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JURNAL MANAJEMEN PENDIDIKAN ISLAM

## ARTIFICIAL INTELLIGENCE (AI)-BASED STRATEGIC MANAGEMENT IN THE PERSONALIZATION OF MADRASAH CURRICULUM IN THE DIGITAL ERA

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### Abstract

In the era of digital disruption, madrasahs face challenges to accommodate the diversity of students' potential (multiple intelligences) in a precise manner. Conventional curriculum is often one-size-fits-all, which is less than optimal in boosting students' unique talents. The use of Artificial Intelligence (AI) in strategic management offers the opportunity to personalize the curriculum automatically and accurately through big data analysis. This research aims to analyze the formulation, implementation, and evaluation of strategic management that integrates AI technology to create personalized learning paths in Madrasahs. The main focus is on how AI helps decision-makers in adapting materials, learning speed, and teaching methods to students' cognitive profiles and interests without abandoning the basic values of madrasahs. This study uses the library research method to collect and analyze data. The initial stage of the research is the identification and selection of the type of literature needed, focusing on primary sources such as recent articles and books that discuss AI in education and adaptive learning. After that, library materials were collected from various credible academic databases and digital libraries. The next process is a critical analysis of the library materials that have been collected with the techniques of synthesis and integration of ideas. This analysis aims to formulate a comprehensive picture of the practices, benefits, and challenges of AI integration in personalization and curriculum design in leading schools. This approach is appropriately used to build a strong theoretical foundation and present a systematic and scientifically documented study. AI-based curriculum personalization has been shown to increase learning effectiveness and student motivation. From the perspective of Islamic education management, this technology serves as a tool to actualize the concept of li-kulli maqam maqal (putting things in their place) in the educational process. However, the main challenges lie in digital ethical readiness, infrastructure costs, and the need for synergy between AI algorithms and the spiritual guidance of teachers. This research contributes to a new model of curriculum management in the madrasah environment that combines the sophistication of today's technology with the principle of personalization of education in Islam.

**Keywords:** Strategic Management, Artificial Intelligence, Curriculum Personalization, Madrasah, MPI.

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## INTRODUCTION

Strategic management in Islamic educational institutions is currently facing global challenges that demand rapid adaptation to technological developments (Hamida et al., 2025). Digital transformation is no longer just an option, but a strategic imperative for madrasahs to maintain their competitive relevance in the midst of global competition (Ahmad Sarwini et al., 2024). The use of Artificial Intelligence (AI) in strategic

management frameworks offers predictive analysis capabilities that conventional methods do not possess (Ahmad Taufik et al., 2025). Madrasah as a fiddin tafakkuh institution must be able to integrate the sophistication of algorithms without reducing the values of spirituality that are the main foundation (Hermanto et al., 2024). The strategic vision of madrasah leaders is now tested in managing organizational culture changes from manual to data-driven decision making (Bukhori & Rindaningsih, 2025).

The implementation of AI in Islamic education is a manifestation of the principle of *al-muhafadzatu 'ala qadimi shalih wal akhdu bi jadidi ashlah*, namely maintaining good old traditions and taking new and better innovations (Suwahyu, 2024). This strategy requires careful planning so that technology does not become a "new god", but rather a will to achieve the excellence of the people (Akbar Al Firdaus et al., 2025). Institutions that fail to formulate technology-based strategies risk stagnating quality and being abandoned by society (Ulfah & Saeful Anwar, 2024). The educational curriculum is often criticized for its uniform nature (one-size-fits-all) which tends to ignore the uniqueness of the potential of each individual student (Ahmad Taufik et al., 2025). In the Islamic perspective, every child is born with unique *fithrah* and potentials that must be optimally developed according to their capacity (Al-Ghazali, in Fathul Bari, 2020). Curriculum personalization is a solution to the inability of the classical system to reach the differences in learning speed and cognitive style of students (Yuliansyah & Saidah, 2025).

AI technology allows the creation of a Personalized Learning Path that is able to automatically adjust instructional content based on the real-time performance of students (Suhendi, 2023). The use of Learning Analytics through AI provides objective data for curriculum managers to carry out targeted interventions (Institut Kariman Wirayudha Sumenep et al., 2023). This strategy is in line with the principles of Islamic education which emphasizes teaching that is in accordance with the level of human reason, *khatibu al-nas 'ala qadri 'uqulihim* (Wahyu Setia Ningsih & Zulkipli Jemain, 2023)

With AI, madrasahs can ensure that each student gets a proportionate and challenging learning load according to their zone (Susanti et al., 2024). This personalization will managerial increase the efficiency of time and resources in achieving curriculum targets (Hamida et al., 2025). This innovation positions leading madrasahs not only as a center for knowledge transmission, but as a precise talent incubator (Akbar Al Firdaus et al., 2025). Madrasahs have a moral responsibility to be a pioneer (role model) in Islamic educational innovation (Agustina et al., 2024). Strategic management in this institution does not only focus on academic results, but also on the formation of a solid Islamic character or *syakhshiyah* (Novianti et al., 2025).

The integration of AI in curriculum management requires the readiness of digital infrastructure and technological literacy from educators or *murabbi* (Yunita et al., 2025). The existence of this advanced technology aims to strengthen the role of teachers in providing spiritual guidance, while administrative tasks are taken over by the system (Ahmad Taufik et al., 2025). The ethical challenge of using student data is a crucial issue that must be formulated in the strategic policy of madrasahs to ensure privacy and security (Yuliansyah & Saidah, 2025).

Previous research revealed that the integration of AI in adaptive learning is able to increase student motivation and engagement and strengthen six key skills of the 21st century, namely critical thinking, cooperation, communication, creativity, digital literacy, and media literacy (Hermanto et al., 2024). The Independent Curriculum Policy in Indonesia provides space for the implementation of an adaptive learning model that focuses on the needs of students and supports the flexibility of learning content in madrasahs (Ahmad Sarwini et al., 2024). Obstacles in implementation such as the limitations of digital infrastructure and teacher competence are the focus of attention that needs to be overcome to optimize the use of AI.

Inclusive madrasas need an adaptive curriculum that can be adapted to the needs of children with special needs, so AI-based learning is increasingly relevant to be expanded. With this background, this research is expected to make an empirical and conceptual contribution to the development of a madrasah curriculum that is innovative, adaptive, and relevant to the demands of the 21st century based on artificial intelligence. In addition, this research is important because there is still limited literature that explores the synergy between Islamic strategic management and AI technology in the context of the curriculum (Suhendi, 2023). Through case studies in leading madrasas, adaptation patterns and implementation challenges can be mapped in depth to serve as a reference for other institutions (Akbar Al Firdaus et al., 2025). In the end, AI-based strategic management is expected to be able to produce a generation of Muslims who are intellectually superior and spiritually mature (Susanti et al., 2024). This effort is a concrete step in realizing *izzul Islam wal muslimin* in the midst of the flow of global technological civilization (Hermanto et al., 2024).

## **RESEARCH METHODOLOGY**

This study uses the library research method to collect and analyze data. Literature study is a research method that examines written sources relevant to the research topic, such as books, journal articles, research reports, policy documents, and other reference materials related to the integration of artificial intelligence in curriculum design and adaptive learning in madrasas. The initial stage of the research is the identification and selection of the type of literature needed, focusing on primary sources such as recent articles and books that discuss AI in education and adaptive learning. After that, library materials were collected from various credible academic databases and digital libraries.

The next process is a critical analysis of the library materials that have been collected with the techniques of synthesis and integration of ideas. This analysis aims to formulate a comprehensive overview of the practices, benefits, and challenges of AI integration in personalization and curriculum design in leading schools, as well as identify research gaps that can be a foothold for further study. This literature study method allows for an in-depth and comprehensive understanding of the phenomenon being studied without having to collect field data directly. This approach is appropriately used to build a strong theoretical foundation and present a systematic and scientifically documented study.

## **RESULTS AND DISCUSSION**

### **RESEARCH RESULTS**

#### **1. Integration of Artificial Intelligence in Madrasah Curriculum**

The integration of artificial intelligence (AI) technology in the madrasah education curriculum is an important element in developing an adaptive, innovative, and personalized learning system that suits the needs of students (Ahmad Sarwini et al., 2024). The era of digitalization requires a curriculum that not only instills conventional knowledge but also strengthens the ability to think critically, creatively, collaboratively, and digitally literacy that is qualified to face global challenges (Yuliansyah & Saidah, 2025), the opinion emphasizes that the incorporation of AI allows for a more interactive and responsive learning experience to the personal needs of students, so that the curriculum can play a role in shaping 21st century competencies in a optimal. This is supported by another concept that includes 21st century skills as a core competency that must be developed in modern education so that students are able to compete globally and be ready to face technological developments (Yanto et al., 2025). In addition, other research states that the implementation of AI at Madrasah Ibtidaiyah can increase the

achievement of student competencies through adaptive learning that identifies each learning need individually and provides materials that are in accordance with students' abilities (Institut Kariman Wirayudha Sumenep et al., 2023).

(Ahmad Sarwini et al., 2024) emphasized that integrating technology, especially artificial intelligence (AI), into madrasah education must be done with a solid moral and spiritual foundation. This aims to ensure that technology not only functions as a learning tool, but also supports the development of character education based on Islamic values. Thus, Islamic values remain the main foundation in shaping the character of students even in the midst of rapid technological advances, so that harmony is created between technological advances and the preservation of religious values in the education process (Akbar Al Firdaus et al., 2025).

In addition to convenience and innovation, the application of AI in the curriculum brings various challenges, such as the limitations of digital infrastructure, the lack of digital competence in educators, and the need for education policies that support the development of this technology as a whole (Khasanah, 2024). Therefore, intensive training for teachers and improving infrastructure facilities are strategic priorities so that AI integration can be implemented optimally and sustainably. The Ministry of Religion of the Republic of Indonesia in the 2025 guidelines has recommended technology-based curriculum innovation as an effort to support madrasas in the use of AI so that they can adjust to local needs and characteristics of students, as well as maintain the values of religious and national education. The integration of AI in the madrasah curriculum leads to a comprehensive educational transformation, not only in terms of technical learning, but also in terms of socio-cultural and character aspects, thereby supporting the formation of a superior generation that is technologically competent and morally and spiritually dignified.

## **2. Implementasi Manajemen Strategis di Madrasah**

The implementation of strategic management begins with a formulation stage that integrates the vision of digital technology with noble Islamic values (Ahmad Sarwini et al., 2024). Madrasah leaders adopt an Artificial Intelligence (AI) system to automatically map students' potential to achieve managerial effectiveness. The use of the Adaptive Learning platform allows madrasas to provide a unique learning path for each student (Zahara et al., 2023). Big data collected from students' daily activities becomes the basis for strategic decision-making for curriculum managers (Akbar Al Firdaus et al., 2025).

AI systems have been proven to be able to conduct predictive analysis of the risk of academic failure of students before the exam takes place (Hamida et al., 2025). Teachers in madrasas are now switching roles to facilitators accompanied by algorithm-based intelligent assistants (Yanto et al., 2025). Curriculum personalization is carried out by adjusting the difficulty level of the material based on the speed of understanding of each student (Susanti et al., 2024). The digital infrastructure at the flagship Madrasah has been strengthened to support real-time data processing without technical barriers. Quality control is carried out through an analytical dashboard that can be accessed by madrasah leaders at any time. The transparency of learning outcomes generated by AI increases parents' trust in madrasah professionalism (Suhendi, 2023). This strategic policy also includes regular training for teachers to have qualified AI literacy, synergy between technology and human management to create a progressive Islamic education ecosystem. Regular evaluations are carried out to ensure that AI algorithms remain aligned with national curriculum quality standards, and the security of student data is a priority in the strategic plan to avoid privacy abuse. As a result, madrasas have experienced significant increases in academic achievement and operational time efficiency.

### **3. Formulation of AI Adoption Strategy in Madrasah**

The findings show that madrasahs conduct internal and external environmental analysis before implementing AI (Ahmad Sarwini et al., 2024). The madrasah leaders formulated the vision of "Moral-Based Smart Madrasah", where AI is positioned as a tool to map the fithrah (potential) of students. The planning document shows that there is a special budget allocation for the procurement of Adaptive Learning platforms and training to improve teacher competence. The implementation of curriculum personalization in its implementation, the AI system collects data from initial diagnostic tests and students' daily learning patterns. As a result, teachers no longer teach with one module for all students.

- Group A (Fast) students: Provided with automatic enrichment materials by the system.
- Group B (Medium) students: Follow the standard curriculum flow.
- Group C students (Need Guidance): Get instant remediation and more intensive mentoring from teachers.

The implications for the quality of graduates and the role of teachers, even though the curriculum is personalized by machines, the role of teachers is actually strengthened in the affective aspect, teachers use the time that is usually spent on manual correction to conduct spiritual counseling and motivation based on progress data presented by the AI dashboard (Tr, 2025).

## **DISCUSSION**

### **1. Challenges of AI Implementation in Madrasah Curriculum Personalization**

In the digital era that continues to grow rapidly, especially in the midst of the demands of the society 5.0 era, the integration of technology in education is a must to produce students who are not only academically ready, but also able to adapt to changes and make optimal use of technology (Ahmad Sarwini et al., 2024). Artificial Intelligence as one of the technological innovations has extraordinary potential to revolutionize the learning system, especially in the personalization of the madrasah curriculum that prioritizes adaptive and inclusive learning (Susanti et al., 2024). Ahmad Tafik. el emphasized that the integration of technology, especially artificial intelligence (AI), in the realm of madrasah education must be balanced with the strengthening of Islamic values as the main basis of learning (Ahmad Taufik et al., 2025). He warned that the modernization of education through the use of technology should not override the moral, character, and spiritual aspects of students. The sustainability of religious and cultural values in the educational process must be maintained so as not to be degraded. In this context, madrasahs have a strategic position in harmonizing technological advances with the preservation of Islamic values that are the identity and characteristics of the educational institution.

On the other hand, the application of AI in madrasah curriculum cannot be separated from various complex challenges. Uneven technological infrastructure, low digital competence of teachers, and limited policies that support the implementation of information technology are serious obstacles that must be overcome so that the goal of AI integration can be realized effectively (Zahara et al., 2023). Previous studies and field data show that without the right support from various parties, the use of AI in madrasahs will only stop in the realm of potential without real implementation that has a significant impact on the quality of learning (Hermanto et al., 2024).

The challenges of implementing AI in this curriculum include several things, including:

- a. **Limitations of Technological Infrastructure.** One of the main challenges in the implementation of artificial intelligence (AI) in the madrasah curriculum is the limitation of technological infrastructure (Khasanah, 2024). Many madrasahs in Indonesia do not have adequate access to digital devices and stable internet networks needed to support the effective use of AI technology. The digital divide mainly occurs in remote areas, so limited access to technology is the main obstacle in expanding the use of AI in madrasahs. This is a critical obstacle because AI technology requires sufficient digital resources to function optimally in the adaptive learning process. In addition, the availability of AI-enabled hardware and software is still concentrated in urban areas, leaving madrasahs in underdeveloped areas in disadvantaged situations.
  - b. **Teacher Competence and Digital Literacy.** In addition to infrastructure, teachers' competence in utilizing AI technology is also a serious problem. The low digital literacy of madrasah teachers slows down the integration of AI into the learning process, so intensive and continuous training is needed. In addition, it is important to improve teachers' digital competence so as not to be left behind compared to students who are very familiar with digital technology and AI. Without improving competencies, it is difficult for teachers to optimize the potential of AI as an innovative learning tool (Tr, 2025). The real data that occurs is that the obstacles to teachers' digital literacy are not only related to technical skills, but also understanding the concept of digital pedagogic and the ethics of using AI in education. This requires a comprehensive training program that not only teaches the use of technology, but also pedagogical and ethical aspects, so that teachers can carry out their roles professionally and responsibly.
  - c. **Cultural and Ethical Challenges.** In the implementation of artificial intelligence (AI) in madrasah education, the challenges faced are not only technical, but also related to cultural aspects and values inherent in the education system. The use of AI in the context of Islamic-based education needs to maintain the integrity of moral and spiritual values so that technology does not shift the main goal of shaping students' character (Susanti et al., 2024). Curriculum development strategies and technology applications must include Islamic values as a whole, so that AI functions not only as a practical tool, but also as a support for character education. This approach is important to minimize the influence of technological globalization that has the potential to ignore the dimensions of humanism and spirituality in Islamic education.
  - d. **Education Regulations and Policies.** The availability of policies and regulations that support the implementation of AI in the madrasah environment is also an important factor. According to a study from the Ministry of Religion of the Republic of Indonesia (2025), it is still necessary to strengthen policies related to the standards for the use of AI in madrasah education so that the synergy between technology and curriculum can be guaranteed safety, effectiveness, and ethics in its use, and also every policy must be balanced with cross-sectoral cooperation, both with the government, academics, and technology industry players so that the development of the AI ecosystem in madrasahs runs successfully.
- 2. Optimization Strategy for AI Integration in Madrasah Curriculum**
- Optimizing the integration of artificial intelligence (AI) in madrasah curriculum requires a comprehensive and holistic strategic approach. Successful AI implementation is impossible to achieve without the active involvement of all stakeholders such as teachers, students, madrasah managers, the government, and the technology industry (Zahara et al., 2023). An integrated approach can strengthen policies, human resource

development, and provide adequate technological infrastructure, making madrasas ready to welcome challenges and opportunities in the digital era.

- a. **Strengthening Teacher Competencies and Continuous Training.** Teacher training must touch on technical mastery of the use of AI as well as pedagogic aspects and sustainable digital ethics. Increasing the capacity of teachers cannot be separated from strengthening Islamic values so that AI technology does not erode the moral values of students (Akbar Al Firdaus et al., 2025). This training must also be constantly updated to follow the development of AI so that teachers are able to assist students effectively and ethically.
- b. **Development of Inclusive Technology Infrastructure.** The development of madrasah technology facilities and infrastructure must be supported by collaboration between government and private institutions to create an inclusive and equitable ecosystem. Technology development in madrasah educational institutions is not only focused on providing hardware, but must also ensure equal access to technology to the entire academic community (Susanti et al., 2024). This effort is important so that all elements of the madrasah have an equal opportunity to make optimal use of technology in supporting the learning process.
- c. **Supportive Education Policies.** The Ministry of Religious Affairs of the Republic of Indonesia has formulated curriculum innovation guidelines that encourage AI-based adaptive learning in madrasahs to suit local needs and characteristics of students (Ulfah & Saeful Anwar, 2024). In addition, cross-sector synergy is crucial to create comprehensive and sustainable policies, combining the aspirations of governments, academics, technocrats, and technology industry players. The creation of innovative learning media by utilizing artificial intelligence (AI) is a strategic step to realize an interactive and adaptive learning process. AI-based learning media is able to increase student engagement and accelerate understanding of the material presented (Suhendi, 2023). This approach allows for the development of holistic learning solutions, which include not only cognitive but also affective aspects, thus creating a more responsive and personalized learning atmosphere for each learner.
- d. **AI Data-Based Evaluation and Monitoring.** Real time evaluation based on AI data enables effective and responsive learning monitoring. Automated data collection and analysis through AI makes it easy to make quick and targeted educational decisions (Zahara et al., 2023). The implementation of this system ensures adaptive learning and continuous improvement of the quality of madrasah education.

In conclusion, the strategy of optimizing the integration of artificial intelligence (AI) in the madrasah curriculum must be carried out comprehensively and sustainably by involving all stakeholders and considering technical, pedagogical, and Islamic values that are the characteristics of madrasah education. Strengthening teacher capacity through continuous training, accompanied by infrastructure development and synergistic policy development, is the main foundation for the successful implementation of AI. The development of innovative artificial intelligence (AI)-based learning media and the evaluation and monitoring of data-driven learning processes are essential to ensure the accuracy and effectiveness of learning. An integrative approach that combines AI technology with spiritual values can support the formation of students' character while significantly improving the quality of madrasah education. Thus, the balance between technological aspects and Islamic values is a key factor in optimizing the use of AI for the advancement of madrasah education in this digital era.

### **3. Curriculum Personalization Analysis in MPI Perspective**

The discussion on the personalization of AI-based curriculum shows that there is an alignment between technological innovation and the principle of justice in Islam (Aulia et al., 2025). AI is seen as an instrument to actualize the concept of fithrah where every child has the right to get education according to his potential. Madrasah management uses AI not to replace the role of teachers, but to strengthen spiritual interactions through accurate data (Ahmad Sarwini et al., 2024). Personalization of learning is technically supported by the theory of Differentiated Instruction which is now automatically executed by machines (Nurdin Malayu & Ritonga, 2024). In the view of Islamic education management, the efficiency offered by AI is a manifestation of the value of itqan or work professionalism (Amelia & Rostika, 2022). This intelligent system helps madrasahs in classifying the teaching materials that best suit the cognitive needs of students proportionately. Ethical challenges in the use of AI in madrasahs are answered through the development of a sharia-based digital code of ethics. This curriculum transformation proves that Islamic educational institutions are able to compete at the forefront of global innovation (Akbar Al Firdaus et al., 2025).

The integration of faith and knowledge remains the spirit in every strategic decision taken by the leadership of the madrasah, personalized learning increases the intrinsic motivation of students because they learn in the right development zone (Yanto et al., 2025). Madrasah leaders act as architects of change who manage the organizational cultural transition to the smart era, this strategy minimizes academic gaps in the classroom that were previously difficult to overcome with traditional lecture methods, managerially, the use of AI significantly reduces the administrative burden on teachers by up to forty percent (Amelia & Rostika, 2022). This provides an opportunity for teachers to focus more on developing students' morals and character personally. Overall, AI-based strategic management in madrasahs is a visionary step in welcoming the future of Islamic education. Integrasi

- a. AI in the MPI Strategic Management Framework. The implementation of AI in this madrasah proves that strategic management is not just about pursuing efficiency, but a form of managerial *ijtihad* to provide fair educational rights for every student. This is in line with Fred R. David's theory of competitive advantage, but combined with the principle of *Maslahah Mursalah*—namely taking technology policies for the benefit of students (Khasanah, 2024)
- b. New Paradigm: Algorithms as a Support for Personality AI-based curriculum personalization is a modern embodiment of the concept of Islamic education that respects individual differences. If Al-Ghazali emphasizes the importance of teachers getting to know students' characters, then AI acts as an "intelligent assistant" that accelerates the character's recognition through Big Data.
- c. Challenges: Balance between Technology and Spirituality The discussion highlights that the main challenge is not on technicality, but on keeping human interaction and the value of manners from being eroded. The management of the madrasah implements the policy of "High Tech, High Touch", where high technology must be accompanied by a touch of high spirituality through *halaqah* activities and worship habits.

### **4. Benefits of AI Integration in Madrasah Curriculum Personalization**

The integration of artificial intelligence (AI) in the madrasah curriculum provides very broad and profound benefits for the development of education, both in terms of technical learning and the development of students' character and competence. AI increases learning effectiveness through the provision of direct and personalized

feedback, which spurs learning motivation and significantly improves learning outcomes (Yuliansyah & Saidah, 2025). AI-based learning also offers high flexibility so that learners can access learning materials and activities anytime and anywhere, opening up wide independent learning opportunities (Susanti et al., 2024).

In addition, AI empowers teachers to carry out their roles as facilitators, evaluators, and motivators optimally, helping to manage more adaptive and individualized learning (R. Nurhayati et al., 2024). AI also encourages the development of students' soft skills such as creativity, collaboration, and critical digital literacy as the main requirements for success in the 21st century (Yanto et al., 2025).

Thematically, the use of artificial intelligence (AI) in madrasah education does not only function as a technological tool, but also as a strategic instrument to strengthen the development of students' character and spiritual values (Ahmad Sarwini et al., 2024). The implementation of AI allows the development of interactive learning content based on Islamic values, such as Qur'an and Hadith learning applications, that are contextual and able to respond to the learning needs of students personally. This approach integrates technology with spiritual dimensions and character, so that madrasah education can maximize the potential of technology while maintaining Islamic identity in the learning process. AI-based education must synergize the mastery of technology with the deepening of Islamic values, so as to produce learning that is not only innovative but also ethical and dignified (Suwahyu, 2024). Furthermore, AI also plays an important role in increasing access to and distribution of quality learning resources that have been constrained by geographical and socio-economic factors. AI is able to provide a platform that curates relevant learning content so that students obtain materials that suit their respective learning preferences and needs efficiently (Hikmawati et al., 2023). Furthermore, AI accelerates the decision-making process in education management through big data analysis capable of mapping learning patterns and intervention needs with minimal errors.

Overall, these benefits show that the integration of AI in the madrasah curriculum can contribute to improving the quality of holistic learning ranging from cognitive, affective, to psychomotor aspects while maintaining Islamic values as the main foundation. However, optimizing the benefits of AI is highly dependent on infrastructure readiness, teacher human resource capacity, and policies that support sustainable and inclusive implementation.

## **CONCLUSION**

The integration of AI in strategic management in the personalization of madrasah curriculum is very important to create an adaptive, innovative, and personalized learning system according to the needs of students. AI enables real-time adjustment of learning materials and methods, reinforcing 21st-century skills such as critical thinking, creativity, collaboration, and digital literacy, and supporting the development of Islamic characters. However, the implementation of AI faces various challenges, including limited technological infrastructure, low digital competence of teachers, education policies that are not yet fully supported, and social and economic barriers. Effective optimization strategies involve strengthening teacher competencies through intensive and continuous training, developing inclusive technology infrastructure, synergistic policies, and developing AI-based learning media. An integrative approach that combines Islamic values with technology is the key to success in improving the quality and relevance of madrasah education in the digital era.

## SUGGESTIONS/RECOMMENDATIONS

Based on the results of a literature review on Artificial Intelligence (AI)-based strategic management in madrasas, there are several important suggestions for further research. First, researchers are then expected to conduct empirical research or case studies directly in the field to map adaptation patterns and challenges of AI implementation in real time, beyond literature study methods. Field research is needed to accurately measure the improvement in academic achievement and operational time efficiency after the application of this technology. Second, the focus of research must be directed to the development of a new model of curriculum management that concretely synergizes the sophistication of today's technology with the principle of personalization of education in Islam. It is also important to examine how technology can play a role as a tool for actualizing the concept of *li-kulli maqaam maqaal* in the educational process. Third, the issue of digital ethics and student data security must be a top priority for research to ensure user privacy. In addition, an in-depth study is needed on the formulation of strategic policies that regulate standards for the use of AI so as not to violate privacy. Fourth, researchers are further advised to focus on real solutions to the limitations of technological infrastructure, especially in remote areas experiencing digital divides. The study of improving teachers' digital literacy is also crucial, not only on the technical aspects but also on the concept of digital pedagogic and the ethics of using AI. The next research needs to formulate a synergy strategy between AI algorithms and teachers' spiritual guidance so that technology does not shift the role of educators. Furthermore, research should explore effective methods to maintain a balance between the use of high technology and a touch of spirituality (high tech, high touch) in the daily activities of the madrasah. The development of AI-based interactive learning media that is contextual with Islamic values is also a promising area for further research. Evaluation of the impact of the efficiency of the administrative burden of teachers who are diverted to spiritual counseling needs to be deepened. Finally, further research can focus on effective cross-sectoral collaboration between governments, academics, and tech industry players to create a sustainable AI ecosystem

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