



## Integration of AI Tools in Islamic Education Curriculum Development Management: Challenges and Opportunities

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### ABSTRACT

The objective of this research is to introduce a model for development management curriculum image in the application of AI on Islamic education. The method used in this research is by literature review, in discussing about the use of Artificial Intelligence (AI) on Islamic Education Curriculum. These sources include journals, books and research reports that have been subjected to thematic and cross-analysis for a determination of emerging trends and points of view. Literature Review : The relevance of AI model are important to the Islamic education which require for technologies such as Natural Language Processing (NLP), Machine Learning and Chatbot. The fourth area is NLP which is useful in text analysis and translation and it can be used in understanding of religious texts such as the Qur'an and hadith having a problem with the issue of translation. Machine learning provides the prediction and thus the learning personalization which helps to adapt the material to the student, yet it raises the issue of algorithm bias. One way that chatbots increase interactivity is in providing learning support in real time but these are the drawbacks because the information supplied must be correct. As a result, integrating concepts in Artificial intelligence in the Islamic education curriculum shall enhance personalization and learning of Islamic concepts as well as the acquisition of the 21st-century skills. But here, the concerns are mobility infrastructure readiness, how to get trainers, and moral problems, such as problem of set algorithms, and the problems with the use of the technology referring to the principles of Islam. However, the post induces expectations of improving the process of learning and the analysis of religious knowledge, meaning that the implementation of this method cannot disregard moral and religious principles.

**Keywords:** *AI Tools Integration, Curriculum Development, Islamic Education*

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## INTRODUCTION

Islamic education is today experiencing a huge challenge of harmonizing spirituality and morality with technology which is central to capture the opportunities of the digital society (Suherman & Indra, 2023). Again, with advancement in technology especially in the AI the need to develop an integrated and responsive curriculum cannot be overemphasized since there seems to be a gap between religious learning and

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technological expertise (Hasanah & Sukri, 2023); (Olfah, 2024). This is also evidenced by other studies revealing that effective teaching delivery with the use of technology in Islamic education aids in enhancing the quality of education and the relevance of the education processes and content in the current world (Murniyetti dkk., 2024); (Sodik, 2024). As curriculum needs to meet current developments, it has to be structured to incorporate technology enhancing the main Islamic education curriculum that is aimed at the formation of good character among the students (Muhammad Yusuf dkk., 2023); (Suherman & Indra, 2023). Therefore, this integration does not only involve sound curriculum development but also preparation of teachers and available infrastructure to adopt this integration (Salsabila dkk., 2023); (Kusumawati & Nurfuadi, 2024).

At the moment, there is growing concern toward incorporating technology in general and AI in particular into the Islamic education curriculum as the benefits of AI in enhancing student learning experiences and learning outcomes are being realized by teaching and learning stakeholders (Murniyetti dkk., 2024); (Sodik, 2024); (Muhammad Yusuf dkk., 2023). According to the studies, AI assists in an innovative learning process so that teachers can use specific strategies that are suitable for students and help them achieve better results (Melisawati & Jamilus, 2024); (Salsabila dkk., 2023). However, although the benefits of AI in Islamic education are clear, significant challenges remain, especially regarding teacher readiness and inadequate technological infrastructure (Suherman & Indra, 2023); (Hasanah & Sukri, 2023). Many teachers feel ill-equipped to apply AI in their instructional practices, indicating the need for comprehensive and ongoing training programs to equip them with the necessary skills and knowledge (Murniyetti dkk., 2024); (Yasin & Rahmadian, 2024). In addition, inadequate technological infrastructure in many educational institutions is also a major obstacle that needs to be overcome to ensure the integration of this technology runs smoothly and effectively (Kusumawati & Nurfuadi, 2024); (Olfah, 2024).

There is a lack of a systematic approach in developing a curriculum that integrates artificial intelligence (AI) in Islamic education, because in-depth research is still rare regarding ways of adapting AI that are in accordance with the framework of Islamic education while still maintaining the ethical and moral values that are firmly held in the teachings of Islam (Kusumawati & Nurfuadi, 2024); (Suherman & Indra, 2023). Although AI offers a wide range of potential to improve learning, the lack of specific and detailed studies on its application in the context of Islamic education indicates a major gap in the existing literature (Hasanah & Sukri, 2023); (Yasin & Rahmadian, 2024). An integrated type of curriculum is required that is rooted in the principles derived from Islamic education for a higher ideal and more flawless organisation, so it becomes essential to know how to combine national curriculums with pesantren curricula especially related to advanced technology like AI because studies are still scarce (Abu Kholish dkk., 2022); (Olfah, 2024). Therefore, further research the focus of curriculum design not only with technology dimensions but also related to moral and spiritual development among students based on Islamic values (Melisawati & Jamilus, 2024); (Salsabila dkk., 2023).

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Therefore, this research provides a new contribution by examining the integration of artificial intelligence (AI) into Islamic education curriculum because how modern technology that comes from AI has not been well-studied before and as Muslimians have moral values inspired Islam at most what become the foundations of their educational system (Olfah, 2024); (Hasanah & Sukri, 2023). Therefore, this research provides a new contribution by examining the integration of artificial intelligence (AI) into Islamic education curriculum because how modern technology that comes from AI has not been well-studied before and as Muslimians have moral values inspired Islam at most what become the foundations of their educational system (Murniyetti dkk., 2024); (Yasin & Rahmadian, 2024). Moreover, this study delivers significant contributions to the enhancement of AI as a reform tool for curriculum integration between national and Islamic boarding schools to shape more holistic structure education adaptable with digital era demands without changing essential values in religious educational practices (Abu Kholish dkk., 2022); (Suherman & Indra, 2023). Therefore, this research is quite important as a step towards developing not only technology-based but also characterful curriculum which suits the modern of Islamic education (Sodik, 2024); (Salsabila dkk., 2023).

The aim of this research is to develop a curriculum development management model that integrates AI in Islamic education. This research ideology is supposed to guide the policymaker and educator in drafting AI based Islamic integrated curriculum which means this theory provide of islamic value into a good teaching-learning system that adaptive, inclusive dan more effective. The paper also seeks to investigate the most relevant methodologies for training teachers in order that they are able to confront technology, and consequently use AI more seamlessly within routine activities.

## **RESEARCH METHODOLOGY**

Resources for the data used in this paper have been obtained with literature review methodology on published sources that justifies and necessitates incorporation of artificial intelligence (AI) tools into Islamic education curriculum building. Data sources included scientific journals, books, research reports as well as other relevant data source. Methods: The data in this Report come from document analysis, and literature review. The document analysis process, including examining research papers and other related publications (literature review).

This research uses two data analysis methods, thematic analysis and comparative analysis. The thematic analysis was used to generate the Major Perspectives and later (and its Conclusion) with respect of how AI can be assimilated within Islamic educational system by identifying, analyzing data sources into themes or patterns ascertaining main trends resulted. By contrast, a comparative analysis examines conclusions and perspectives of multiple sources in order to understand the opportunities for; limitations on; and consequences postulated by such incorporation. A similar study has been carried out earlier. This way, through research we can provide a detailed and profound understanding of the topic which is under investigation.

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## **RESULT AND DISCUSSION**

### **Selection of appropriate AI models for Islamic education**

#### **1. Natural Language Processing (NLP)**

NLP can be used to analyze text in a variety of formats, such as student assignments, online discussions, or even learning content (Allen dkk., 2022). Such as the correction of grammar which is used to detect and correct grammatical errors in students' writing, text summarization can be use for extractive summary so that student get main point of long paragraph fastly to understand what actually content says or sentiment analysis it's using in education field also where you analyze emotion on basis of some texts given by any possible users may being a student try sharing views with teachers now Nlp will help yore teacher even good reason would not raise problem let us move ahead when its anything virtual translation could be feature then particular scenario select language making classroom live class room.

#### **2. Machine Learning**

Machine learning can be used to predict various things in an educational context, such as: success prediction is used to predict which students are likely to struggle in a subject; Difficulty prediction is used to predict the level of difficulty of material for certain students (Oppong, 2023). Additionally, machine learning enables adaptation of learning according to individual student needs, such as: content recommendations are used to suggest relevant learning materials based on student interests and abilities; Difficulty adjustment is used to adjust the difficulty level of questions or assignments according to student abilities (Song dkk., 2024). Examples include: Smart Tutoring Systems and Adaptive Online Learning Platforms. Machine learning has great potential to personalize learning. By understanding each student's learning style, AI can provide appropriate material and appropriate challenges (Xu, 2024). One potential challenge to be attended is tweaking the algorithm to reduce bias. As another example, where an algorithm is too quantitative it can be as well too qualitative.

#### **3. Chatbot**

Chatbots can provide more interactive and enjoyable learning for students, such as: virtual tutors are used to answer student questions, provide explanations, and provide exercises; Learning assistants are used to help students organize study time, organize schedules, and find learning resources (Labadze dkk., 2023). Examples of applications include: Socratic and Duolingo. Chatbots are excellent for providing interactive and flexible learning. Chatbots can answer student questions anytime and anywhere (Nur Fitria dkk., 2023). The challenge is ensuring the chatbot provides accurate and relevant information. Chatbots that are not properly programmed can provide false or misleading information.

### **AI Integration Framework in the Islamic Education Curriculum**

The aim of integrating AI into Islamic education is to achieve a number of important goals (A. Hakim & Anggraini, 2023). Above all, ensuring that learning is personalized and tailoring teaching strategies and resources around the individual needs of learners.

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Moreover, increased learning effectiveness can likely be expected when the religious literacy of students is enhanced with greater engagement in Islamic teachings. Promote the acquisition 21st century skills, to grant students with better critical thinking abilities, creative minds and ability to work in a team as required by this digital era. A second reason that Islamic teachings must be relevant in the modern world is that Muslims can unite them with today's issues and global challenges.

The following are the important elements of AI integration: 1) Learning Material Development: AI enables the creation of interactive digital content, such as instructional games, animated films, and simulations. By adapting teaching materials to students' interests, skills and learning preferences, content can also be made more personally relevant to them. In addition, translation and transliteration assistance in the acquisition of the Qur'an and hadith by offering these services in various languages; 2) Teaching Strategy: Students can ask questions and receive answers, practice, and support from an AI chatbot-based virtual instructor. AI is used in project-based learning to solve practical problems. Finding opportunities for improvement is facilitated by the use of AI in learning data analysis; 3) Learning Evaluation: By using adaptive assessment, test questions are leveled according to student abilities. Automated feedback reacts to student replies in a timely and targeted manner. Comprehensive performance evaluations evaluate students' social and emotional competencies in addition to their cognitive understanding (Nguyen dkk., 2023).

Needs analysis to determine the special needs of schools or madrasas is the first step in implementing AI. Next is planning clear goals, tactics and resources. Important steps include creating appropriate technological infrastructure, educating educators to use AI more proficiently, and implementing AI gradually with pilot projects that are periodically evaluated and improved (Nur Fitria, 2021).

Equal access to technology is potentially one barrier of the digital divide that can be rectified. The other barriers include data privacy needs to be secure and protect student meal cost, it requires a huge budget, teacher skill due teachers still need education about increasing their knowledge in the use of AI technology (Afzal dkk., 2023).

AI has various benefits that can improve the interpretation of the Koran and Hadith. Deeper meaning can be discovered using intelligent search engines, which make it easy to explore texts based on themes or grammatical context (Khalifa & Albadawy, 2024). AI is also able to categorize hadiths based on their level of truth and extract certain material in an understandable way, such as moral principles or fiqh provisions (Gulyamov, 2024). Furthermore, AI can find several interpretations by analyzing the attitudes in the interpretation.

AI can help memorize the Koran through virtual tutors that offer instant feedback on pronunciation and recitation. Although visualization of verses helps understand difficult meanings, adaptive learning adapts the content to the student's level of competency. Text comprehension can also be improved through interactive exercises.

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### **Technology Infrastructure Readiness in Islamic Education Institutions**

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Assessment of the present level of technology is indispensable for AI to get integrated with Islamic education. This examination covers far too many things, including physical infrastructure (server room, hardware provision and availability state of the network etc.) We must also take into account the software of that time, including system level and complementary programs.

Human sources also are important, along with the availability of a qualified technical guide team and the technical information of teachers and IT employees. Information should be steady, abundant, and of high nice. Lastly, having a budget for generation investments is vital to pay for the necessary software program and hardware as well as for the advent and upkeep of AI systems. Islamic instructional establishments can guarantee the fulfillment and efficiency of enforcing AI, enhancing coaching requirements, by way of evaluating every of these elements (Boukherouaa dkk., 2021).

A number of important steps are included in the assessment process to determine whether Islamic education is technologically ready to use AI. First, a survey was given to teachers, staff, and students to find out how ready they are for today's technology (Rashid dkk., 2021). Next, a technology audit is carried out to evaluate the state and continuity of all available infrastructure. Additionally, records evaluation is performed to evaluate the current use of the generation and discover styles and ability trends. Finally, benchmarking is the process of comparing an institution's technological state with other academic institutions that have implemented AI effectively, thereby enabling the extraction of best practices and learning from their experiences (Grajeda dkk., 2023). Educational institutions can gain a complete picture of their technology readiness to support the introduction of AI by combining these strategies.

There are various ways to see indicators of technology readiness for implementing AI in Islamic education. First, there ought to be good enough infrastructure in region, with all essential hardware and software to be had and operating as intended. Second, having adequate human resource skills, meaning staff and teachers can use technology efficiently. Third, for records to adequately assist AI systems, it have to be correct, applicable, and up-to-date. Fourth, there is high-level management support, where management supports technology investment. Fifth, to ensure protection and compliance with applicable guidelines, explicit guidelines concerning the usage of technology and information safety are needed. Islamic educational institutions can guarantee the best technological preparation for effective AI implementation by meeting these indicators (Chowdhury dkk., 2023).

A number of efficient techniques are one of the assessment instruments that can be used to measure the readiness of Islamic education technology for AI integration. To begin with, a SWOT analysis is conducted to determine the institution's technological strengths, weaknesses, opportunities, and threats. Second, technology performance is measured from various angles with the Balanced Scorecard Matrix, which provides a comprehensive picture of how effectively technology is used. Third, an institution's technological maturity is evaluated using a Maturity Model, which helps determine how ready the institution is to accept and implement AI. Educational institutions can make

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more strategic and informed decisions regarding technology implementation by using this assessment tool.

### **Challenges in AI Integration in the Islamic Education Curriculum**

There are many different and complex technical problems facing remote schools in Indonesia, such as limited availability of technology and inadequate teacher preparation. According to research, there are significant issues related to technology accessibility in many rural areas, which directly impacts educational standards. Based on Su'udi's research, 73.1% of rural health centers have accessibility problems. These findings can also be extended to educational settings, where inadequate infrastructure makes it difficult for students to access the technology they need for teaching (Su'udi dkk., 2022). In addition, it changed into observed that one of the largest problems instructors face while imposing home getting to know applications, mainly in far off regions, is the gap in internet connectivity and virtual era (Pratiwi, 2021).

The fact that instructors do not receive sufficient training contributes to limited access to technology. Even though teachers in border areas really understand the subject matter, they are often ill-prepared to incorporate technology into the classroom (Hermansyah & Sumarsono, 2021). This means that teachers cannot use technology well, despite its potential, unless they have appropriate training. Another study found that teachers' knowledge of educational digitalization is limited to the use of ICT tools, and lacks a deeper understanding of various technology-based learning environments (Nenotek dkk., 2023). This shows that to higher put together instructors to stand the needs of modern-day education, extra comprehensive schooling is needed.

In addition, challenging geographic circumstances can hinder the implementation of learning technology. According to research, communities in rural areas are often isolated from each other geographically, thereby limiting their access to technology and educational resources (Hildayanti dkk., 2023). This shows that similarly efforts are needed via the authorities and academic institutions to offer suitable infrastructure and necessary training for instructors to increase get entry to to schooling in rural regions.

In addition, other research highlights the difficulties that arise in integrating technology into education in the digital era, such as gaps in access and infrastructure (Subroto dkk., 2023). This means that although there are prospects for improving the quality of education using technology, existing obstacles must be overcome first. In this situation, teacher preparation becomes very important. found that self-efficacy and motivation were positively correlated with teacher performance. This means that training to increase motivation can increase teacher effectiveness in remote locations (Ana Merdekawati, 2021).

To meet these challenges, some remote schools have tried to raise teaching standards. According to Maulida and Wirdanengsih's research, to comply with policies requiring computer-based exams, schools in rural areas have attempted to improve the educational experience for their students and teach them the use of computers (Maulida & Wirdanengsih, 2019). This means that despite challenges, they try to find solutions.

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However, there are nevertheless troubles, particularly with regard to verbal exchange between instructors and mother and father, and it is vital to address the fact that only a few mother and father are aware of the significance of kids's education (Pratiwi, 2021). Therefore, it is very crucial to involve mother and father within the schooling technique and assist them realize the significance of training for his or her kids.

From all perspectives, the technological challenges faced by remote schools in Indonesia are complex and require a comprehensive strategy. Increased parental involvement in schools, teacher training and increased technology are all part of this. It is hoped that via overcoming these problems, students will get hold of better education and the usual of studying in far off regions will improve.

There are a number of crucial moral and theological issues inside the use of AI in Islamic coaching. The possibility of prejudice in AI algorithms that would war with Islamic values is one of the fundamental barriers. Algorithmic bias is a kind of bias in synthetic intelligence (AI) that arises whilst the information used to train an AI device reflects pre-present prejudice or injustice. Due to the potential for biased results in the decision-making process, this is especially important in Islamic education (Beatrice Oyinkansola Adalakun dkk., 2024); (Oluwatobi Opeyemi Adeyelu dkk., 2024). To stop discriminatory actions that may result from biased algorithms, for example, the use of AI in banking needs to be carefully studied (Beatrice Oyinkansola Adalakun dkk., 2024).

Payroll ethics for AI is also a significant concern. Prioritizing a balance between technological superiority and the authenticity of Islamic teachings is very important in the application of AI in education. Artificial intelligence (AI) has the capacity to enhance the interpretation of spiritual texts and streamline the academic method; however, excessive use of generation has the capability to intervene with students' important and innovative questioning capability (F. Hakim dkk., 2024); (A. Hakim & Anggraini, 2023). Therefore, so that students can face the complexity of AI while still upholding Islamic beliefs, educational institutions must create curricula that are tasked with incorporating AI (Sari Hernawati dkk., 2024).

AI accountability and ethical compensation are also important. This includes bias reduction, algorithm accountability, and data privacy rules. To combine AI technology with moral and ethical norms, Islamic concepts can offer important insights for creating an ethical framework (Mohadi & Tarshany, 2023); (Benjamin Samson Ayinla dkk., 2024). Islamic educational institutions can integrate AI responsibly, ensuring that this technology is used to uphold Islamic values and improve the quality of education, by understanding and addressing ethical and religious issues.

Opposition to technological change among educators and society is one of the cultural and social obstacles to integrating AI in Islamic education. They may worry that AI will take over their jobs or reduce students' critical and creative thinking capacity (F. Hakim dkk., 2024); (A. Hakim & Anggraini, 2023). Therefore, it is very important to create a curriculum that integrates AI responsibly so that students can learn its ins and outs while upholding Islamic principles (Sari Hernawati dkk., 2024).

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Another hassle is over-reliance on era. Teachers and society need to make sure that kid's critical and innovative thinking talents are not diminished by using using AI. Artificial intelligence (AI) can improve the interpretation of sacred texts and speed up the learning process, but its application must be wise to prevent deviant Islamic education (F. Hakim dkk., 2024).

### **Opportunities Presented by AI Integration**

The use of Artificial Intelligence (AI) in Islamic education gives a whole lot of widespread opportunities. One of the principle opportunities is improving learning efficiency. AI can create a curriculum tailor-made to every pupil's wishes, taking into consideration a more personalized approach to the mastering system. AI can growth efficiency and effectiveness in learning Islamic religious education (Yulianti dkk., 2018). With this shrewd device, instructors can more without problems become aware of college students' strengths and weaknesses, in order to pay greater attention to areas that want improvement. This now not best improves scholar learning consequences but additionally makes the mastering method more exciting and relevant.

Additionally, AI makes it viable to offer getting to know materials in diverse formats, which include audio, visual, and interactive. This broadens the accessibility of Islamic education for students with different gaining knowledge of styles. Innovative and creative Islamic schooling objectives to discover and facilitate more exciting mastering (Rosyad, 2019). By utilizing technology, Islamic education can reach more students, including those who may have difficulty with traditional learning. Material presented in a variety of formats can help students understand complex concepts better.

The use of AI also can increase students' getting to know reviews via digital reality applications. With this era, students can experience Islamic historical occasions directly, that could growth their expertise of the context and which means of Islamic teachings. Interactive simulations can boom students' know-how of crucial events in Islamic records (F. Hakim dkk., 2024). In this way, college students now not most effective study Islamic history from books, but can also have a better experience, that can enhance their reminiscence and understanding of the fabric being taught.

AI systems can also aid in the analysis of religious literature, allowing students to understand the context and deeper meaning of scriptures. AI systems can help in the analysis of religious literature (F. Hakim dkk., 2024). By using AI, students can access various interpretations and explanations of religious texts more quickly and accurately. This now not most effective broadens their understanding however additionally facilitates them in developing important thinking capabilities which can be crucial in know-how spiritual teachings.

Additionally, AI can help students develop important technology skills to face future challenges. In an increasingly more digital global, the potential to use era successfully is turning into an invaluable skill. By making use of AI in Islamic education, students not handiest learn about spiritual values but also discover ways to use era to decorate their mastering.

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AI can also increase the success of personalized learning by evaluating each student's unique behavior and talents. AI can increase the success of personalized learning. With a machine capable of reading pupil records, instructors can offer greater precise and relevant comments, so students can study in the way that excellent suits them. This technique not best improves studying effects but additionally allows college students experience greater concerned and influenced in the learning manner.

Islamic education has come to be an crucial problem in current years due to the fact it's far related to the growing need for a cutting-edge and applicable training device. Technology-based Islamic education can increase material accessibility (F. Hakim dkk., 2024). Thus, Islamic schooling wishes to conform to present day traits and make use of generation to reach a wider range of students. This includes the use of online platforms and educational applications that allow students to learn anytime and anywhere.

Technology-based totally Islamic schooling gaining knowledge of performs an critical function in empowering people with the essential abilties and expertise. The use of technology in Islamic education must pay attention to the instructions of the Koran and Hadith (Astuti dkk., 2023). Therefore, it is vital to make sure that the technology used in Islamic education isn't always most effective powerful but additionally according with spiritual values and concepts. This will help create a balanced learning environment between technology and spiritual values.

The integration of AI within the context of Islamic religious schooling continues to be confronted with numerous demanding situations, which include the difficulty of integrating AI into the studying enjoy, in preference to changing it. In integrating artificial intelligence in Islamic religious education, collaboration between PAI lecturers, AI experts and religious experts will be very important. Collaboration between educators and AI experts is very important in technology integration (Nurhayati dkk., 2024). With this collaboration, Islamic education can utilize technology in the most effective way and in accordance with the religious context.

Islamic schooling control and AI have exquisite opportunities to improve the best of schooling, which includes developing better management structures, developing college students' social and spiritual skills, in addition to developing applicable curricula. However, the usage of AI also brings demanding situations which include risks to the security of students' private records and the capability have an effect on of foreign cultures that aren't in step with Islamic values. The use of technology in Islamic education must pay attention to ethics and morals (Astuti dkk., 2023). Therefore, it's miles critical to control using AI wisely in order that it remains in step with the desires of Islamic schooling.

Thus, the integration of AI in Islamic training has brilliant ability to enhance college students' studying, know-how and studying reviews. However, the usage of AI have to be carefully monitored to ensure that its implementation stays consistent with the dreams and values of Islamic training. Collaboration among educators, AI specialists, and non secular professionals is essential to growing applicable and effective AI answers within the context of spiritual schooling.

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### **Implications for the Islamic Education Curriculum**

In terms of AI's implications for the curriculum, Islamic schooling should ensure that AI is implemented in a way that complies with ethical and spiritual norms and is extraordinarily transparent and accountable. This includes ensuring that biased data is not used to train AI systems and that systems do not produce unfair conclusions (Beatrice Oyinkansola Adedokun dkk., 2024); (Oluwatobi Opeyemi Adeyelu dkk., 2024). The framework for assessing the moral consequences of AI technology is the idea of Maqasid Al-Shari'ah which emphasizes the objectives of Islamic law (Mohadi & Tarshany, 2023). Therefore, the proper integration of AI into future Islamic schooling curricula ought to be taken into account to make certain that this generation is used to uphold Islamic ideals while improving the overall excellent of education.

By evaluating each student's unique behavior and skills, AI can also provide customized and more effective learning by giving them access to more relevant and interesting content (F. Hakim dkk., 2024). However, it must be emphasized that careful tracking of the usage of AI is essential to ensure that those systems keep to conform with ethical and religious standards and do not deliver rise to bias. Additionally, for AI assessments to be understandable and justified, data security and transparency must be considered when using AI in Islamic education (Olatunji Akinrinola dkk., 2024).

As a end result, integrating AI into Islamic schooling can increase standards throughout the board and offer college students with an training that is greater pleasant and tailored to their character wishes. However, it's miles essential to bear in mind that the use of AI requires regular monitoring to make certain that the gadget does no longer introduce bias and keeps to stick to moral and spiritual ideas.

When developing an AI-based totally Islamic training curriculum, there are some of important moral and theological concerns that ought to be made. Prioritizing AI integration is crucial to make sure that these systems are free from bias, as this will lead to unfair conclusions and violate Sharia norms. Algorithmic bias is a type of bias in artificial intelligence (AI) that arises when the information used to teach an AI system reflects pre-current prejudice or injustice. This is very important in Islamic education because it is able to make the selection-making system less honest (Beatrice Oyinkansola Adedokun dkk., 2024); (Oluwatobi Opeyemi Adeyelu dkk., 2024).

The second need is for the curriculum to include the ideas of Maqasid Al-Shari'ah, which highlights the goals of Islamic law. Therefore, the goals of preserving justice, eradicating injustice, preserving life, enhancing intelligence, and protecting property can be achieved through the direction of AI growth (Mohadi & Tarshany, 2023). This will make it easier to guarantee that AI technology is applied to uphold Islamic beliefs while improving the quality of education.

Third, the development of the Islamic education curriculum needs to include AI. The curriculum needs to be created taking into account students' ability to handle the complexities of AI while still upholding Islamic principles. This includes coaching college

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students how to make use of synthetic intelligence (AI) responsibly and a way to recall the moral consequences of this generation (Sari Hernawati dkk., 2024).

Fourth, data security and openness in the application of AI must also be considered in AI integration. Islamic education must ensure that AI systems are accountable and the data used to train them is free from bias. As part of this, standards for bias mitigation, algorithm accountability, and data privacy are being developed (Khan dkk., 2022); (Afzal dkk., 2023).

Therefore, important ethical and religious considerations must be made when developing AI-based Islamic education programs. Islamic educational institutions can integrate AI responsibly, ensuring that the technology is used to uphold Islamic beliefs and improve the overall quality of education, by recognizing and resolving these issues.

## **CONCLUSION**

AI has some of benefits and downsides when it comes to handling the creation of curricula for Islamic education. Natural language processing (NLP) can resource in the examine of non secular texts like the Al-Qur'an and Hadiths by supplying translations, summaries, and in-depth analysis. Machine learning promises individualized learning by predicting each student's needs and obstacles and presenting content suitable to their level of expertise. Chatbots and virtual instructors can also improve student interest and flexibility during the learning process.

But there are enormous technical, cultural, and ethical demanding situations. NLP machine translation may not always translate religious content with subtleties accurately. Furthermore, an over-reliance on technology and potential prejudice in AI algorithms could be in opposition to Islamic values and impair students' ability to think critically. Data security, privacy, and technology preparedness in remote areas are other important concerns.

To address these issues, careful planning is required, including needs analysis, teacher preparation, and the creation of an adequate technology infrastructure. Islamic education will gain a great deal from AI integration if it is implemented ethically and in accordance with Islamic principles. As a result, AI improves learning requirements while also expanding the use of Islamic education to tackle modern issues.

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