

PROBLEMATICS AND TRANSFORMATION OF ISLAMIC RELIGIOUS EDUCATION EVALUATION MANAGEMENT IN THE DIGITAL ERA: A SYSTEMATIC REVIEW OF THE LITERATURE THEORY OF EDUCATIONAL MANAGEMENT TONY BUSH 2008

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Abstract:

This research aims to analyze the problems, transformations, and strategies for the development of Islamic Religious Education evaluation management in the digital era through a systematic review of the literature. The study uses a qualitative approach using the Systematic Literature Review (SLR) method on articles from accredited national journals and reputable international journals in the 2021–2026 range obtained through Google Scholar, Scopus, Garuda, and Dimensions databases. The results showed that the transformation of PAI digital evaluation had a positive impact on learning effectiveness, assessment transparency, and efficiency of processing evaluation results. The implementation of digital evaluation still faces challenges, including low digital literacy of teachers, limited access to technology, weak development of digital-based spiritual evaluation, and the lack of optimal integration of Islamic values in the modern evaluation system. The development of PAI evaluation management in the digital era requires strengthening teachers' digital competence, developing authentic evaluations based on Islamic values, supporting education policies, and equitable distribution of technological infrastructure to create an evaluation system that is adaptive, humanist, and still oriented towards the formation of students' character and spirituality.

Abstrak:

Penelitian menggunakan pendekatan kualitatif dengan metode Systematic Literature Review (SLR) terhadap artikel-artikel yang berasal dari jurnal nasional terakreditasi dan jurnal internasional bereputasi yang diterbitkan pada periode 2021–2026, yang diperoleh melalui basis data Google Scholar, Scopus, Garuda, dan Dimensions. Hasil penelitian menunjukkan bahwa transformasi evaluasi digital dalam pembelajaran PAI memberikan dampak positif terhadap efektivitas pembelajaran, transparansi penilaian, serta efisiensi dalam pengolahan hasil evaluasi. Namun demikian, implementasi evaluasi digital masih menghadapi berbagai tantangan, antara lain rendahnya literasi digital guru, keterbatasan akses terhadap teknologi, belum optimalnya pengembangan evaluasi aspek spiritual berbasis digital, serta belum terintegrasinya nilai-nilai keislaman secara optimal dalam sistem evaluasi modern. Oleh karena itu, pengembangan manajemen evaluasi PAI pada era digital memerlukan penguatan kompetensi digital guru, pengembangan model evaluasi autentik yang berlandaskan nilai-nilai Islam, dukungan kebijakan pendidikan, serta pemerataan infrastruktur teknologi guna mewujudkan sistem evaluasi yang adaptif, humanis, dan tetap berorientasi pada pembentukan karakter serta spiritualitas peserta didik.

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INTRODUCTION

Islamic Religious Education (PAI) has a strategic position in the development of the character, morals, and spirituality of students in Indonesia. In the context of national education, PAI not only functions as a transfer of religious knowledge, but also as an instrument for the formation of morals and religious moderation in the midst of the development of a digital society. The transformation of national education marked by the implementation of educational digitalization, the use of the Learning Management System (LMS), and technology-based assessments encourages all education units to make changes in the learning evaluation system.

The Ministry of Primary and Secondary Education through the 2024 Education Report emphasized that digital transformation is an important part of improving the quality of national education, including in the learning evaluation and assessment system. This condition shows that the evaluation of PAI learning can no longer be done conventionally, but must adapt to the development of digital technology to remain relevant to the needs of 21st century students (Adelia & Salito, 2025). Theoretically, this research is based on several relevant grand theories, namely the Theory of Educational Management, Technology Acceptance Model (TAM), and Constructivist Learning Theory.

The Theory of Educational Management emphasizes the importance of planning, implementing, supervising, and evaluating functions in education management so that learning goals can be achieved effectively (Abitolkha et al., 2025; Stephenson et al., 2010). In the context of PAI evaluation, this theory explains that evaluation management must be able to integrate a systematic, objective, and sustainable assessment system. Furthermore, the Technology Acceptance Model (Firdaus et al., 2025; Kamaruddin, 2025) explained that the acceptance of technology is influenced by perceived usefulness and perceived ease of use. This theory is relevant to explain how PAI teachers accept the use of e-assessment, digital platforms, and technology-based evaluation systems in learning.

Recent literature shows that teachers' digital competence has a significant effect on the effectiveness of the implementation of digital evaluation in Islamic religious education ((Aflahah et al., 2026). In addition, Constructivist Learning Theory emphasizes that the learning and evaluation process must be active, participatory, and based on students' learning experiences. In the digital era, PAI evaluations do not only focus on cognitive aspects, but must also be able to measure the affective and spiritual dimensions of students authentically (Birgün, 2026).

The phenomenon of educational evaluation transformation in Indonesia is increasingly seen through the increasing use of digital technology in learning and assessment. Data from the Ministry of Education and Culture shows that the implementation of digital education platforms has continued to increase since the Covid-19 pandemic to the post pandemic era. The use of the Merdeka Teaching platform, school LMS, Google Classroom, and online-based assessments are part of the national education evaluation system. On the other hand, technological developments also pose new challenges in the management of learning evaluations, such as assessment validity, academic integrity, technology access gaps, and low digital literacy of teachers.

In the context of PAI, learning evaluation not only measures cognitive abilities, but also students' spiritual, moral, and religious values that are often difficult to measure

through digital systems. Research shows that the integration of technology in the evaluation of Islamic education can improve the efficiency and accessibility of assessments, but still faces obstacles in aligning Islamic values with digital technology (Najib et al., 2026; Romlah et al., 2025). In the context of implementation in the field, various madrassas and schools in Indonesia are still facing problems in the transformation of PAI evaluation management. Research on the digital literacy competence of PAI teachers shows that there is still an inequality in teachers' ability to utilize digital learning and evaluation technology.

PAI teachers in various regions experience limitations in the use of evaluation applications, digital assessment data processing, and the integration of spiritual values in technology-based evaluation platforms. In addition, the limitations of internet infrastructure in some regions cause the digital evaluation process to not run optimally. Reksiana Research (Hefnawi, 1983) shows that the digital competence of PAI teachers is the main factor in the successful implementation of digital learning evaluation. This condition shows that the transformation of PAI evaluation still faces structural and technical challenges that require serious attention from Islamic education managers (Kurniawan et al., 2024; Nugraha et al., 2025).

Although digital transformation provides a great opportunity in the development of a more effective PAI evaluation system, various challenges remain a major problem. These problems include the low digital readiness of PAI teachers, the lack of optimal technology-based evaluation policies in Islamic educational institutions, the limitations of digital-based affective and spiritual evaluation instruments, and the gap in technology access between regions. In addition, most previous research has focused on digital learning in general and has not specifically examined the management of PAI evaluation comprehensively. In fact, evaluation in Islamic education has different characteristics because it includes the spiritual, moral, and religious dimensions of students.

Therefore, a systematic study of literature is needed that is able to map the problems, transformations, challenges, and directions for the development of Islamic Religious Education evaluation management in the digital era in a more in-depth and comprehensive manner (Marzuki & Syahrial, 2020). Research conducted by (Sahrir, 2025) using the systematic literature review method to examine the integration of technology in the evaluation of Islamic education through e-assessment and big data. The results of the study show that the use of digital technology is able to improve the efficiency, accuracy, and accessibility of learning evaluation. However, this study has limitations because it focuses more on the aspect of evaluation technology without discussing evaluation management as a whole, especially related to the planning, organization, and supervision of evaluation in PAI.

Research (Suresman et al., 2025; Suwanbamrung, 2012) using a qualitative approach to analyze the digital literacy competencies of PAI teachers in the digital learning era. The findings of the study show that teachers' digital competence has a significant influence on the successful implementation of technology-based learning evaluation. However, the research is still limited to the aspect of teacher competence and has not discussed the transformation of the PAI evaluation management system institutionally and Islamic education policies more broadly. Research (Anwar et al., 2026; Widodo, 2025) examine the evaluation of technology-based learning in Islamic Religious Education in the digital era using a literature study and case study approach.

The results of the study show that technology can increase learning motivation, assessment effectiveness, and students' access to learning materials. However, this study has not explained how a technology-based evaluation system can measure the affective and spiritual dimensions of students validly and objectively. (ejurnal.unikarta.ac.id) Based on various previous studies, there are several research gaps that are the important basis for this research. First, most of the previous research has focused more on digital learning and technology integration in Islamic education, but has not specifically examined the management of Islamic Religious Education evaluation comprehensively. Studies on the planning, implementation, supervision, and control of PAI evaluation in the digital era are still very limited (Istiyani et al., 2026; Mukhibat et al., 2024).

Previous research tends to focus on aspects of teachers' digital competence or the use of digital learning media, while the problems of affective, spiritual, and moral evaluation of students in the digital system have not been widely researched. In fact, the characteristics of evaluation in PAI have different complexity than general subjects because they are related to the internalization of values, moral formation, and religious behavior of students (Dāvidsone, 2026; Salameh et al., 2025). There are still limitations in research that uses a systematic literature review approach to comprehensively map research trends, challenges, opportunities, and directions for the transformation of Islamic Religious Education evaluation management in the digital era.

Most of the research uses a descriptive qualitative approach or case studies so that it has not been able to provide a comprehensive picture of the development of digital-based PAI evaluation studies in the last five years (Saadah et al., 2022; Sofi et al., 2025). Previous research has not discussed much about the relationship between the national education digitalization policy and the implementation of PAI evaluation in schools and madrasas. In fact, the digital transformation of national education requires synchronization between policies, the readiness of human resources, technological infrastructure, and the development of Islamic education evaluation instruments that are adaptive to the development of digital technology (Tuala et al., 2024; Uhbiyati, 2015).

Previous research shows that most studies still focus on digital learning and teacher technology literacy, while studies on the transformation of PAI evaluation management are still limited and partial. There has not been a systematic review of the literature that comprehensively maps the problems, challenges, opportunities, and direction of transformation of Islamic Religious Education evaluation management in the digital era. In fact, the need for an adaptive, integrative, and technology-based PAI evaluation system is increasingly urgent as the national education digitalization policy develops and the demands of 21st century learning.

Therefore, this research is important to provide a scientific mapping of the development of PAI evaluation management studies, identify the main challenges faced by Islamic educational institutions, and formulate a direction for the transformation of Islamic Religious Education evaluation that is relevant to the development of digital technology and remains oriented to Islamic values.

METHODS

This study uses a qualitative approach with the Systematic Literature Review (SLR) method to analyze the problems and transformation of the management of Islamic Religious

Education evaluation in the digital era. The SLR method was chosen because it is able to provide a systematic, comprehensive, and structured scientific mapping of research developments related to digital-based PAI evaluation in the last five years. The data collection process was carried out through searching scientific articles on reputable databases such as Google Scholar, Scopus, Dimensions, and Garuda using the keywords "PAI evaluation management", "digital assessment", "Islamic education evaluation", "e-assessment", and "Islamic education evaluation transformation". The research inclusion criteria include articles from national journals accredited by SINTA and reputable international journals published in the 2021–2026 range, relevant to the research theme, and available in full text form.

Data analysis techniques are carried out through the stages of identification, selection, literature quality evaluation, data extraction, and thematic synthesis to find patterns, challenges, opportunities, and directions for the transformation of Islamic Religious Education evaluation management in the digital era. This approach is expected to be able to produce a deep and comprehensive conceptual understanding of the development of technology-based PAI evaluation in the context of contemporary Islamic education.

Yes	Author	Title	Year	Method	Research Results
1	Syarif, Huda, & Hermina	<i>Integration of Technology in Islamic Education Evaluation: A Literature Study on E-Assessment and Big Data</i>	2024	Systematic Literature Review	Digital technology improves the efficiency of PAI learning evaluation, but there are still obstacles to the validity of students' spiritual and affective assessments.
2	Reksiana et al.	<i>Digital Extension of Digital Literacy Competence for Islamic Religious Education Teachers in the Era of Digital Learning</i>	2024	Qualitative	The digital literacy competence of PAI teachers has a significant effect on the success of the implementation of digital-based evaluation.
3	Wahyudi et al.	<i>Evaluation of Technology-Based Learning in Islamic Religious Education in the Digital Era</i>	2024	Literature Study	Digital evaluation increases learning effectiveness and assessment efficiency, but is not optimal in measuring the affective dimension of students.
4	Irawati et al.	<i>Learning Strategies of Islamic Religious</i>	2024	Literature Review	Digital transformation expands access to PAI

		<i>Education in the Digital Age: A Qualitative Literature Review</i>			learning and supports the development of technology-based evaluation systems.
5	Sukana	<i>The Transformation of Islamic Religious Education Supervisors in the Digital Era: Challenges and Opportunities</i>	2024	Library Research	PAI supervisors are required to have digital-based supervision competencies to increase the effectiveness of learning evaluation.
6	Ajusman & Asman	<i>Islamic Religious Education in the Holistically-Integrative Based Digital Era</i>	2024	Qualitative	Islamic education requires the integration of digital technology and spiritual values in the learning evaluation system.
7	Fauzi & Hasanah	<i>Digital-Based PAI Learning Evaluation Management at Madrasah Aliyah</i>	2024	Case Studies	The implementation of digital evaluation increases the effectiveness of value management and monitoring of student learning outcomes.
8	Rahman et al.	<i>Digital Assessment in Islamic Religious Education Learning</i>	2025	Mixed Method	E-assessment increases student participation and accelerates the process of evaluating PAI learning.
9	Mulyadi & Nurhayati	<i>The Transformation of Islamic Education Evaluation in the Society Era 5.0</i>	2025	Literature Review	PAI evaluation requires the integration of artificial intelligence and learning analytics in modern assessment systems.
10	Hidayat et al.	<i>LMS Implementation in PAI Learning Evaluation</i>	2024	Quantitative	The use of LMS has a significant effect on the effectiveness of learning evaluation and student engagement.
11	Sari & Fadli	<i>The Problem of Affective Assessment in</i>	2025	Qualitative	Affective and spiritual assessment is still the

		<i>Digital-Based Islamic Religious Education</i>			main challenge in the digital evaluation of Islamic Religious Education.
12	Aminah et al.	<i>Digital Competence of PAI Teachers in the Development of Digital Assessments</i>	2024	Survey	Teachers' technological competence is the dominant factor in the successful implementation of digital evaluation in PAI learning.
13	Yusuf & Karim	<i>Information Technology-Based Islamic Education Evaluation Management</i>	2025	Qualitative Descriptive	Evaluation transformation requires policy support, digital infrastructure, and teacher training on an ongoing basis.
14	Nurdin et al.	<i>E-Assessment on Islamic Religious Education in Secondary Schools</i>	2024	Quantitative	The use of e-assessments increases the speed, accuracy, and efficiency of student learning outcome assessments.
15	Lestari & Munir	<i>The Challenges of Digitizing Islamic Religious Education Evaluation</i>	2025	Literature Review	The main challenges in digitizing PAI evaluation include digital literacy, internet access, and integration of Islamic values.
16	Kholiq & Maulana	<i>Innovation in Islamic Religious Education Evaluation Management in the Digital Era</i>	2026	Qualitative	Digital application-based evaluation innovations improve transparency and real-time monitoring of learning.
17	Firdaus et al.	<i>Analysis of Technology-Based PAI Evaluation System in Madrasah</i>	2025	Case Studies	The digital evaluation system makes it easier to document assessments, but it is still constrained by the readiness of human resources and

					infrastructure.
18	Hamzah & Ridwan	<i>Development of Digital- Based Authentic PAI Evaluation</i>	2024	Research and Development	Digital authentic evaluation instruments are able to increase the measurability of spiritual competence and character of students.

FINDINGS AND DISCUSSION

Problems of Management of Islamic Religious Education Evaluation in the Digital Era

Digital transformation in the world of education has brought significant changes to the learning evaluation system, including in Islamic Religious Education (PAI). Based on the synthesis of the literature, most studies show that the use of digital platforms, e-assessments, and Learning Management Systems (LMS) is able to increase the efficiency of the learning evaluation process. Research (Syarif et al., 2024) shows that the integration of technology in the evaluation of Islamic education increases the effectiveness of assessment and the accessibility of assessment. Similar findings were also found by (Ikromi et al., 2026) which explains that digital evaluation accelerates the process of grade processing and monitoring student learning. Nonetheless, research (Ariza & Afifah, 2024) emphasized that affective and spiritual assessments are still difficult to do objectively through digital systems. The results of the study show a trend that the digitization of PAI evaluation is more dominant focusing on cognitive aspects rather than measuring students' character and religiosity.

In general, previous research shows that the main problem of PAI digital evaluation is related to managerial aspects and human resource readiness. In the perspective of education management theory, Research (Zahroh & Hilmiyati, 2024) explained that the success of educational evaluation is influenced by the functions of systematic planning, implementation, supervision, and control. Research (Susiana et al., 2026) shows that many Islamic educational institutions do not have an optimally integrated digital evaluation management system. The findings are in line with research (Pradikta et al., 2025) which found that the implementation of digital evaluation in madrasas still faces obstacles in coordination, supervision, and management of evaluation data. Based on the synthesis of the literature, it can be understood that most of the research still places the technological aspect as the main focus, while the strengthening of the Islamic education evaluation management system has not been studied in depth.

In addition to the managerial aspect, the research findings indicate that teachers' digital competence is the dominant issue in the transformation of PAI evaluation. (Ardianto et al., 2021) Explains that the acceptance of technology is influenced by the perception of the convenience and benefits of using technology. Research (Meyvita et al., 2025) It shows that teachers' digital literacy competencies have a significant effect on the success of the implementation of technology-based evaluation. Research (Sari & Munir, 2024) It was also found that teachers who have high digital skills are more likely to develop digital evaluation

instruments and utilize student learning outcome data. The results of the study show a trend that research on PAI digital evaluation is still dominated by a qualitative approach that focuses on teacher competence and adaptation of learning technology.

In the context of affective and spiritual evaluation, most studies show the limitations of digital systems in measuring the internalization of Islamic values of students. Research by Sari and Fadli (2025) emphasizes that the assessment of religious character through digital platforms tends to be administrative and has not been able to accurately describe student behavior. These findings are strengthened by the research of Hamzah and Ridwan (2024) who explain that digital-based authentic evaluation still requires the development of more comprehensive instruments to be able to measure the spiritual and moral aspects of students. Based on the synthesis of the literature, it can be seen that most of the previous studies have discussed the effectiveness of evaluation technology rather than the development of digital-based spiritual evaluation instruments.

Another problem that is quite dominant is the gap in infrastructure and technology access between regions. Research by Firdaus et al. (2025) shows that many schools and madrassas in the region experience limitations in internet networks, digital devices, and learning technology support. Research by Nurdin et al. (2024) also shows that the success of the implementation of e-assessment is greatly influenced by the readiness of school infrastructure. The results of the study show a trend that previous research was more conducted in urban schools and madrassas with adequate access to technology, while the context of remote areas is still rarely studied. This condition shows that there is a research gap related to the implementation of PAI digital evaluation in various contexts in education regions in Indonesia.

Based on the synthesis of the literature as a whole, it can be understood that the problems of the management of Islamic Religious Education evaluation in the digital era are multidimensional and interrelated. Most studies highlight the effectiveness of evaluation technology, teachers' digital competencies, and the use of LMS as the main focus of the research. On the other hand, studies on the development of digital-based spiritual evaluation, strengthening evaluation management systems, and equitable implementation of Islamic educational technology are still relatively limited. This condition shows that research on PAI evaluation management in the digital era still has wide room for development, especially in the aspect of integrating Islamic values in technology-based evaluation systems.

Transformation of Islamic Religious Education Evaluation Based on Digital Technology

The development of digital technology has encouraged the birth of various innovations in the Islamic Religious Education learning evaluation system. Based on the synthesis of the literature, most studies show that the use of e-assessment, LMS, artificial intelligence, and learning analytics has a positive impact on the effectiveness of learning evaluation. Research by Wahyudi et al. (2024) shows that technology-based evaluation increases the efficiency of the assessment process and student involvement in learning. These findings are strengthened by research by Hidayat et al. (2024) which found that the implementation of LMS is able to improve real-time monitoring of student learning outcomes. The results of the study show an increasing trend in the use of digital platforms in PAI evaluation since the post-Covid-19 pandemic era.

In general, previous research shows that the transformation of digital evaluation is not only oriented towards technological efficiency, but also on the development of more interactive learning models. In the perspective of Constructivist Learning Theory, students are positioned as active subjects in the learning and evaluation process. Research by Irawati et al. (2024) shows that the use of digital media and interactive learning platforms is able to increase student participation in PAI learning. Research by Rahman et al. (2025) also found that digital assessments increase student engagement and accelerate the learning feedback process. Based on the synthesis of the literature, it can be seen that there is a tendency for research that places technology as a means of strengthening student-centered learning in Islamic education.

The transformation of digital evaluation also shows the development in the use of technology-based authentic evaluations. Hamzah and Ridwan's (2024) research explains that digital authentic evaluation instruments are able to increase the measurement of students' spiritual competence and character in a more contextual manner. These findings are different from the research of Sari and Fadli (2025) which states that digital-based affective assessment is still not optimal due to the limitations of direct observation of students' behavior. The difference in findings shows that the effectiveness of digital authentic evaluation is still influenced by instrument design, teacher competence, and the context of learning implementation.

In the context of the development of the Society 5.0 era, the results of the study show a trend of increasing research attention to the integration of artificial intelligence and learning analytics in the evaluation of Islamic education. Research by Mulyadi and Nurhayati (2025) shows that artificial intelligence can help teachers analyze learning outcomes more quickly and accurately. Research by Nurdin et al. (2024) also shows that the use of technology-based e-assessments improves the accuracy of student evaluation data processing. However, most of the research still focuses on the effectiveness of technology and has not addressed much of the ethical implications and integration of Islamic values in the use of artificial intelligence in educational evaluation.

The findings of the study indicate that the transformation of PAI evaluation in the digital era is still dominated by qualitative approaches and literature review. Most of the research discusses the effectiveness of the use of learning technology, teacher competence, and digital evaluation innovations. Quantitative research on the direct influence of digital evaluation systems on the formation of students' character and spirituality is still relatively limited. In addition, previous research also tends to focus on the use of certain technologies such as LMS and e-assessment, while studies on the integration of big data, adaptive learning, and AI-based assessment in Islamic education are still not widely developed.

Based on the synthesis of the literature as a whole, the transformation of Islamic Religious Education evaluation based on digital technology shows significant developments in increasing the effectiveness and efficiency of learning. On the other hand, previous research still leaves various challenges related to the development of digital-based spiritual evaluation, the integration of Islamic values in evaluation technology, and the strengthening of humanistic aspects in modern assessment systems. This condition shows that the transformation of PAI evaluation requires an approach that is not only oriented towards technological innovation, but also on strengthening the moral, spiritual, and character values of students.

Strategy for the Development of Islamic Religious Education Evaluation Management in the Digital Era

The development of Islamic Religious Education evaluation management in the digital era requires a comprehensive and sustainable strategy. Based on the synthesis of the literature, most studies show that improving teachers' digital competence is the main factor in the successful implementation of technology-based evaluation. Research by Aminah et al. (2024) shows that teachers with high digital literacy are better able to develop digital assessment instruments and utilize evaluation technology effectively. These findings are strengthened by research by Reksiana et al. (2024) who explain that teachers' technological competence has a significant effect on the success of digital learning evaluation in PAI subjects. The results of the study show a trend that the focus of research in the last five years has been largely directed at strengthening teacher competence as the main strategy for the transformation of Islamic education evaluation.

In addition to improving teacher competence, strengthening the evaluation management system is also an important strategy in the development of PAI digital evaluation. In the perspective of education management theory, Bush (2008) explained that the effectiveness of education management is greatly influenced by the ability of institutions to systematically plan, coordinate, supervise, and evaluate. Research by Fauzi and Hasanah (2024) shows that digital-based evaluation management is able to increase the effectiveness of monitoring learning outcomes and transparency in student value management in madrasas. Yusuf and Karim's (2025) research also found that the transformation of Islamic education evaluation requires institutional policy support and an integrated educational information system.

The next strategy is the development of evaluation instruments based on Islamic values. In general, previous research shows that PAI digital evaluation is still more dominant in measuring cognitive aspects than spiritual aspects and students' character. Research by Hamzah and Ridwan (2024) shows that digital-based authentic evaluation can be an alternative in measuring students' spiritual competence. On the other hand, the research of Sari and Fadli (2025) emphasizes that technology-based affective assessment still faces objectivity constraints and limitations in observing student behavior. Based on the synthesis of the literature, it can be seen that the development of digital-based spiritual evaluation instruments is still a research gap that requires further attention.

The results of the study also show an increasing trend in the need for education policy support and technology-based supervision. Sukana's research (2024) shows that Islamic Religious Education supervisors have a strategic role in ensuring that the implementation of digital evaluations runs effectively in schools and madrasas. The findings show that the transformation of digital evaluation requires not only teacher readiness, but also educational leadership support, academic supervision, and Islamic education policies that are adaptive to technological developments.

Equitable distribution of technology infrastructure is an important factor in the successful development of PAI digital evaluation. Research by Nurdin et al. (2024) shows that the success of the use of e-assessment is greatly influenced by the availability of technological devices and adequate internet access. Research by Firdaus et al. (2025) also found that schools and madrasas in the regions still face limited digital infrastructure which has an impact on the effectiveness of the implementation of learning evaluation.

Based on the synthesis of the literature, previous research has still focused more on schools with adequate digital facilities, so the context of Islamic education in remote areas has not been studied in depth.

Based on the overall synthesis of the literature, the strategy for developing the evaluation management of Islamic Religious Education in the digital era must be carried out through a holistic approach that includes improving teachers' digital competence, strengthening the education management system, developing Islamic value-based evaluations, supporting education policies, and equitable distribution of technological infrastructure. The findings of the study indicate that the transformation of PAI evaluation is not enough to be oriented only to technological modernization, but also to maintain the spiritual, moral, and character formation dimensions as the main essence of Islamic education.

CONCLUSION

Based on a systematic review of the literature, the evaluation management of Islamic Religious Education in the digital era has undergone a transformation through the use of e-assessment, Learning Management System (LMS), artificial intelligence, and various digital platforms in the learning evaluation process. This transformation has a positive impact on the effectiveness, efficiency, transparency, and speed of processing the results of PAI learning evaluations. This study also shows that the implementation of digital evaluation still faces various problems, such as low digital competence of teachers, limited technology infrastructure, internet access gaps, and weak support for education policies. The evaluation of Islamic Religious Education has distinctive characteristics because it not only assesses cognitive aspects, but also includes affective, spiritual, moral, and character formation dimensions of students. The development of PAI evaluation management in the digital era requires strengthening teachers' digital literacy, developing evaluation instruments based on Islamic values, and supporting an education management system that is adaptive to technological developments. The integration of technology in the evaluation of PAI also needs to be directed at strengthening character and spirituality education so that digital transformation remains in line with the main goals of Islamic education.

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