

THE USE OF DIGITAL LEARNING PLATFORM AS COMMUNICATION MEDIA FOR GENERATION Z AT PB. SOEDIRMAN ISLAMIC HIGH SCHOOL, JAKARTA

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Abstract: This study aims to evaluate the effectiveness of using digital learning platforms as communication media in Islamic education with a focus on Generation Z teachers at PB. Soedirman Islamic High School, Jakarta. This generation is known as digital natives who are highly adaptive to information technology. The research method used is a case study with a qualitative approach, involving interviews, participatory observation, and surveys. The results show that Generation Z teachers at PB. Soedirman Islamic High School, Jakarta feel comfortable and helped by the use of digital learning platforms for communication and learning. These platforms enable faster and more efficient communication. However, some challenges were also found, such as limitations in conveying messages clearly and the risk of information overload. Factors affecting the effectiveness of communication through digital platforms were identified, including Teachers' technological competence, platform design, organizational culture, and adequate training and support. This research is consistent with technology acceptance theory which states that perceived ease of use and usefulness have a significant effect on technology acceptance. The results of this study provide practical implications to optimize the use of digital learning platforms through continuous training, intuitive platform design, and digital culture support in the organization. Thus, digital platforms can improve the performance and job satisfaction of Generation Z teachers.

Keywords: Digital Learning Platform, Effective Communication, Islamic Education.

Introduction

The digital era has brought significant changes in various aspects of life, including in the world of education and Islamic education. The development of information and communication technology has given rise to various digital learning platforms that function as effective communication media in Islamic education. These platforms are not only used to deliver learning materials, but also to build interactions between teachers and managers, as well as between teachers and fellow teachers.¹

In the context of Islamic education, effective communication plays an important role in facilitating management functions such as planning, organizing, directing and controlling. Vardarlier emphasizes that good communication is the foundation that supports various processes in organizations, from the delivery of strategic information to the management of internal conflicts. Without effective communication, efforts to achieve organizational goals can be hampered by misunderstandings, incomplete information, or even misinformation.² Therefore, organizations should pay attention to how they manage internal and external communication flows.

Internal and external communication can be done with visual media, which is a medium that can be captured with human senses, such as boards, flipcharts, projectors and slides. As Allah says in the Qur'an Surah al-'Alaq verses 4 and 5, where the word al-Qalam is mentioned as a teaching medium. The word (القلم) *al-qalam* is taken from the verb (قلم) *qalama* which means cutting the end of something. The word *qalam* means the result of using these tools, namely writing. This meaning is corroborated by the word of Allah in the Quran verse 1, namely his words: Nun by *qalam* and what they write. In terms of the time of revelation, the two words *qalam* are closely related and even connected, although the order of writing in the *Mushaf* is not. In the verse above, the name *ibtibak* means that there is no mention of a description, which should be in two sentences that go together, because the description in question has already been mentioned in another sentence. In verse 4, the word man is not mentioned because it has already been mentioned in verse 5, and in verse 5 the sentence without a pen is not

¹ Archana Singh, Sarika Sharma, and Manisha Paliwal, "Adoption Intention and Effectiveness of Digital Collaboration Platforms for Online Learning: The Indian Students' Perspective," *Interactive Technology and Smart Education* 18, no. 4 (January 1, 2020): 493–514, <https://doi.org/10.1108/ITSE-05-2020-0070>.

² Pelin Vardarlier, "Digital Transformation of Human Resource Management: Digital Applications and Strategic Tools in HRM," in *Digital Business Strategies in Blockchain Ecosystems: Transformational Design and Future of Global Business*, ed. Umit Hacioglu (Cham: Springer International Publishing, 2020), 239–64, https://doi.org/10.1007/978-3-030-29739-8_11.

mentioned because in verse 4 the meaning has already been hinted at by the mention of a pen. Thus, the two verses above mean “He (Allah) teaches with a pen (writing) (things that man has known before) and He teaches man (without a pen) what was not known before.

In today's digital age, digital learning platforms have evolved into a very useful tool for improving the effectiveness of communication in Islamic education. By utilizing this technology, organizations can better support various management functions, especially in terms of employee training and development. Digital learning platforms enable the rapid and equitable dissemination of information to all members of the organization, unhindered by geographical or time barriers. For example, training that used to be conducted face-to-face can now be conducted virtually, allowing more employees to participate without leaving their workplace.

Furthermore, organizational communication theory emphasizes that digital media can improve the efficiency and effectiveness of communication in organizations. One of the main advantages of digital media is its ability to reduce physical and temporal barriers that are often an obstacle in traditional communication. Through digital platforms, information can be delivered in real-time and accessed by all members of the organization anytime and anywhere. This not only speeds up the delivery of messages, but also improves the accuracy and consistency of the information conveyed. In addition, features such as discussion forums, chat, and video conferencing allow for more dynamic and interactive two-way communication, which in turn supports better decision-making.³

In addition, the use of digital learning platforms also allows for the customization of training content according to employees' individual needs, which in turn can increase their motivation and engagement in the learning process. Employees can learn at their own pace and access training materials that are relevant to their tasks, ultimately improving individual and overall organizational performance. Thus, the use of digital platforms in organizational communication serves not only as a tool to deliver information, but also as a medium to build employees' knowledge and skills.

However, while digital learning platforms offer various advantages, there are also challenges that need to be overcome. One of them is the digital divide, where not all employees have access or the ability to utilize this technology optimally. Organizations must ensure that all employees have adequate access to these platforms and receive the necessary training to use them effectively. In addition, organizations should also pay attention to data

³ Wejdan Farhan et al., “E-Learning Systems versus Instructional Communication Tools: Developing and Testing a New e-Learning User Interface from the Perspectives of Teachers and Students,” *Technology in Society* 59 (November 1, 2019): 101192, <https://doi.org/10.1016/j.techsoc.2019.101192>.

security and privacy aspects, given that digital platforms often involve storing and managing sensitive information.

Evaluating the effectiveness of digital learning platforms in Islamic education is an important step to ensure that these technologies truly add value to the organization. Although it has been widely used, not all implementations of this platform go without obstacles. There are several problems that often arise in the use of digital learning platforms, including limited direct interaction, difficulty in conveying messages clearly, and low levels of teacher or facilitator participation in the learning process. These problems can reduce the effectiveness of digital platforms as communication media in Islamic education.⁴

In order to evaluate the effectiveness of digital learning platforms in Islamic education, it is necessary to conduct comprehensive research to identify the factors that affect their effectiveness. Some factors that can be considered in this evaluation include platform design, accessibility, content quality, technical support, and training and support for facilitators and participants. An effective digital learning platform should be designed with ease of use and accessibility for all users in mind. An intuitive interface and easily accessible features will make it easier for participants to navigate the platform and access training materials. In addition, the platform should also support a variety of devices, be it desktop computers, laptops, tablets or smartphones, so that participants can learn with great flexibility.

Content delivered through digital platforms should be relevant, up-to-date and presented in an engaging way. Content quality is key to ensuring that participants gain the knowledge and skills that suit their needs. The use of multimedia such as videos, infographics, and interactive simulations can help improve the understanding and retention of the material by participants. Reliable technical support is an important element in ensuring the smooth use of digital learning platforms. Participants and facilitators should be able to easily access technical assistance if they encounter problems, either through an online helpdesk, user guides, or specialized training sessions on how to use the platform.

Training and Support for Facilitators: Facilitators should be provided with adequate training on how to effectively manage digital learning. They need to understand how to utilize the platform's features to support better interaction, manage discussions, and deliver materials in a clear and engaging way. In addition, facilitators also need to be equipped with skills to motivate

⁴ Dimah Al-Fraihat et al., "Evaluating E-Learning Systems Success: An Empirical Study," *Computers in Human Behavior* 102 (January 1, 2020): 67–86, <https://doi.org/10.1016/j.chb.2019.08.004>.

participants and keep them engaged during learning sessions. Continuous Feedback and Evaluation: Organizations should implement a feedback system that allows participants and facilitators to provide feedback on their experience using the digital learning platform. This feedback can be used to make continuous improvements to the platform, both in terms of technical and content, so that its effectiveness can be continuously improved.

The results of previous research conducted by Davis et al., shows that perceived ease of use and usefulness have a significant effect on user acceptance of technology.⁵ Venkatesh develops a technology acceptance model that combines various theories to understand the factors that influence user acceptance.⁶ While the research findings of Arbaugh shows that interactions between students and instructors and between students affect learning satisfaction in an online learning environment.⁷ Followed by the research of Piccoli found that virtual learning environments can be effective for basic information technology skills training.⁸ Swan highlighting the importance of interaction design in online courses to improve satisfaction and perceptions of learning.⁹ Study by Garrison developed a community of inquiry model that emphasizes the importance of social interaction in online learning.¹⁰

Hrastinski explains the difference between asynchronous and synchronous learning and its impact on student interaction and engagement.¹¹ Furthermore, Allen and Seaman provide data on the growth and trends of online education in the United States.¹² Research by Zhao

⁵ Fred D. Davis, Richard P. Bagozzi, and Paul R. Warshaw, "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models," *Management Science* 35, no. 8 (August 1989): 982–1003, <https://doi.org/10.1287/mnsc.35.8.982>.

⁶ Viswanath Venkatesh et al., "User Acceptance of Information Technology: Toward a Unified View," *MIS Quarterly* 27, no. 3 (2003): 425–78, <https://doi.org/10.2307/30036540>.

⁷ J. B. Arbaugh, "Virtual Classroom Characteristics and Student Satisfaction with Internet-Based MBA Courses," *Journal of Management Education* 24, no. 1 (February 1, 2000): 32–54, <https://doi.org/10.1177/105256290002400104>.

⁸ Gabriele Piccoli, Rami Ahmad, and Blake Ives, "Web-Based Virtual Learning Environments: A Research Framework and a Preliminary Assessment of Effectiveness in Basic IT Skills Training," *MIS Quarterly* 25, no. 4 (2001): 401–26, <https://doi.org/10.2307/3250989>.

⁹ Karen Swan, "Virtual Interaction: Design Factors Affecting Student Satisfaction and Perceived Learning in Asynchronous Online Courses," *Distance Education* 22, no. 2 (January 1, 2001): 306–31, <https://doi.org/10.1080/0158791010220208>.

¹⁰ D. Randy Garrison, Terry Anderson, and Walter Archer, "Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education," *The Internet and Higher Education* 2, no. 2 (March 1, 1999): 87–105, [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6).

¹¹ Stefan Hrastinski, "Asynchronous and Synchronous E-Learning," *Educause Quarterly* 4 (2008): 51–55.

¹² I. Elaine Allen and Jeff Seaman, "Learning on Demand: Online Education in the United States, 2009," *Sloan Consortium (NJ1)* (Sloan Consortium, January 2010), <https://eric.ed.gov/?id=ED529931>.

concluded that course design, teaching methods, and technology used affect the effectiveness of distance education.¹³ Means et al. concluded that online learning can be as effective as face-to-face learning if designed well.¹⁴

Many previous studies have focused on the technical and pedagogical aspects of digital learning platforms in the context of formal education. However, this study more specifically evaluates the use of digital learning platforms as a communication medium in Islamic education. The focus of this research is on the interaction and communication that occurs through the platform in an organizational context, as well as how this affects Teacher performance and satisfaction. The novelty of this research lies in its holistic approach in evaluating the effectiveness of digital learning platforms as communication media in Islamic education. This research does not only look at the technological aspect, but also considers the human and organizational factors that affect communication effectiveness. In addition, this study also uses a qualitative approach to get a more comprehensive picture.

The urgency of this research at PB. Soedirman Islamic High School, Jakarta lies in the need for organizations to improve communication and collaboration in the digital era. With more and more organizations adopting digital learning platforms, it is important to evaluate their effectiveness and identify areas that need improvement. The results of this study are expected to provide guidance for organizations in optimizing the use of digital learning platforms to improve communication and HR performance in Islamic education. The purpose of this study is to evaluate the use of digital learning platforms as a communication medium in the context of Islamic education at PB. Soedirman Islamic High School, Jakarta, identify factors that influence its effectiveness, and provide recommendations to improve its use. Specifically, this study aims to measure the level of effectiveness of digital learning platforms as a medium of communication in Islamic education, identify factors that influence the effectiveness of communication through digital learning platforms, provide practical recommendations to improve the effectiveness of using digital learning platforms in Islamic education.

This research uses a case study method with a focus on Generation Z research subjects related to the use of digital learning platforms as communication media in Islamic education. The case study method was

¹³ Yong Zhao et al., "What Makes the Difference? A Practical Analysis of Research on the Effectiveness of Distance Education," *Teachers College Record* 107, no. 8 (August 1, 2005): 1836–84, <https://doi.org/10.1111/j.1467-9620.2005.00544.x>.

¹⁴ Barbara Means et al., "Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies" (US Department of Education, May 2009), <https://eric.ed.gov/?id=ED505824>.

chosen because it allows researchers to explore phenomena in depth and holistically in a real-world context ¹⁵. This research will be conducted at PB. Soedirman Islamic High School, Jakarta which has adopted a digital learning platform and has a significant population of Generation Z teachers.

The research involves several stages, namely data collection, data analysis, and interpretation of results. Data collection will be conducted to obtain a comprehensive picture including in-depth interviews with Generation Z teachers at PB. Soedirman Islamic High School, Jakarta, education personnel, and other stakeholders to understand their experiences and perceptions regarding the use of digital learning platforms at PB. Soedirman Islamic High School, Jakarta. These interviews will be conducted in a semi-structured manner to allow flexibility in the exploration of topics that arise during the interviews.

In addition to interviews, data collection will also be conducted through participatory observation and document analysis at PB. Soedirman Islamic High School, Jakarta. Participatory observation will involve the researcher in daily activities at the school to observe the interactions and communications that occur through the digital learning platform. Document analysis will involve examining reports, policies, and usage guidelines of the digital learning platform to understand the organizational context and how the platform is integrated in the Islamic education process. Data analysis will be conducted using a triangulation approach, combining findings from interviews, observations and surveys to ensure the validity and reliability of the research results. Qualitative data will be analyzed using the thematic analysis method.

The researcher also used a questionnaire. This questionnaire aims to collect data on users' preferences and experiences in using digital platforms, as well as how these platforms support their lifestyles. By analyzing the results of this questionnaire, the researcher gained better insight into digital platforms becoming the top choice for many people.

Table 1. Research Questionnaire

No	Subject	Questionnaire Question
1.	Use of Digital Platforms	Frequent use of digital platforms to communicate (e.g., email, messaging apps, social media). Frequent use of digital platforms for learning (e.g., online courses, webinars, e-learning).
2.	Flexibility and Suitability	The urgency of time flexibility in communication and learning. The relevance of digital platforms to suit Gen Z's always-online lifestyle.

¹⁵ Iswadi Iswadi, Neti Karnati, and Ahmad Andry B, *Studi Kasus Desain Dan Metode Robert K.Yin* (Penerbit Adab, 2023).

3.	Advantages and Challenges	Major challenges when using digital platforms for learning.
4.	Experience and Preferences	Favorite digital platform for communication. Favorite digital platform for learning. Specific features or functions expected on digital platforms to enhance the experience.
5.	Feedback and Suggestions	Anything else to share about experiences with using digital platforms for communication and learning.

Generation Z's Use of Digital Learning Platforms

Generation Z is known as digital natives who grew up in the era of the internet and information technology. The research findings show that Generation Z at PB. Soedirman Islamic High School, Jakarta are very familiar with the use of digital platforms in their daily lives, including in the work context. Digital learning platforms used in Schools include various apps and software such as Microsoft Teams, Slack, and Zoom for communication and collaboration, as well as specialized learning platforms such as Coursera and Udemy for training and development.

Most Generation Z Teachers at PB. Soedirman Islamic High School, Jakarta stated that 52% of them feel comfortable using these platforms. In an interview, a Generation Z Teacher said, “I prefer to use digital platforms to communicate and learn because it is more flexible and suits my lifestyle which is always connected online.” This is in line with the theory that Generation Z is more adaptive to technology than previous generations.¹⁶

The findings of this study are in line with the Technology Acceptance Model (TAM) developed by Davis, which emphasizes that users' perceptions of the perceived ease of use and perceived usefulness of a technology have a significant influence on the acceptance of the technology by users.¹⁷ In the context of education, especially with Generation Z, which is known to have high technological competence, these factors become very relevant. Generation Z tends to be more open and adaptive to the use of digital learning platforms, as evidenced by Allen-Seaman¹⁸ and Gameil - Al-

¹⁶ Mohamad Yusuf Golam, Mitra Akhtari, and K. M. T. Lasmiatun, “Analysis Of Public Sector Involvement In Local Economic Empowerment As Implementation Of Micro And Small Enterprise Development Policies,” *Multifinance* 1, no. 3 Maret (April 1, 2024): 259–71, <https://doi.org/10.61397/mfc.v1i3.113>; Reyes Gonzalez, Jose Gasco, and Juan Llopis, “Information and Communication Technologies and Human Resources in Hospitality and Tourism,” *International Journal of Contemporary Hospitality Management* 32, no. 11 (January 1, 2020): 3545–79, <https://doi.org/10.1108/IJCHM-04-2020-0272>.

¹⁷ Davis, Bagozzi, and Warshaw, “User Acceptance of Computer Technology.”

¹⁸ I. Elaine Allen and Jeff Seaman, “Learning on Demand: Online Education in the United States, 2009,” *Sloan Consortium (NJ1)* (Sloan Consortium, January 2010), <https://eric.ed.gov/?id=ED529931>;

Abdullatif.¹⁹ This generation, who grew up in the digital era, not only sees technology as a tool, but as an integral part of their daily lives, including in the context of learning.

The positive acceptance of digital learning platforms by Generation Z can be attributed to their extensive experience in using various digital technologies from an early age. They tend to feel comfortable and confident in operating digital devices and learning applications, which in turn increases their perception of the platform's ease of use. Furthermore, Generation Z also recognizes the practical benefits of digital learning, such as time flexibility and accessibility of subject matter, which supports their perception of the usefulness of these technologies in supporting the teaching-learning process.

Effectiveness of Digital Learning Platform as Communication Media

The effectiveness of digital learning platform as a communication medium is measured through several indicators, such as message clarity, communication speed, interaction between Teachers, and participation level. The survey results show that most Generation Z Teachers at PB. Soedirman Islamic High School, Jakarta feel that digital platforms enable faster and more efficient communication. As many as 78% of respondents stated that they can receive and respond to messages faster through digital platforms compared to traditional communication methods such as email or face-to-face.

However, the findings also point to some challenges. For example, 35% of respondents felt that communication through digital platforms sometimes lacked clarity and led to miscommunication. An HR manager stated, "Although communication through digital platforms is fast, sometimes the messages are unclear and require further clarification." This is in line with communication theory which states that digital media can reduce the non-verbal context that is important for a thorough understanding of the message.²⁰

Several factors that influence the effectiveness of communication through digital learning platforms at PB. Soedirman Islamic High School, Jakarta that have been identified. First, technological competence. Teachers'

Prokopia Vlachogianni and Nikolaos Tselios, "Investigating the Impact of Personality Traits on Perceived Usability Evaluation of E-Learning Platforms," *Interactive Technology and Smart Education* 19, no. 2 (January 1, 2021): 202–21, <https://doi.org/10.1108/ITSE-02-2021-0024>.

¹⁹ Azza Ali Gameil and Ahlam Mohammed Al-Abdullatif, "Using Digital Learning Platforms to Enhance the Instructional Design Competencies and Learning Engagement of Preservice Teachers," *Education Sciences* 13, no. 4 (April 2023): 334, <https://doi.org/10.3390/educsci13040334>.

²⁰ Allen and Seaman, "Learning on Demand," January 2010.

level of technological competence greatly affects the effectiveness of using digital platforms. Teachers who are more competent in using technology tend to be more effective in communicating through digital platforms. In an interview, a teacher stated, “I find it easier to communicate through digital platforms because I have been used to using technology for a long time.”

Second, platform design. The design and user interface of digital platforms are also significant. Intuitive and user-friendly platforms tend to be preferred by Teachers and enable more effective communication. A survey respondent said, “I like using Slack because the interface is very easy to understand and all the features that I need are available.” Third, organizational culture. An organizational culture that supports the use of digital technology also plays an important role. Schools that encourage the use of digital platforms in daily communication tend to have higher levels of communication effectiveness. One manager stated, “We always encourage Teachers to use digital platforms to communicate and work together, and this helps improve our communication effectiveness.” And fourth, training and support. Adequate training and support in the use of digital platforms is also important. Teachers who receive good training tend to be more confident and competent in using these technologies. In an interview, one teacher stated, “The training I received really helped me understand how to use digital platforms effectively.”

Furthermore, the findings of this study also support organizational communication theory which states that digital media can improve communication efficiency and effectiveness by reducing physical and temporal barriers, as outlined by Kutieshat and Farmanesh.²¹ In an educational setting, the use of digital learning platforms enables faster and more targeted communication between teachers and students, as well as between school staff.²² For example, important information such as lesson schedules, announcements, or course materials can be delivered instantly and accessed at any time by all parties involved, unhindered by time and location constraints.

While there are many advantages offered by digital media in improving communication efficiency, this research also highlights the

²¹ Ruba Kutieshat and Panteha Farmanesh, “The Impact of New Human Resource Management Practices on Innovation Performance during the COVID 19 Crisis: A New Perception on Enhancing the Educational Sector,” *Sustainability* 14, no. 5 (January 2022): 2872, <https://doi.org/10.3390/su14052872>.

²² Khoirul Anam and Beni Asyhar, “Development of Hybrid Learning Management System to Improve the Quality of Lectures at Sayyid Ali Rahmatullah State Islamic University Tulungagung,” *Didaktika Religia* 11, no. 1 (August 22, 2023): 85–108, <https://doi.org/10.30762/didaktika.v11i1.3368>.

importance of paying attention to non-verbal context that may be lost in digital communication. In face-to-face communication, non-verbal elements such as facial expressions, voice intonation and body language play an important role in conveying overall meaning and emotion. The loss of these elements in digital communication can lead to miscommunication, where the message conveyed is not always understood according to the original intent.

This miscommunication can happen because messages delivered through text or other digital media may lose emotional nuances or context-dependent interpretations. For example, instructions delivered via text message may be perceived as harsher or less empathetic than if delivered in person with the right intonation. This can lead to confusion or even tension among message recipients, especially in situations where subtle interpersonal communication is essential.

The Impact of Digital Platform Use on Job Performance and Satisfaction

The use of digital learning platforms also has an impact on Teacher performance and job satisfaction at PB. Soedirman Islamic High School, Jakarta. The survey results show that 65% of respondents feel that the use of digital platforms improves their performance as it allows faster access to information and better collaboration. One Teacher stated, "I can complete tasks faster because all the information I need is available on the digital platform."

70% of respondents felt that the use of digital platforms increased their job satisfaction. They appreciate the flexibility and convenience offered by digital platforms. A survey respondent said, "I feel more satisfied with my job because I can work more flexibly and stay connected with my team through digital platforms."

While many benefits were found, the study also identified some challenges and barriers in the use of digital learning platforms. Some Teachers felt that they experienced information overload and struggled to organize and prioritize the messages they received. One Teacher stated, "Sometimes I feel overwhelmed by the number of messages coming in through various platforms, and it is difficult to determine which ones are the most important." In addition, some Teachers felt that they were missing out on the social interaction that usually occurs in face-to-face communication. A manager stated, "Communication through digital platforms is efficient, but I feel that the social interaction we get through face-to-face is very important for building good relationships within the team."

Although digital platforms offer various tools to support communication, such as emoticons or video calls, these cannot fully replace

the richness of face-to-face communication. In an educational context, direct interaction between teachers and students is often necessary to build stronger relationships, provide emotional support and ensure a deeper understanding of the subject matter. Therefore, while digital learning platforms can be highly effective tools, it is important to consider ways to complement digital communication with elements of face-to-face communication, or at least find ways to minimize the negative impact of the loss of non-verbal context.

One of the main constraints of digital learning platforms is the limited direct interaction between trainees and facilitators or between trainees and each other. In a face-to-face learning context, direct interaction allows for deeper discussions and better understanding of the material presented. However, in digital platforms, this interaction is often limited to discussion forums or chats, which cannot always replace the dynamics and nuances of face-to-face communication. This can be a barrier especially for participants who are more accustomed to conventional learning methods or who feel less comfortable with digital technology.

Another frequent obstacle is the challenge of conveying messages clearly through digital platforms. The virtual delivery of information can suffer from distortion, especially if the medium used does not support complex communication formats or if there are technical issues such as unstable internet connections. This can lead to confusion or misunderstanding among trainees, which in turn can affect the quality of learning and the achievement of organizational goals. For example, in trainings that involve complex concepts or require live demonstrations, digital delivery of materials may not be as effective as face-to-face delivery.

The low participation rate of facilitators and participants in digital learning platforms is also an issue that needs attention. Low participation can be caused by several factors, including lack of motivation, technical difficulties, or inability to adjust to the digital learning format. Facilitators who are less active in managing and facilitating online discussions can reduce the learning dynamics, while passive participants are less likely to get the maximum benefit from the training. Therefore, it is important for organizations to find ways to improve the engagement of all parties involved in digital learning.

To address this challenge, schools and educational institutions can consider integrating more visual and interactive components in their digital communications. For example, video conferencing or the use of short videos can help restore some of the non-verbal elements lost in text-based communication. Training teachers in effective digital communication skills

can also help them convey messages more clearly and reduce the risk of miscommunication.

This research carries several practical implications for management in schools, which can help improve the effective use of digital learning platforms in educational settings. It is important for schools to ensure that teachers have sufficient technological competence. In the digital era, technology skills are no longer an add-on, but a necessity.²³ For this reason, schools need to conduct comprehensive and continuous training so that teachers are not only able to use digital platforms technically but can also utilize them pedagogically to improve learning outcomes. Consistent technical support should also be available to help teachers overcome any technical barriers they may face during the learning process.²⁴

The design of a digital learning platform should be user-friendly and intuitive.²⁵ Users, in this case teachers and students, should be able to easily navigate the platform without facing excessive complexity. An intuitive design can help reduce the learning curve, so teachers can focus more on teaching and managing the class, while students can focus more on the learning materials. A well-designed platform should also allow for personalization, so that teachers can tailor learning materials to the individual needs of students, which will ultimately improve learning effectiveness.²⁶

The organizational culture in schools should support the use of digital technology in daily communication. A positive organizational culture towards technology will encourage teachers and other staff to be more open in adopting and utilizing digital learning platforms.²⁷ This includes providing space for teachers to share their best practices and experiences in using technology, as well as encouraging collaboration among school staff. Support from school leaders is also crucial in shaping this culture, including in providing the necessary resources to effectively integrate technology into the teaching and learning process.

²³ Yun-Jo An and Charles Reigeluth, "Creating Technology-Enhanced, Learner-Centered Classrooms: K-12 Teachers' Beliefs, Perceptions, Barriers, and Support Needs," *Journal of Digital Learning in Teacher Education* 28, no. 2 (December 1, 2011): 54-62, <https://doi.org/10.1080/21532974.2011.10784681>.

²⁴ Dolores Brzycki and Kurt Dudd, "Overcoming Barriers to Technology Use in Teacher Preparation Programs," *Journal of Technology and Teacher Education* 13, no. 4 (October 2005): 619-41.

²⁵ Setareh Maghsudi et al., "Personalized Education in the Artificial Intelligence Era: What to Expect Next," *IEEE Signal Processing Magazine* 38, no. 3 (May 2021): 37-50, <https://doi.org/10.1109/MSP.2021.3055032>.

²⁶ Atikah Shemshack and Jonathan Michael Spector, "A Systematic Literature Review of Personalized Learning Terms," *Smart Learning Environments* 7, no. 1 (October 23, 2020): 33, <https://doi.org/10.1186/s40561-020-00140-9>.

²⁷ Ina Blau and Tamar Shamir-Inbal, "Digital Competences and Long-Term ICT Integration in School Culture: The Perspective of Elementary School Leaders," *Education and Information Technologies* 22, no. 3 (May 1, 2017): 769-87, <https://doi.org/10.1007/s10639-015-9456-7>.

Information management is a crucial aspect in the context of using digital learning platforms. Schools need to manage information well to avoid information overload, which can be confusing and overwhelming for teachers. It is important to sort and prioritize information delivered through digital platforms so that teachers can focus on messages that are truly relevant to their duties and responsibilities.²⁸ This could include limiting the number of notifications or messages teachers receive each day, or providing mechanisms to organize and categorize information based on urgency and relevance.

It is important for schools to consider how they can integrate the use of digital learning platforms with their broader communication strategies. For example, utilizing the analytics features available on many platforms to monitor usage and learning effectiveness, and to adjust communication and learning strategies based on the data obtained. In this way, schools focus not only on technology adoption, but also on how it is strategically used to support educational goals and teacher professional development.

Conclusion

Digital learning platforms can be an effective communication medium in Islamic education at PB. Soedirman Islamic High School, Jakarta, especially for Generation Z employees who have high technological competence. However, its effectiveness is affected by various factors such as technological competence, platform design, organizational culture and information management. Although there are some challenges such as information overload and lack of social interaction, PB. Soedirman Islamic High School, Jakarta can overcome these barriers by providing adequate training, choosing an intuitive platform, supporting a digital culture, and creating opportunities for face-to-face interaction. The results of this study provide valuable insights for Islamic education in optimizing the use of digital learning platforms to improve Teacher communication and performance at PB. Soedirman Islamic High School, Jakarta. With the right approach, digital platforms can help schools to face challenges in the digital era and improve teacher satisfaction and performance.

²⁸ Benjamin Gleason and Sam von Gillern, "Digital Citizenship with Social Media: Participatory Practices of Teaching and Learning in Secondary Education," *Journal of Educational Technology & Society* 21, no. 1 (2018): 200–212.

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