, so that digitalization does not eliminate the characteristics of Islamic educational institutions.

### **Strengthening Digital Transformation Policy**

It is necessary to prepare a targeted digitalization policy, including operational standards, data security, ethics for the use of technology, and digital communication rules to ensure the sustainability of the program.

### **Collaboration and Benchmarking**

Islamic educational institutions are advised to collaborate with digital schools, colleges, and technology institutions to obtain best practices in the implementation of digitalization and organizational communication.

### **Advanced Research**

The next research can be directed to empirical studies using field data to see the effectiveness of digitalization and communication in Islamic educational institutions in various regions

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