From Traditional to Digital: Enhancing Teacher Performance for Improved Educational Quality

Supiansyah[1*], Zakky Zamrudi[2], Husnul Madihah[3], Siti Fajrianti[4], Herlina Lusiana[5]

[1,2,4,5]Management Department, Universitas Islam Kalimantan Muhammad Arsyad Al Banjari, Banjarmasin, South Kalimantan, Indonesia
[3]Educational Administration Department, Universitas Islam Kalimantan Muhammad Arsyad Al Banjari, Banjarmasin, South Kalimantan, Indonesia
Email: supiansyah@gmail.com[1], zakky@uniska-bjm.ac.id[2], madihah.alkareem@gmail.com[3], fajrianti9534@gmail.com[4], lusiana.muyoto@gmail.com[5]

Abstract:

This study aims to analyze digital transformation in improving the quality of education in madrasahs, focusing on optimizing teacher performance. The approach used is qualitative with a case study type, where data is collected through interviews, observations, and documentation. Data are analyzed using reduction, display, and verification, which helps trace the main themes related to technology implementation in learning and teacher professional development. The study results indicate that the application of technology in various aspects, such as online learning platforms, technology training for teachers, and digital tools, can overcome socio-economic challenges and increase teaching effectiveness. Technology allows teachers to access broader and more flexible educational resources and strengthens communication with parents, improving the quality of education in madrasahs. The implications of this study are the importance of integrating technology in education to address socio-economic disparities and improve teacher performance, which will support achieving more inclusive and quality education goals.

Keywords: *Digital Transformation, Quality of Education, Madrasah, Optimizing Teacher Performance*

Abstrak:

Penelitian ini bertujuan untuk menganalisis transformasi digital dalam meningkatkan mutu pendidikan di madrasah, dengan fokus pada optimalisasi kinerja guru. Pendekatan yang digunakan adalah kualitatif dengan jenis studi kasus, di mana data dikumpulkan melalui wawancara, observasi, dan dokumentasi. Data dianalisis menggunakan reduction, display, and verification, yang membantu penelusuran tema-tema utama terkait implementasi teknologi dalam pembelajaran dan pengembangan profesional guru. Hasil penelitian menunjukkan bahwa penerapan teknologi dalam berbagai aspek, seperti penggunaan platform pembelajaran online, pelatihan teknologi untuk guru, dan pemanfaatan alat digital, dapat mengatasi tantangan sosial ekonomi serta meningkatkan efektivitas pengajaran. Pemanfaatan teknologi memungkinkan guru untuk mengakses sumber daya pendidikan yang lebih luas dan fleksibel, serta memperkuat komunikasi dengan orang tua, yang pada gilirannya berkontribusi pada peningkatan mutu pendidikan di madrasah. Implikasi dari penelitian ini adalah pentingnya integrasi teknologi dalam pendidikan untuk mengatasi kesenjangan sosial ekonomi dan meningkatkan kinerja guru, yang akan mendukung pencapaian tujuan pendidikan yang lebih inklusif dan berkualitas.

Kata Kunci: *Transformasi Digital, Mutu Pendidikan, Madrasah, Optimalisasi Kinerja Guru*

INTRODUCTION

Madrasah, as an Islamic educational institution, has a great responsibility to form a spiritually superior and competent generation in the modern era. In facing technological developments and the demands of the times, digital transformation has become an unavoidable necessity (Karaiskos et al., 2024). However, many madrasah are still constrained by the minimal use of technology in the learning process and education management. Meanwhile, teachers, as the spearhead of education, often face challenges in adapting to digital technology, which impacts the quality of learning (Bacus et al., 2024). Therefore, optimizing teacher performance through technology becomes a strategic issue to improve the quality of education in madrasahs. How can digital transformation be implemented effectively to empower teachers and improve the quality of education? This question is an important focus in understanding the role of technology in creating more progressive madrasahs.

Madrasah Aliyah Siti Mariam, Banjarmasin, as one of its region's leading Islamic educational institutions, also faces major challenges in the digital transformation process. With significant potential, such as the presence of dedicated teaching staff and developing technological infrastructure, optimizing teacher performance through digital technology has not been fully achieved. One of the indicators is the lack of utilization of digital platforms to support interactive learning and efficient administration (Gore et al., 2022). In addition, teachers' digital literacy level still varies, thus hampering consistency in the application of technology in the classroom, even though, in theory, it shows that effective digital transformation can improve operational efficiency and the quality of education (Ochoa et al., 2023). Therefore, a structured strategic approach is needed to maximize the potential of digitalization at Madrasah Aliyah Siti Mariam, Banjarmasin.

Studies on digital transformation show its positive impact on teacher performance by improving pedagogical skills, efficiency, and adaptability to change, all of which are essential to improving the quality of education in madrasah (Tep, 2024). When teachers have access to and skills to utilize technology, they tend to be more innovative in developing learning methods relevant to student's needs in the digital age (Schacter & Thum, 2004). This digital transformation is also strengthened by the support of school management, which acts as a facilitator in providing training and technology infrastructure. In addition, an organizational culture that encourages collaboration and innovation strengthens the positive impact of digital transformation on teacher performance. With the synergy between technology, management support, and organizational culture, madrasah can achieve today's more effective and relevant educational goals.

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This research aims to fill the gap by examining the application of digital transformation to improve teacher performance at Madrasah Aliyah Siti Mariam, Banjarmasin. The uniqueness of this research lies in its focus on integrating digital technology with teacher professional development strategies in the context of madrasahs. Unlike previous studies discussing digitalization in general, this study prioritizes a specific approach to answer the challenges at Madrasah Aliyah Siti Mariam, Banjarmasin. Thus, this study is expected to provide new contributions to developing digital transformation theory and practices for improving the quality of education in the madrasah environment.

This study aims to answer the question: How can digital transformation improve teacher performance at Madrasah Aliyah Siti Mariam, Banjarmasin? In addition, this study also aims to identify factors that support and hinder the implementation of digital transformation in the context of improving the quality of education in madrasahs.

The argument underlying this research is that digital transformation has great potential to improve teacher performance in madrasahs through optimal use of technology. Digital transformation can increase the efficiency and effectiveness of the learning process. This is because technology provides tools and platforms that make it easier for teachers to design innovative and data-based learning. Previous research has shown that the planned application of digital technology can improve teacher competence and the quality of education in various educational institutions. However, the success of implementing digital transformation at Madrasah Aliyah Siti Mariam, Banjarmasin is highly dependent on infrastructure support, adequate training, and active involvement from all elements of the madrasah.

RESEARCH METHOD

This research was conducted at Madrasah Aliyah Siti Mariam, Banjarmasin as the main unit of analysis. This madrasah was chosen because it faces challenges in optimizing digital transformation to improve teacher performance, even though it has great potential in terms of human resources and technological infrastructure. The study used a qualitative design with a case study approach. This approach greatly helps researchers to explore in depth how digital transformation is implemented and its impact on teacher performance and the quality of education in madrasahs (Cole, 2024; Scharp, 2021; Tasci et al., 2020). Focusing on case studies provides a detailed understanding of specific phenomena at Madrasah Aliyah Siti

Mariam, Banjarmasin, enabling us to understand the process and results of implementing digital transformation locally.

Data was collected through in-depth interviews, participant observation, and documentation (Ikotun et al., 2023; Saura, 2021; Yang et al., 2020). Interviews were used to explore informants' views and experiences regarding implementing digital transformation and its impact on teacher performance. This study involved various key informants in implementing digital transformation in madrasahs. The Principal of the Madrasah is the main decision maker and the Head of the Foundation, who provides a policy perspective. From a technical aspect, the Head of Administration and the Deputy Principal of the Madrasah for Curriculum, Student Affairs, Facilities and Infrastructure, and Public Relations provided insights related to the readiness, challenges, and implementation of digitalization. In addition, teachers and administrative staff contributed to understanding educators' readiness, while students and parents provided user perspectives. Participatory observation was conducted to understand the interactions between madrasah elements in implementing technology. Documentation analysis included madrasah archives, activity reports, training records, and documentation of the use of technology in learning.

The collected data is analyzed through three main stages: reduction, display, and verification. The data reduction stage is carried out by filtering and selecting the most relevant information with the focus of the research to make it more focused and systematic. Furthermore, the selected data is displayed in the form of a matrix or narrative, making it easier to interpret and analyze in depth. To ensure the validity and accuracy of the findings, verification is carried out through data triangulation, namely comparing information from various sources to obtain valid and objective conclusions.

RESULT AND DISCUSSION
Result
Teacher Training and Professional Development

The results of in-depth interviews with the principal, teachers, and administrative staff showed that teacher training and professional development are two of the main strategies implemented by transformational leaders to build a competitive culture at Madrasah Aliyah Siti Mariam, Banjarmasin. The principal actively encourages teacher skill development through ongoing training and workshops tailored to current educational needs. One teacher stated, "The principal always encourages us to take training that is in line with the latest developments in education, this makes us feel more confident in teaching." This shows that transformational leaders not only focus on improving the quality of teaching but also strive to build the overall professional capacity of teachers.

Furthermore, the interview results revealed that the madrasah leaders integrated teacher training with collaboration and knowledge-sharing principles. The madrasah principals regularly held discussion forums between teachers after the training to share new materials and experiences. One teacher said, "After the training, we always have a sharing session where we can exchange ideas and

strengthen our understanding of the materials we have just learned." This not only improves the quality of teaching but also fosters a competitive culture based on collaborative learning and mutual support among teachers. This program shows that transformational leaders use training to improve individual skills while strengthening collaboration within the team.

Interviews also revealed that the training focused on developing learning skills related to technology adaptation. The teachers interviewed mentioned that the madrasah leader encouraged them to master various educational applications and digital platforms to improve the teaching and learning process. One teacher said, "The madrasah principal is very supportive of us in using technology for teaching, by providing training that makes us more comfortable in utilizing digital media." This shows that the training focuses on developing traditional pedagogical skills and emphasizes the importance of digital skills relevant to the development of the times and the needs of today's education.

Overall, the interview results show that teacher training and professional development implemented by transformational leaders positively impact building a competitive culture in madrasahs. Leaders can create an environment that supports ongoing professional development by prioritizing ongoing training, teacher collaboration, and technology adaptation. The success of this training not only improves the quality of learning but also strengthens the competitiveness of madrasahs in facing the ever-growing challenges of education.

Use of Performance Standards and Rubrics

The study's results indicate that using performance standards and rubrics at Madrasah Aliyah Siti Mariam, Banjarmasin is important in improving the quality of education and teacher performance. Documentation related to performance standards and rubrics reveals that the madrasah has implemented a systematic and results-based evaluation system to monitor and improve teacher performance. The standards covered various aspects, such as pedagogical competence, classroom management, and the ability to use technology in learning. Performance rubrics provide objective and measurable assessments of teacher achievement, becoming the basis for their professional development. In addition, documentary evidence shows that the evaluation process is carried out regularly through monthly evaluation meetings and annual performance reports that allow the madrasah to make continuous improvements. Using performance standards and rubrics proves that performance management based on clear standards can improve teaching effectiveness and support teacher professional development.

Table 1. Use of Performance Standards and Rubrics

Aspect	Performance Rubric Implementation	Impact
Strategic Policy	Integration of performance standards and rubrics into the vision and mission of the madrasah	Improving the quality of learning and accountability of teacher performance
Routine Activities	Periodic evaluation of teacher performance through monthly evaluation meetings	Identify teacher strengths and weaknesses in more detail.

Use of Technology	Utilization of digital systems for teacher performance assessment and monitoring	Accelerate the evaluation process and transparency of teacher performance.
Performance Report	Annual report on teacher performance achievements	Continuing professional development and improvement of academic achievement

Table 1 illustrates how performance standards and rubrics are implemented at Madrasah Aliyah Siti Mariam, Banjarmasin. In strategic policies, integrating performance standards and rubrics into the institution's vision and mission shows the madrasah's commitment to improving the quality of learning. In routine activities, monthly teacher performance evaluations allow madrasah leaders to identify areas that need improvement. Technology, especially in digital systems for assessment and monitoring, provides speed and ease in carrying out evaluations. As part of the evaluation process, annual reports also contribute to teacher professional development and improve student academic achievement. This shows that systematic and data-based performance standards and rubrics can create an environment that supports continuous development and improvement in madrasahs.

From the documentation analyzed, it can be concluded that the use of performance standards and rubrics at Madrasah Aliyah Siti Mariam, Banjarmasin significantly improves teacher performance and the overall quality of education. The first pattern found is the integration of performance standards in the madrasah's strategic policies, ensuring that all elements have clear expectations for teacher performance. The second pattern is periodic evaluation, which is carried out to systematically assess teacher performance and provide space for madrasah leaders to provide constructive feedback. The third pattern is using technology in the evaluation process, which facilitates monitoring and increases performance transparency. Thus, applying performance standards and rubrics is an effective tool in improving the quality of teaching and supporting teacher professional development.

Addressing Socioeconomic Challenges Using Technology

Observation results at Madrasah Aliyah Siti Mariam, Banjarmasin show that transformational leadership is key to overcoming socioeconomic challenges by integrating technology into the learning process. Madrasah leaders actively encourage the use of technology in various aspects of education to reduce barriers arising from students' economic limitations. One of the main findings is using online learning platforms that allow students from low-income families to access learning materials without the constraints of transportation costs or dependence on physical facilities. Madrasah leaders ensure that teachers use this technology optimally to support distance learning or blended learning models so that students in remote areas or with limited access can still get an equivalent learning experience.

Further observations revealed that technology also includes implementing more interactive learning, such as learning videos and online quizzes. Using these media provides opportunities for students to learn more interestingly, flexibly,

and appropriately. The madrasah leader continuously supports the improvement of teachers' technological competencies by providing regular training and workshops. This ensures that teachers can utilize the various digital tools available more effectively, thus creating practical solutions to address socioeconomic inequalities that can hinder students' access to quality teaching materials. One teacher said, "The training provided by the madrasah principle has helped us in using digital technology more efficiently to support learning."

In addition, madrasah leaders also use technology to strengthen communication between the madrasah and parents. Digital platforms convey important information, ranging from student learning progress to notifications about social assistance or scholarships available to needy students. This approach facilitates the involvement of parents who may have limited time or physical access to come to the madrasah while supporting student success. The documentation notes that using this technology has reduced the distance created by economic factors and ensured that parents can receive important information quickly and effectively, increasing their collaboration in supporting their children's education.

Overall, the application of technology in addressing socioeconomic challenges at Madrasah Aliyah Siti Mariam, Banjarmasin has shown positive results. Using online learning platforms provides more equitable access to all students, especially those from families with economic limitations. In addition, improving technology skills for teachers ensures they can utilize digital tools more effectively while strengthening communication with parents through technology, which facilitates collaboration to support student progress. With this approach, technology has proven to be a very effective tool in addressing socioeconomic disparities and improving the quality of education at the madrasah, making the school more inclusive and quality-oriented.

Discussion

The main implication of the results of this study is that teacher training and professional development play a vital role in improving the quality of education at Madrasah Aliyah Siti Mariam, Banjarmasin. Using a transformational approach, Madrasah leaders focus on providing continuous training for teachers, ensuring that they not only master the curriculum but also have skills in using technology to improve the quality of learning (Balković, 2023). This structured, needs-based training program allows teachers to continue developing their pedagogy and technology skills to provide students with more effective and relevant learning (Freeh & Hussein, 2021). With continuous professional development, teachers become more skilled and confident in facing challenges in the classroom and managing online and face-to-face learning (Syslova, 2020).

The professional development process also encourages teachers to innovate in teaching methods for educational and teaching staff (Aljenobi & Ibrahim, 2023). The results of interviews with several teachers showed that they felt more motivated to find new, more effective ways to deliver material after attending training held by the madrasah. Teachers with more competence in using digital technology, for example, can integrate learning aids such as videos, online quizzes, and virtual discussions into the learning process (Henriksen et al., 2020). This, in

turn, increases student participation and makes learning more engaging and effective. In addition, training and professional development driven by madrasah leaders also strengthen the bond between teachers and other staff, creating a more collaborative working environment and supporting the creation of a culture of innovation in the madrasah. By continuously developing teacher capacity, madrasahs can create a healthy, competitive atmosphere that focuses on improving the overall quality of education (Zamanian et al., 2021).

Based on the research results, using performance standards and rubrics has proven to be a key element in improving the quality of teaching and learning at Madrasah Aliyah Siti Mariam, Banjarmasin. Madrasah leaders utilize clear performance standards to guide teachers in designing lesson plans and measuring the effectiveness of teaching and education staff (Chattopadhyay & Jankunaite, 2023). The performance rubric used to assess student learning outcomes provides clear guidance for teachers to know which areas need improvement and development. This increases transparency in learning evaluation and provides opportunities for teachers to adapt to the diverse needs of students (Sayekti et al., 2024).

Consistently applied performance standards and rubrics allow for objectively measuring student and teacher achievement so that everyone knows where they stand regarding academic and professional achievement (Aljenobi & Ibrahim, 2023). This approach benefits teachers and motivates students to work harder and focus more on achieving learning goals (Balestra et al., 2020). For example, using detailed rubrics allows students to know exactly what is expected of them in an assignment or exam and how they can improve. Observations in madrasah show that using these clear standards helps reduce uncertainty in learning, increases teaching efficiency, and strengthens a competitive culture among students (Paassen et al., 2021). In this way, madrasahs have succeeded in creating a more structured environment and are oriented towards higher achievement, both at the individual and collective levels (Abourokbah et al., 2024).

The observation results show that transformational leadership is important in overcoming socio-economic challenges through technology at Madrasah Aliyah Siti Mariam, Banjarmasin. Madrasah leaders actively encourage the use of technology to overcome obstacles faced by students from underprivileged families so that they can still access learning materials easily without being burdened by transportation costs or other physical needs (Chattopadhyay & Jankunaite, 2023). One of the initiatives observed was implementing an online learning platform that allows students to learn from home with equal access to all learning materials, regardless of the student's economic condition (Commission et al., 2021). Technology is an important tool in creating an inclusive and accessible learning environment for all students, which ultimately reduces socio-economic disparities in madrasah (Zhuang & Xie, 2021).

Technology is used to speed up access to materials and as a medium to enrich learning with a more interactive and interesting approach. Learning videos, online quizzes, and other learning applications allow students to learn more flexibly and according to their needs (Won et al., 2023). Madrasah leaders continue to train teachers to have sufficient skills in using technology and maximize the

potential of technology in supporting the learning process (Badikov & Bolotskikh, 2021). With this increased skill, teachers are more confident and effective in integrating technology into their teaching. In addition, technology is also used to strengthen communication between the madrasah and parents so that even though parents cannot be present in person at the madrasah, they remain informed about student development and can play a role in supporting their children's education (Saad et al., 2023).

Overall, the use of technology to address socio-economic challenges at Madrasah Aliyah Siti Mariam, Banjarmasin has proven to be very effective in improving the quality of education. With equal access for all students to learn using digital platforms and improving technology skills for teachers, technology has become a bridge connecting all parties in improving the quality of education at the madrasah (Luo et al., 2023). This approach reduces barriers caused by economic factors and creates a more inclusive and innovation-based learning culture (Huang et al., 2020). Technology, thus, becomes a key element in creating a fairer and more competitive education system capable of competing at both local and national levels.

CONCLUSION

This research concludes that digital transformation at Madrasah Aliyah Siti Mariam, Banjarmasin, enhances education quality by improving teacher performance. Key elements include technology in learning, digital teacher training, and online platforms that support professional development. Technology helps students, especially those from disadvantaged backgrounds, access learning materials more easily. The study highlights the importance of continuous teacher training, clear performance standards, and using technology to strengthen communication with parents, creating an inclusive and competitive educational environment. Additionally, it allows teachers to improve their skills and provides students with broader access to quality education, overcoming economic barriers.

This research provides a practical contribution to digital transformation in madrasah by providing guidelines for implementing technology to improve the quality of education and teacher performance. However, this research also has limited coverage of one madrasah, so the results must be seen in a wider context. Future research is recommended to examine further the implementation of technology in various madrasah with different characteristics, as well as involving a quantitative approach to strengthen the validity of research results and explore the long-term influence of implementing digital transformation in improving the quality of education.

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