

ARTIFICIAL INTELLIGENCE: OPPORTUNITIES AND THREATS IN ISLAMIC HIGHER EDUCATION

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Abstrak: AI atau Artificial Intelligence merupakan sebuah teknologi yang dikembangkan dengan memiliki kecerdasan buatan untuk dapat melakukan pekerjaan yang dasarnya membutuhkan kecerdasan manusia. Penggunaan AI masih menjadi perbincangan hangat di berbagai negara maju dan berkembang seiring dengan terus dikembangkannya teknologi tersebut. AI dianggap memiliki potensi besar dalam merevolusi dunia pendidikan dikarenakan kemampuannya dalam menyediakan pembelajaran yang lebih personal. Namun disaat yang bersamaan, hadirnya AI memicu berbagai kekhawatiran terhadap potensi ancaman yang ia bawa ke dalam dunia pendidikan. Penelitian ini bertujuan untuk membahas secara lebih lanjut mengenai peluang dan ancaman penggunaan AI dalam pembelajaran di pendidikan tinggi Islam. Penelitian ini menggunakan metode penelitian kualitatif dikarenakan penelitian ini ditujukan untuk memahami dan mendeskripsikan fenomena yang ada pada objek penelitiannya. Penelitian ini menggunakan pendekatan fenomenologi yang mana pendekatan fenomenologi merupakan sebuah desain penelitian yang berfokus pada essence yaitu data bersifat faktual berdasarkan pengalaman dari subjek penelitian, ataupun invariant structure yaitu pada cara subjek dalam memaknai pengalamannya. Lokasi Penelitian ini adalah Institut Agama Islam Negeri Curup dan subjek penelitiannya adalah mahasiswa IAIN Curup, dosen IAIN Curup dan juga staf/tenaga kependidikan IAIN Curup. Data diperoleh dengan cara wawancara dan observasi serta diolah dan dianalisis menggunakan teknik triangulasi data. Hasil penelitian ini menunjukkan bahwa AI memiliki peluang besar dalam pendidikan tinggi Islam baik di bidang pendidikan ataupun di bidang administrasi. Pada bidang pendidikan, AI dapat meningkatkan efisiensi pembelajaran, sedangkan di bidang administrasi AI dapat memberikan kemudahan dan meningkatkan produktifitas tenaga kependidikan. Bersamaan dengan peluang yang besar, AI turut membawa ancaman bersamanya. Munculnya rasa malas, menggampangkan tugas dan adanya sifat ketergantungan terhadap AI menjadi ancaman besar sekaligus menjadi dampak negatif dalam penggunaan AI. Begitupun dengan adanya otomatisasi dalam bidang administrasi memberikan ancaman terhadap berkurangnya kebutuhan institusi terhadap pekerjaan staf administrasi dan akan digantikan oleh AI.

Kata kunci: Kecerdasan Buatan, Pendidikan Tinggi Islam, Penggunaan Kecerdasan Buatan

Abstract: AI, or Artificial Intelligence, is a technology developed to perform tasks that typically require human intelligence. The use of AI remains a hot topic in both developed and developing countries as the technology continues to advance. AI is considered to have significant potential in revolutionizing the education sector due to its ability to provide more personalized learning experiences. However, the emergence of AI also raises various concerns about the potential threats it poses to the education system. This research aims to further discuss the opportunities and threats of using AI in learning within Islamic higher education. This study employs a qualitative research method to understand and describe the phenomena related to its research subjects. A phenomenological approach is used, focusing on the essence of the data, which is factual and based on the experiences of the research subjects, or the invariant structure, which pertains to how the subjects interpret their experiences. The research was conducted at the State Islamic Institute of Curup, and the subjects included students, lecturers, and administrative staff at the institute. Data were collected through interviews and observations and were

processed and analyzed using data triangulation techniques. The results of this study indicate that AI holds great potential for Islamic higher education in both the educational and administrative fields. In education, AI can enhance the efficiency of learning, while in administration, AI can simplify tasks and boost the productivity of educational staff. Alongside these significant opportunities, AI also brings threats. The emergence of laziness, the tendency to take tasks lightly, and the dependency on AI pose significant threats and represent negative impacts of AI usage. Additionally, automation in administration poses a threat to the need for administrative staff, as their roles may be replaced by AI.

Keywords: *Artificial Intelligence, Islamic Higher Education, use of artificial intelligence*

Introduction

AI (Artificial Intelligence) is a technology developed to perform tasks that fundamentally require human intelligence. (Eriana dan Zein 2023) Through complex algorithms and mathematical models, a computer technology known as AI was created, which has the ability to learn from data, recognize patterns and language, and make decisions. This continuously developed AI now plays a significant role in transforming many aspects, including human interactions, business, and education.

The use of Artificial Intelligence (AI) in education has become a hot topic in various developed and developing countries alongside the continuous advancement of digital technology. AI has the potential to revolutionize the current teaching and learning processes. This is because AI technology can provide a more personalized and adaptive approach to student needs, such as differentiated learning applied on platforms like Dreambox, Knewton, Scootpad, and others.

Not only in differentiated learning, but AI can also provide a more engaging learning experience for students through discovery learning methods using AR (Augmented Reality) / VR (Virtual Reality) technology. By utilizing this technology, learning can be conducted more effectively as students can be directly involved in the material being taught. (Putri et al. 2023)

In addition to enhancing the effectiveness of learning for students, AI also assists educators with its ability to collect and analyze data, enabling teachers to identify weaknesses and develop better teaching and learning methods. These various solutions are offered through the use of AI to improve efficiency and effectiveness in the educational process.

In higher Islamic education, the implementation of AI presents various opportunities that can be deeply explored. This is because AI can provide a more personalized and adaptive learning experience. For example, AI can be used to create learning systems that can adjust the teaching material to the individual needs of each student. The use of AI can help students understand educational concepts more deeply and effectively. Examples of AI implementation in education include the use of chatbots to answer students' questions in real-time and online learning platforms that use algorithms to assess student progress and provide feedback tailored to educational needs.

Moreover, AI can help automate various administrative tasks, such as class scheduling, student data management, and automated grading. This can significantly reduce the administrative workload of teachers and administrators, allowing them to focus more on teaching and guiding students. Similarly, in the archiving of documents, AI can organize documents more neatly, concisely, and securely online through cloud-based applications like Google Drive, OneDrive, and others. (Jaillant dan Caputo 2022)

However, despite the many benefits offered, the use of AI in education is not without issues and challenges. One major issue is the inability and inaccuracy of AI in teaching educational principles, particularly concerning Islamic religious education. (Wiranto dan Suwartini 2022) In this context, AI must be able to handle the nuances and complexities of Islamic teachings accurately, necessitating a rich database and highly sophisticated algorithms to avoid bias in interpreting Islamic principles. However, currently, AI sophistication is still perceived as not reaching that level. Additionally, concerns about AI use are increasing with the presence of biases in AI algorithms.

Algorithms based on unrepresentative data have been found to contain biases that can lead to unfair or even misleading assessment results. Instances where AI algorithms show racial or gender bias have emerged in various fields, including education. (Gupta, Parra, dan Dennehy 2022) For example, there have been cases where AI algorithms performing automatic assessments assigned lower scores to students from certain ethnic or gender backgrounds compared to those from majority groups, despite comparable academic performance. (Kleinberg et al. 2019) This bias can negatively impact the educational and career opportunities of affected students and reduce trust in educational systems using AI technology. (Swiecki et al. 2022)

In this digital era, the need for integrating technology, including AI, in education is becoming increasingly urgent. AI has the capability to provide broader and more inclusive access to education. With AI, educational materials can be accessed anytime and anywhere, offering greater flexibility for students and educators. Additionally, AI can serve as a support tool in developing more effective curricula and teaching methods.

The phenomenon of using AI in the learning process has attracted significant attention in recent years. The advent of natural language processing in AI technology has made interactions between users and AI deeper and more complex. (Subiyantoro et al. 2023) In some findings, AI has even succeeded in providing more personalized and flexible learning experiences. Furthermore, AI can periodically expand its learning range, perform evaluations, and provide quick feedback to its users. (Maghsudi et al. 2021)

Given these advancements, it is clear that AI has a substantial impact, especially in the field of education. AI's ability to identify students' needs and personalize learning based on individual capability levels can motivate students to learn through AI. This creates significant opportunities for students to overcome the learning challenges they face. There are no longer time and place constraints for learning, as AI allows students to access educational materials anytime and anywhere, as long as they have internet access. The extensive database that AI possesses is also an added value from the students' perspective, as it enables limitless information development, allowing independent learning to thrive.

For example, a study showed that AI in education has helped students improve their learning outcomes by up to 46% through the use of adaptive learning platforms that provide real-time feedback and automatic adjustments to teaching materials based on student needs. (Hooda et al. 2022) Another report found that the use of AI-based learning applications could enhance student motivation and improve learning outcomes. (Ronsumbre et al. 2023) Additionally, a UNESCO report revealed that AI has the potential to narrow educational gaps and provide more inclusive learning compared to conventional methods. (UNESCO 2021)

While AI holds many positive potentials for education, significant threats cannot be ignored. Among these threats are AI's potential to influence social interactions and interpersonal relationships between educators and students, the lack of well-regulated AI ethics, the uncertainty of the accuracy of information provided by AI, particularly concerning complex data such as understanding religious studies, the security of user data privacy, and the dependency on AI that could hinder the development of students' cognitive abilities, such as critical thinking, problem-solving skills, and understanding of concepts. (Grassini 2023)

Furthermore, dependence on AI could reduce the role of teachers as facilitators and mentors, potentially widening the gap between educators and students, especially in character education. These various risks need to be considered to ensure that the use of AI in education not only brings positive impacts and generates new innovations that can enhance the quality of current education but also preserves the values, morals, and ethics that characterize our nation.

These issues underscore why this research is so important. Although AI offers many opportunities to enhance the quality of education in Islamic higher education, the accompanying threats and challenges cannot be overlooked. Therefore, this study aims to further discuss the opportunities and threats of using AI in learning within Islamic higher education.

Method

In this research, a qualitative research method was used. Qualitative research aims to understand and describe phenomena observed in the research subjects. (Wakarmamu 2022) According to Zuchri, qualitative research does not require theoretical guidelines to obtain data but rather relies on the facts gathered during the research. Thus, in this context, the data analysis will be inductive, based on the facts obtained, which will then be constructed into a hypothesis or theory. (Abdussamad 2021)

This study uses a phenomenological approach. According to Creswell's theory, phenomenology is a research design focused on essence, meaning data that are factual based on the experiences of the research subjects, or invariant structure, referring to how subjects interpret their experiences. In another theory, phenomenological research relates to an individual's subjective experience, such as their perspective on an event they encounter. Therefore, phenomenological research can be understood as an effort to comprehend the meaning of a phenomenon. (Creswell dan Creswell 2018)

The selected research location is the State Islamic Institute of Curup (IAIN Curup), and the subjects include several lecturers, educational staff, and students at IAIN Curup. The subjects were chosen using purposive sampling, meaning they were selected due to their relevance and connection to the characteristics of this research. Data collection techniques included interviews and observations, where researchers interviewed the subjects about

their experiences using AI in their educational processes and observed the learning processes and administrative activities within the educational institution. To support this research, additional data were also obtained from various relevant literature related to AI or the use of AI in education, such as the journal article "Shaping the Future of Education" by Simone Grassini, which focuses on exploring AI's potential in educational environments, and other books discussing AI.

The data obtained through interviews and observations were then processed and analyzed using data reduction, data presentation, and conclusion verification techniques. Data reduction was carried out to filter relevant information from the raw data collected. The reduced data were then presented in narrative form, diagrams, tables, or other formats. The next stage involved verifying the conclusions by comparing the findings and testing their consistency.

Findings and Discussion

Definition of AI and the History of Its Creation

AI, or Artificial Intelligence, is a branch of computer science that aims to develop systems and machines capable of performing tasks that fundamentally require human intelligence. The use of algorithms and mathematical models in AI enables systems and computers to learn from acquired data, recognize patterns, and even make intelligent decisions. (Eriana dan Zein 2023)

AI development began in the early 20th century with Alan Turing, who created machines capable of performing basic mathematical tasks and reasoning through mathematical comparisons, such as determining which number is larger or smaller, in the early 1950s. (Muggleton 2014) Turing believed that an intelligent machine is one that can interact with humans, leading him to conduct various experiments to achieve this. These experiments were further developed by Newell and Simon, who designed a program to mimic human problem-solving methods known as the General Problem Solver. This is considered one of the critical steps in the creation of Artificial Intelligence as we know it today, following continuous experiments and development. (Jaya et al. 2019)

The main strength of AI lies in the amount of information it possesses. With the presence of big data as a source of real-time data that AI can access, AI development has accelerated rapidly. AI can now answer various human questions in a short time and even provide decisions and recommendations based on its findings. (Pratama et al. 2023) AI continues to be developed by scientists and technology experts through new algorithms to create even more advanced and efficient AI, which can be utilized in various sectors of human life in the future. (Santoso 2023)

The Role of AI in Human Life

AI, or Artificial Intelligence, has become an integral part of nearly every aspect of modern human life. This widespread use has led to significant shifts in various human perspectives. On the positive side, this integration enhances individual potential more efficiently by combining human natural intelligence with artificial intelligence. It simplifies access to information, education, and income generation, which is the fundamental aim of AI: to facilitate human tasks through its intelligence. (Pohan et al. 2023)

A simple example of AI's impact on modern life is the use of map applications like Google Maps, Waze, Apple Maps, Bing Maps, and others. In the past, people had to stop and ask for directions to avoid getting lost, but now these platforms eliminate the need for such interactions.

Digital assistants in gadgets are used almost daily to organize personal schedules, set alarms, manage daily plans, send messages, search for information, and even control smart home devices remotely. In everyday life, AI is not only used to control things but also to analyze human preferences, such as behavior, likes, hobbies, etc., providing product recommendations or interesting content suggestions.

Beyond daily life assistance, AI is also applied in the healthcare sector. AI plays a significant role in health, from accurate medical image analysis aiding healthcare professionals to remote patient monitoring using various IoT devices like cameras and sensors. Light diagnoses via chatbots have become commonplace, reducing medical costs while still offering healthcare recommendations. AI can also check oxygen levels, heart rates, blood sugar levels, and sleep quality, aiding in regular health care without long doctor wait times. (Zou dan Schiebinger 2021)

Similarly, AI has revolutionized the business industry. AI is frequently used for various analyses such as opportunity analysis, threat analysis, stock pattern analysis, consumer behavior analysis, and more. These analyses guide business development directions, helping companies avoid losses or even bankruptcy. (Fidiyanti et al. 2023)

In education, AI has become a pivotal tool, especially since the outbreak of COVID-19 in late 2019 or early 2020. The pandemic disrupted many educational activities, necessitating the adoption of strategies for continuity. The advent of various remote learning platforms provided a practical solution at that time. (BPPT 2020)

Platforms like Zoom, Google Meet, and Microsoft Teams were extensively used for remote learning. (Haris 2022) However, challenges in student engagement emerged, as teachers struggled to maintain student attention. Initially, online learning was monotonous due to the lecture-only method. This situation called for educational innovation

Integrating technology into education became essential. Active learning methods such as Project-Based Learning, Problem-Based Learning, inquiry learning, discovery learning, and others became the answer. The reduced social interaction or outdoor activities led students to interact more with their gadgets, which educational institutions capitalized on to ensure continuous learning.

Platforms like Quizizz, Wordwall, Kahoot, DreamBox, Duolingo, Brainly, and others with a game-like environment became highly popular among students. These platforms allow students to learn according to their interests, featuring appealing interfaces and level adjustments that challenge students to progress to the next level.

Personalized learning on these platforms enables students to study materials suited to their needs and capabilities. Additionally, AI in these platforms provides instant feedback, allowing students to learn from their mistakes immediately. This differentiation in learning based on student abilities makes education more effective. Fast learners are not held back by slower learners, and slower learners are not overwhelmed by the pace set by fast learners.

Opportunities for Using AI in Islamic Higher Education

Higher education institutions are among the entities experiencing significant impacts from the use of AI in their educational environments. Various workflows in higher education have undergone substantial changes both in their administrative functions and in the learning processes. One of the most frequently used AI applications in higher education is the chatbot. A chatbot is a computer program that uses AI to interact with humans by providing information, answering questions, or offering other needed assistance. (Adamopoulou dan Moussiades 2020)

In the learning process at Islamic higher education institutions, chatbots are commonly used by students. Platforms such as Chat GPT, Perplexity AI, and Bard AI (Gemini AI) are utilized by students during their studies to quickly find information and directly navigate to what they need, compared to the longer time previously required to find information through search engines like Google or Bing, which involved searching through relevant articles one by one.

Based on interviews conducted with 30 students at IAIN Curup from January 8-11, 2024, the presence of AI provides ease in learning. Through AI, students can easily obtain information in a much shorter time with accurate results, allowing them to use the information directly without needing to read each article, analyze, and condense the information, which would take a long time without guaranteed data accuracy.

Additionally, students often use chatbots for various tasks such as writing papers, research reports, essays, or even answering questions during class discussions. They stated that using AI chatbots in their assignments offers significant convenience. For example, when writing papers, students no longer need to worry about creating papers by copying and pasting from online articles, as they can now ask AI to do this.

Twenty-three students reported asking AI to generate an article based on their specified prompts, while seven others used AI to find information and create outlines for their papers, which they then used as a basis for their work.

From these findings, it is evident that regardless of the methods students use for their assignments, AI significantly facilitates their work, allowing them to complete tasks in a relatively shorter time compared to reading books or articles and summarizing them into a paper.

Furthermore, FM, an English Language Teaching student, mentioned using chatbots for translation and grammar correction. He found the translation results better compared to automatic translation tools like Google Translate because he could prompt the chatbot to fix grammatical errors, resulting in higher grades for his English assignments due to fewer grammar mistakes.

Similarly, EA, an English Language Teaching lecturer, on January 9, 2024, stated that besides manually translating articles from Indonesian to English, he also uses AI-based grammar checkers like Grammarly to ensure grammatical correctness.

Utilizing AI in foreign language learning is an innovation introduced by lecturers at IAIN Curup, not only in English but also in Arabic. On January 15, 2024, HZ, an Arabic Language Teaching lecturer, mentioned that through AI, students no longer struggle with reading or translating Arabic texts. With just a smartphone and its camera, students can understand the contents of the books they are studying. This is part of integrating technology into learning. Students with initially limited foreign language skills no longer feel insecure due to their limited vocabulary or difficulty expressing themselves, as AI helps boost their confidence in learning Arabic.

The use of AI is not only applicable to general subjects, as stated by AS - a lecturer in the IAT program - who mentioned that in his daily life, he often uses AI chatbots as a reference to search for various information related to famous but weak hadiths or well-known expressions in society that are regarded as hadiths but are actually just pearls of wisdom. AS acknowledges that using AI can assist him in conducting research or simply satisfying his curiosity more easily, although he still considers the findings from AI as a secondary source after referring to the original works of Islamic scholars. Sometimes, he uses AI solely to find out the original sources or books that discuss the matter. (Interview, January 16, 2024)

AI is also used in Islamic higher education, particularly at IAIN Curup, in the administrative sector. There are many conveniences achieved through AI in administration (Observation, January 8, 2024). FY, an academic staff member in the MPI program, stated that AI is used to create various academic documents such as electronic activity certificates. Previously, certificates were just paper documents without names, but now AI can automatically input participants' names based on attendance lists filled out through links created by the event organizers (Interview, January 8, 2024).

Another common administrative use of AI is in creating letters for students, such as active study certificates, research permits, course completion certificates, and other letters. AI makes the work of academic staff lighter and more productive by handling these tasks, allowing them to focus on other tasks that AI cannot yet perform

AI has broad potential to help increase productivity in managing administration in higher education. FY also noted that one of the most challenging tasks at the start of a semester is scheduling classes, assigning classrooms, and setting teaching schedules for lecturers. This usually takes a long time and involves various trials and errors. However, using AI chatbots with detailed prompts, this task becomes easier, requiring fewer corrections and less time than before.

Another example of AI use in administration at IAIN Curup is collecting alumni data. According to OR, an alumni tracking team member, collecting alumni data is an easy but exhausting task due to the need to contact thousands of alumni individually to fill out tracer study links. With AI, this task becomes much easier with just one click and pre-arranged text templates (Interview, January 16, 2024)

From these statements, it can be concluded that AI plays a significant role in improving the efficiency of work in Islamic higher education, particularly at IAIN Curup, both in learning processes and administrative affairs. Various student services can be carried out more easily and efficiently, saving time and effort, allowing staff to focus on other tasks. In learning, students can continuously improve their competencies without waiting for or relying on information from their lecturers, and various other learning innovations can be introduced through AI.

The presence of AI in Islamic Higher Education offers extensive service prospects, from providing innovative education to more inclusive education centered on learners, creating more effective and efficient education, thus improving the quality of education when managed well. (Alhaji 2022) This aligns with the Islamic view that everything has two potentials, as stated in QS. Asy-Syams verse 8, that humans are perfect because they possess both good and bad potentials. This ensures balance in life. (Sukeriyadi, Barni, dan Iskandar 2023) Similarly, AI in education has various positive potentials that can help, support, and ease human life, but it also brings negative potentials and threats if not optimally managed and utilized by humans.

Threats of AI Usage in Islamic Higher Education

AI is fundamentally intended to assist in performing various human tasks, from trivial matters to complex ones like thinking, analyzing, and other reasoning abilities. (Muttaqin et al. 2023) However, assistance does not always have a positive impact, especially when provided at the wrong time or to someone unprepared to receive it, which can result in the opposite effect. Similarly, while AI offers many opportunities that can ease and enhance the quality of higher education, it also brings various threats when not utilized and managed properly.

In Islamic higher education, the use of AI, which provides opportunities for inclusive education and various conveniences for students in completing tasks, poses a significant threat when students are not well-equipped with the ethics of AI usage in the educational process. Among the threats accompanying these conveniences is the emergence of laziness and a tendency to underestimate tasks.

AI provides substantial assistance to students in completing their tasks, allowing what should take a whole day to be completed in just a few hours. Finding study references, which used to take a long time and involve extensive reading, can now be done in just a few minutes with AI. Experiencing such ease can lead students to underestimate tasks if they are not properly guided in this matter.

In a study conducted by Isti'anatul and Syamsul, it was found that the presence of technology and AI brings many negative effects to its users. Among these negative impacts are the emergence of laziness, underestimation of tasks, and a narrowing of one's mindset, especially when there is dependence on the use of such technology.

Dependence on AI leads individuals to no longer exercise their brains to think but rather choose to use AI to solve various problems they face. (Isti'anatul Mashlahah dan Syamsul Arifin 2023)

This poses a significant threat to the nation's progress. The decline in intellectual ability significantly affects a person's emotions, behavior, attitudes, and even survival skills. (Rizky Anisa, Aprilia Ipungkartti, dan Kayla Nur Saffanah 2021) As stated in the Quran in surahs al-Baqarah:164, al-Mu'minun:80, Hud:51, Yasin:62, and other verses, Allah has given humans the intellect to be used wisely in considering their duties and responsibilities as Allah's creations on earth. Therefore, in the use of AI in Islamic higher education, it is crucial to implement policies that prevent students from becoming dependent on AI and instead continue to hone their critical thinking skills and problem-solving abilities. This will create modern humans integrated with technology while maintaining their distinction as the most perfect of Allah's creations, capable of optimizing their intellect.

Another threat posed by AI is the concern from religious figures about the disinformation provided by AI, which can lead to incorrect religious understanding. (Maulana 2022) AI's methods of obtaining information are not yet fully known, and its accuracy is still doubted by technology experts. Additionally, instances of racial and ethnic discrimination embedded in AI algorithms present a threat that needs to be considered in Islamic education.

Islam, as a religion focusing on the improvement of faith in Allah and human morals, faces significant concerns with the current popularity of AI due to these issues. Incorrect information provided by AI can lead to students' misunderstanding of their religion. Uwe Peters, in his research on biases in AI algorithms, discussed various biases, particularly in politics and social issues like racial or gender discrimination. Some of these biases can be easily traced, but Peters further explained that other biases in AI algorithms are hard to detect due to differing perspectives, causing AI results to sometimes be irrelevant or contradictory to the social norms of certain areas. (Peters 2022) This raises concerns that AI might teach individuals a liberal or even radical understanding of religion, both of which can disrupt the harmony and beauty of religious life today. These risks must be considered by Islamic higher education when integrating AI into their curriculum.

AI usage in the administrative field of Islamic higher education also poses threats. The ease of using AI in administration, which can automate document creation and other tasks, threatens job opportunities and reduces the need for human resources. With fewer tasks for academic staff, it is possible to reduce the number of personnel in these roles to cut institutional expenses, replacing them with AI. This poses a serious threat to the job security of academic staff.

Given these considerations, various strategic approaches and policies for AI use in the educational environment need to be established. Among these are the implementation of ethics in AI usage within the educational process and ensuring good collaboration between educators, educational staff, and AI in their tasks. Training on AI usage becomes mandatory for educators and educational staff to optimize productivity and enhance competencies in skills not yet achievable by AI. This allows AI to handle trivial tasks while more complex tasks are performed by the human resources in Islamic higher education.

Conclusions

AI, or Artificial Intelligence, is a technology developed to perform tasks that normally require human intelligence. This is intended to assist humans in their daily lives. In Islamic higher education, the presence of AI offers significant opportunities to enhance educational quality, but it also brings considerable threats with various negative impacts from its use.

Among the opportunities presented by AI in Islamic higher education is the increased efficiency of learning. Students directly experience the ease of learning when using AI, finding that education becomes more inclusive and tailored to their level of understanding and needs. Similarly, in the administrative field, the presence of AI simplifies the creation of academic documents such as correspondence and the management of class schedules, making these tasks more efficient. This allows educational staff to focus more on other, more complex tasks, thereby increasing their productivity.

However, the threats that accompany these opportunities in Islamic higher education include the emergence of laziness, underestimation of tasks, and dependency on AI. AI usage without proper understanding can make students lazy and prone to underestimating their assignments. The ease provided by AI can lead to dependency, potentially reducing students' critical thinking skills and their ability to solve real-life problems. AI's automation of administrative tasks also poses a significant threat to academic staff, as the reduced workload could lead to a decreased need for these positions, which may be replaced by AI.

Given these opportunities and challenges, Islamic higher education institutions need to adopt strategic approaches and develop policies regarding AI usage in the educational environment. Establishing rules for the ethical use of AI in education and providing training to collaborate effectively with AI are some solutions to optimize AI's potential while minimizing its negative impacts.

This research focuses on the opportunities and threats posed by AI usage specifically in Islamic higher education, suggesting further in-depth studies for future researchers. These could include studies on the implementation of AI in education to improve quality, verifying the negative impacts of AI in education, and various other types of research that can be developed based on the findings of this study. This research can also serve as a consideration for educational policymakers when developing policies related to the utilization and integration of AI into the educational curriculum.

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