

Improving Digital Competence Madrasah Teachers Through the Ministry of Religion's Digital Platform (SIPINTAR)

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Abstract

The aim of the research is to measure the extent to which digital platforms such as the Ministry of Religion's SIPINTAR can support and improve the competency of digital madrasah teachers, as well as provide useful insights for the development and evaluation of better training programs in the future. The research methodology uses mixed sequential explanatory methods, starting with quantitative research and carrying out qualitative analysis. The research population was 282 MAN teacher respondents spread across Garut Regency, while the sampling technique used the Slovin technique so that the research sample was 165 MAN teachers in Garut Regency. The research results obtained an R Square correlation of 0.251, which means that digital platforms are able to influence teacher competence by 25.1%. The Ministry of Religion's

SIPINTAR platform is an effective solution for increasing the competency of madrasa teachers for the following reasons: (1) good accessibility; (2) Diversity material; (3) direct testing; (4) evaluation and feedback as well as the legality of the certificate form as a result of the training. The Ministry of Religion's Sipantar platform suggests providing online mentor support or discussion forums where teachers can interact, share experiences and get encouragement from experts in their respective fields.

Keywords: *Digital Competence, Teachers, Digital Platform*

INTRODUCTION

The Industrial Revolution 4.0 era is a time where digital technology is developing rapidly and influencing various aspects of life and industry. The hallmarks of this revolution include the integration of physical and digital systems with technologies ranging from artificial intelligence, data analytics, the Internet of Things (IoT). The increasingly rapid advances in technology have led to dependence on the internet, various knowledge can now be accessed easily via the internet, even enabling a learning process that no longer relies on physical meetings, but instead uses digital platforms. (Nazib et al., 2024).

As the main focus, the teacher's ability to use technology is very important in today's education. By understanding and mastering technology, teachers can create a learning environment that is supportive, innovative and in line with the demands of the digital era which has a big influence on the formation of students' knowledge, skills and attitudes (Prayogi, 2019). However, the fact is that there are still many teachers who are technologically illiterate, as according to the Ministry of Education and Culture (Kemendikbud) it is revealed that 60% of teachers in the country still have limited abilities in mastering Information and Communication Technology (ICT).

Likewise, the results of research conducted by (Hasibuan, 2021) 52% of teachers' ability to use and utilize ICT is still low. This is due to many factors, but the most dominant is the low level of participation in technology-based training. Research conducted by (Winarti et al., 2022) The level of digital competence of PAUD teachers in the areas of content and knowledge creation, evaluation and problem solving as well as technical operations is still low. Research conducted by (Kurnia, 2021) research of 89 teacher respondents from 14 high schools in Banyumas Regency. The level of digital literacy competency among high school teachers in Banyumas Regency is at the intermediate level

(Medium). Research (Sahelatua, 2018) At SDN 1 Pagar Air, teachers are still unable to use IT media and do not know what benefits there are in using technology

Teachers' digital competence is not yet optimal due to many factors. Some factors that influence teachers' digital competence include: (Kurnia, 2021): (1) Access and Infrastructure Availability of sufficient access to technology and infrastructure that supports encouraging the development of digital competencies; (2) Training and Professional Development involving the use of technology; (3) Motivation and awareness of the importance of developing digital skills to support innovative learning (4) Institutional support from schools, education departments, and work environments in providing resources and incentives for teachers; (5) A work culture that supports experimentation, innovation, and the use of technology in learning will help teachers to improve their digital competence: (6) The existence of facilitators or mentors who support teachers' learning and development of digital skills also has an influence: (7) internal factors of self-confidence in facing new technology and the willingness to continue learning and developing digitally play a key role in increasing competence.

According to (Fitria, 2023) One of the reasons for the limited ability of teachers to use technology is that age is the dominant factor in the occurrence of technology failure. The higher the age, the lower work productivity will be. So digital-based training is needed to improve teachers' digital competence. The availability of sufficient access is one factor in increasing teacher digital competence.

A digital platform is a technological framework that provides services, tools, or infrastructure that enable users to interact, collaborate, or access various types of information and services in an online environment (Amin et al., 2023). A digital platform can be a website, software application, online system, or a combination of various technological elements that facilitate user activities such as e-commerce transactions, communication on social media, online learning, and many others. Digital platforms enable users to connect, share information, and perform various actions efficiently and easily through digital technology (Bonina, 2021).

Digital platforms can be evaluated through several key indicators (Yamin et al., 2022): (1) Accessibility assesses how easy the platform is for users to access and use both in terms of interface navigation and availability on various devices: (2) Interactivity measures the level of user engagement and interaction with the platform through features such as dynamic content, collaboration, and feedback; (3) Design evaluates the visual layout, security, usability, and usability of the digital platform in order to facilitate a good user experience: (4) Analyzes the impact of the platform's relevance, effectiveness, and results on stated goals, such as improving performance, understanding, or other units of measurement according to the purpose of the platform.

Digital platforms integrate a variety of modules that expand the scope of a device's functionality, sometimes referred to as additional software subsystems (Decuyper et al., 2021). In general, these modules are implemented in the form of applications developed by third parties (Reuver et al., 2017). There are many types of digital platforms that function for various purposes and activities. The following are some examples of various digital platforms that are commonly used: (1) Social Media, for example Facebook, Instagram, Twitter, LinkedIn, and Snapchat; (2) Online Marketplaces For example Amazon, eBay, Etsy, and Tokopedia; (3) Streaming Media Such as Netflix, YouTube, Spotify, and Twitch; (4) Online Education including Coursera, Udemy, Khan Academy, and Google Classroom; (5) Blogging and Websites Such as WordPress, Blogger, Wix, and Medium (6) Video Conferencing Examples include Zoom, Google Meet, Microsoft Teams, and Skype; (7) E-commerce Such as Shopify, WooCommerce, Magento, and BigCommerce; (8) Cloud Storage For example Google Drive, Dropbox, OneDrive, and iCloud; (9) Content Management Systems Such as WordPress, Drupal, Joomla, and Shopify; (10) Mobile Applications Such as WhatsApp, Uber, TikTok, and Facebook Messenger Any digital platform has unique functionality and provides a variety of services according to user requirements (Spagnoletti et al., 2019)

Through the Education and Training Center of the Ministry of Religion innovation in the form of digital-based training and learning platforms was introduced as a response to the demands of the Industrial Revolution 4.0 era. The existence of this digital platform reflects the Ministry of Religion's commitment to modernizing Islamic education and adapting it to the latest technological developments. Thus, it is hoped that the introduction of this digital platform will strengthen the capacity of teachers and education staff and improve the quality of learning in order to prepare a generation that is ready to compete in the industrial era 4.0 effectively.

Research results (Amin et al., 2023) Digital platforms show potential in reshaping and enriching competency development strategies for teachers. Then (Aulia & Murni, 2023) The independent teaching platform is the right forum to increase the competence, innovation and creativity of primary school teachers in particular. Because, the independent teaching platform provides various features that can help teachers get references, inspiration and understanding of the independent curriculum.

The Ministry of Religion's SIPINTAR digital platform is an initiative of the Ministry of Religion of the Republic of Indonesia which aims to provide education and training services in terms of increasing the competency of madrasa teachers. SIPINTAR (Innovative Adaptive Responsive Learning and Management System) is a platform

designed to support the professional development of madrasa teachers through a variety of training materials, learning content and interactive quizzes. Some of the features that are possible from the Ministry of Religion's SIPINTAR digital platform include interactive learning modules, educational resources, discussion forums, as well as reporting and monitoring learning progress. The aim is to improve and expand the technological skills of madrasa teachers to support innovative and adaptive Islamic religious education.

Therefore, there is a need for a special study regarding the role of the Ministry of Religion's digital platform (SIPINTAR) in improving the digital competence of madrasa teachers. The novelty in this research can provide a new vision regarding how digital platforms such as SIPINTAR can specifically influence changes in the behavior and competence of madrasa teachers.

METHODS

Sequential explanatory method research is combination research that combines quantitative and qualitative research methods sequentially, where the first stage of research is carried out using quantitative methods and in the second stage qualitative methods are used (Snyder, 2019).

In this study the population was 282 MAN teacher respondents spread across Garut Regency. Researchers determined the population was affordable due to more focused research and limited time and funds. (Hikmawati, 2020). The following are the names of selected schools and selected teachers in the research population.

Table 1 Population

No	School name	Population
1	MAN 1 Garut	72
2	MAN 2 Garut	64
3	MAN 3 Garut	49
4	MAN 4 Garut	35
5	MAN 5 Garut	62
Score		282

The sample size used for this research uses the Slovin formula as a reference (Elfil & Negida, 2017):

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{282}{1 + 282(0,05)^2}$$

$$n = \frac{282}{1 + 282(0,0025)}$$

$$n = \frac{282}{1 + 0,705}$$

$$n = \frac{282}{1,705}$$

$$n = \frac{282}{1,55} = 165,39$$

$$n = 165$$

The results of calculations using the Slovin formula to determine the number of respondents used as research samples from a population of 282 MAN principals in East Garut Regency amounted to 165.

Table 2
Sample

No	School name	Population	Calculation	Sample
1	MAN 1 Garut	72	$(72/282) \times 165 = 42,12$	42
2	MAN 2 Garut	64	$(64/282) \times 165 = 37,44$	37
3	MAN 3 Garut	49	$(49/282) \times 165 = 28,67$	29
4	MAN 4 Garut	35	$(35/282) \times 165 = 20,47$	21
5	MAN 5 Garut	62	$(62/282) \times 165 = 36,37$	36
Score				165

RESULTS AND DISCUSSION

The results of descriptive statistical data on digital competency data for madrasah teachers as a whole have high criteria. This can be seen from the score range starting from the data interval 36-51.

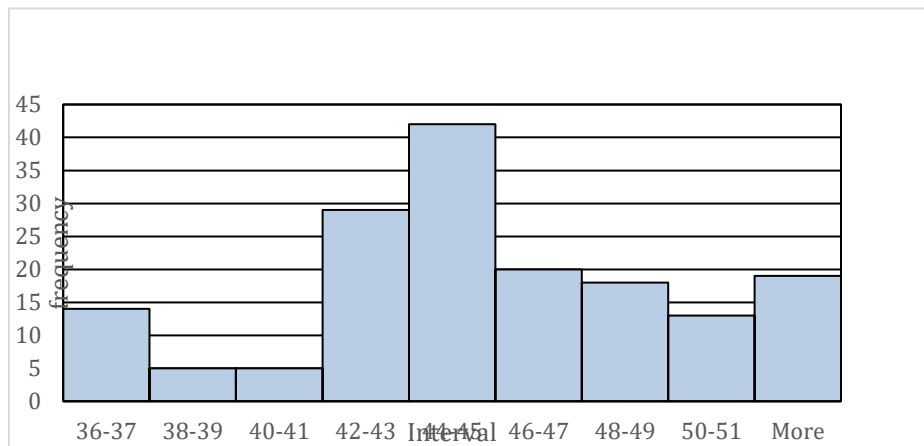
Table 3
Frequency Distribution of Digital Platforms

<i>Interval</i>	<i>Frequency</i>	<i>Relative Frequency</i>
36-37	14	8.5%
38-39	5	3.0%
40-41	5	3.0%

42-43	29	17.6%
44-45	42	25.5%
46-47	20	12.1%
48-49	18	10.9%
50-51	13	7.9%
More	19	11.5%
Score	165	100%

Furthermore, the digital competency variable data for madrasah teachers is presented in diagram form in the following figure:

Pictrure 1. Distribution Score of Digital Platforms



Likewise, the results of descriptive statistical data for the digital platform variable as a whole have high criteria. This can be seen from the score range starting from 42-57.

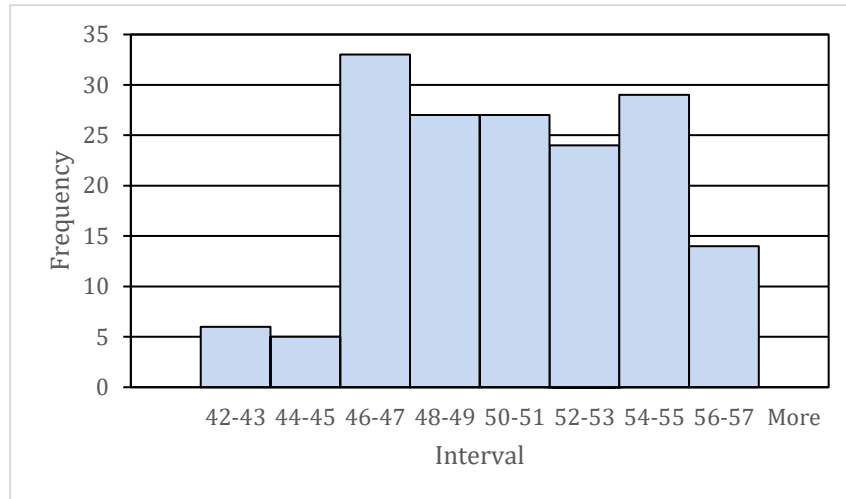
**Table 4
Frequency Distribution of Digital Platforms**

<i>Interval</i>	<i>Frequency</i>	<i>Relative Frequency</i>
42-43	6	3.6%
44-45	5	3.0%
46-47	33	20.0%
48-49	27	16.4%
50-51	27	16.4%

52-53	24	14.5%
54-55	29	17.6%
56-57	14	8.5%
Score	165	100%

Furthermore, the digital platform data variables are presented in diagram form in the following figure

Pictrure 2. Distribution Score of Competence Digital



In the next stage, simple and multiple correlation tests were carried out to determine the correlation coefficient between variables and their significance.

**Table 5
Correlation Tests**

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95.554	1	95.554	4.147	.0000 ^b
	Residual	3755.440	163	23.040		
	Total	3850.994	164			

a. Dependent Variable: Teacher Digital Competence

b. Predictors: (Constant), Platform Digital

From the output it is known that the calculated F value = 4.147 with a significance level of 0.000 < 0.05, so the regression model can be used to predict digital

platform variables or in other words there is an influence of digital platforms on teacher digital competence. Meanwhile, the magnitude of the correlation/relationship value can be seen in the following table:

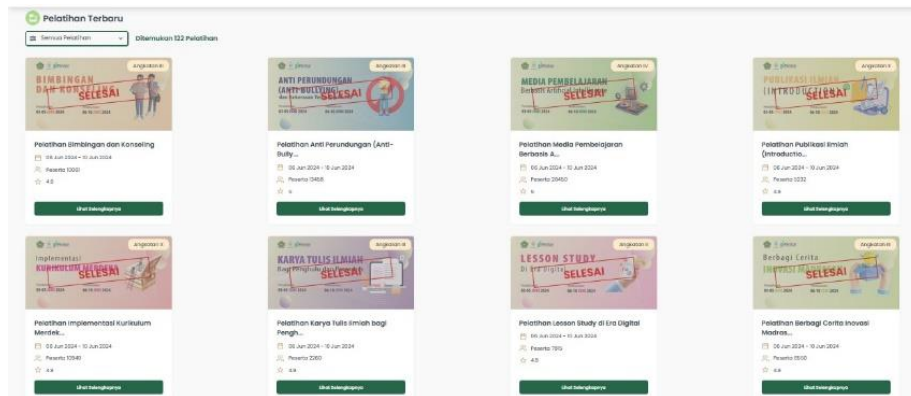
Table 6. Correlation Value Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.458 ^a	.251	.192	4.800

a. Predictors: (Constant), Platform Digital

The magnitude of the R correlation/relationship value is 0.458. From this output, an R Square correlation of 0.251 is obtained, which means that digital platforms are able to influence teacher competence by 25.1%.

The calculation results show that there is a correlation and influence of increasing teacher digital competence through digital platforms. Increasing teacher digital competence through the Ministry of Religion's SIPINTAR digital platform can occur in various ways. SIPINTAR provides online training content on the use of technology in education, supporting teachers to develop their digital skills.



Pictrure 3. Appearance Training in SIPINTAR Kemenag

Training on the Ministry of Religion's SIPINTAR platform can cover various topics that are relevant to the professional development of madrasah teachers, both academic and non-academic, which are relevant and needed to improve performance itself. Teachers can choose the training they will participate in via the platform page <https://pintar.kemenag.go.id/pelatihan>. After determining the type of training to be

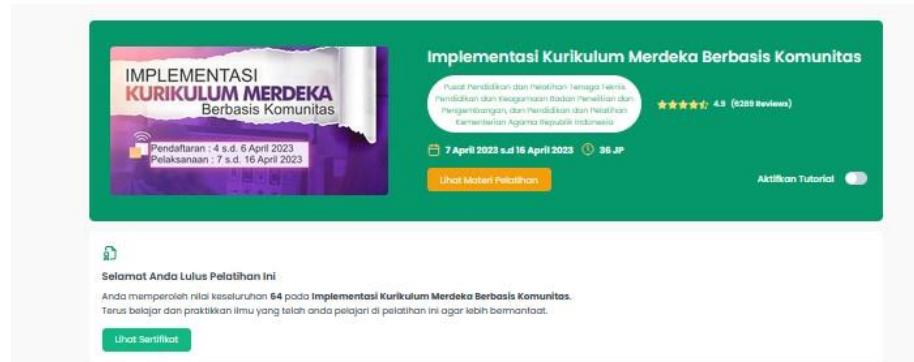
followed, the teacher must complete the training stages in accordance with the stipulated provisions.

Pictrure 4. Step By Step Training



Teachers will study the training content provided, whether in the form of videos, reading materials, interactive resources, or practical exercises. Through the combination of these diverse learning resources, teachers are expected to expand their knowledge of educational technology, improve digital skills, and apply best practices in teaching to create more effective learning experiences for students. Next, there is an exam or evaluation to measure the teacher's understanding of the material that has been studied. Exams can include questions about training materials to measure the extent to which teachers understand concepts, teachers have the opportunity to gauge their understanding, evaluate learning progress, and identify areas where they need to focus to improve their digital competency.

After completing the training and meeting the requirements, teachers can obtain a certificate confirming their success in the training. receive an official certificate reflecting their success in completing the training. This certificate is proof that confirms that teachers have successfully completed training, improved their digital competencies, and met set standards. This certificate can be of added value in referring to teachers' abilities and expertise in the future, as well as increasing their credibility in the use of technology in the learning process. Thus, platforms such as the Ministry of Religion's SIPINTAR not only provide training, but also recognize and reward teachers' efforts in their personal development.



Pictrure 5. Finaly Training

Madrasah teachers can access training with the flexibility to learn in their own time, without being tied to a specific class schedule, allowing for independent skills development. Training materials can be accessed anywhere, as long as an internet connection is available, allowing wider access without geographical restrictions. Teachers can adapt learning to their own level, focusing on material that they consider important or complex. Through the ability to study independently and easy access to learning materials, madrasa teachers can expand their knowledge in various fields and deepen their skills in utilizing technology in religious education. As per (Amin et al., 2023) Good access can support teachers to take online courses and training to improve their abilities in using educational technology. Digital platforms play a crucial role as a means of training teachers to expand and improve their digital competencies. Teachers can develop their digital skills without the limits of space and time, thereby increasing their ability to utilize technology in the learning process

Teachers' digital competence can be significantly influenced by platforms because they can develop digital competence (Alf et al., 2023), perfecting teaching methods (Vásquez, 2021) and expand their understanding of technology integration in education (Haškov et al., 2021). Through digital platforms, teachers can collaborate with colleagues, share best practices, ideas and experiences, deepening their understanding of how best to use technology in learning. Sharing best practices allows teachers to improve their teaching methods, making learning more interesting, relevant, and effective (Basilotta et al., 2022).

Teachers' digital abilities can be measured through a number of criteria, as stated by (Blyznyuk, 2018) including: information management, use of technology in learning interactions (communication), teacher's ability to create digital content for education (educational content creation), teacher's efforts to protect against the impact

of digital technology (security), and teacher's mastery in analyzing the positive side and negative digital technology (educational problem solving). When a teacher has strong digital competencies, they can utilize technology more effectively to create more interactive, engaging, and relevant experiences for students (Mashuri, Chamda, 2022).

CONCLUSION

The Ministry of Religion's SIPINTAR platform is an effective solution for increasing the competency of madrasa teachers for the following reasons. Madrasah teachers can access training and learning materials easily online, anytime and anywhere, facilitating independent and customized learning. The platform provides a variety of training modules as well as digital resources to enhance technology skills and innovative integration of religious education.

The presence of multimedia content and interactive resources enriches the learning experience, helping teachers learn in a more dynamic and engaging way. Teachers can immediately apply the learning concepts obtained into their learning practices with platform support. There are tests and evaluations that help teachers understand the extent to which they are digesting the material and improving in certain areas. Providing certification or learning certificates will provide formal recognition of the training progress achieved by teachers, thereby increasing motivation and appreciation. With the combination of these features, the Ministry of Religion's SIPINTAR provides a holistic approach to digital training of madrasa teachers, strengthening the foundation of technological competence and modern learning, thereby contributing to improving the quality of religious education in Indonesia.

As suggestions for the Ministry of Religion's SIPINTAR Platform in improving its services, several suggestions could include; (1) Personalization of Training by developing features that allow teachers to create training plans tailored to their needs and interests; (2) Providing online mentor support or discussion forums where teachers can interact, share experiences, and gain encouragement from experts in their respective fields; (3) Ensure that the learning materials provided are relevant, up to date, and varied to meet the various needs and levels of expertise of teachers; (4) Include practical exercises and projects or assignments that can help teachers apply learning concepts in real contexts in the classroom; (5) Provide an informative and transparent monitoring tool so teachers can see their progress over time and be aware of areas that need improvement; (6) Collaborate with other educational organizations or the technology industry to expand the scope of learning materials and support the latest developments in the field of educational technology. By implementing these suggestions, the Ministry of Religion's SIPINTAR Platform can continue to improve the

quality of its services and have a greater impact in increasing the digital competence of madrasa teachers in Indonesia.

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