

Navigating the Digital Age: Ethical Implications of Technological Advancement from the Perspective of Islamic Education Reason

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Abstract

Since the beginning of the 21st Century, the world has undergone profound changes due to advancements in technology in digital age. The rapid changes in the information world have posed many challenges in the digital era which has led to social vices and ethical challenges such as dishonesty, disrespect, disloyalty, pride, indecent dressing, get-rich-quick syndrome, religious and social intolerance, poor value orientation among others. These negative tendencies have become so that they now constitute a social crisis which have adversely affected the ethics and value orientations of the citizens as well the productivity of the nation. In order to confront this problem better, there is a need for a pragmatic approach to address the problem at its root. Islamic Education is essential in this area. This paper explored the ethical implications of technological advancements in digital age through the lens of Islamic Principles. It argued that since the practice of Islamic Principles is an endeavor in which ethical and values choices are not some abstract ideas but are embedded in the very fabric of its teaching and practice, Islamic Principles and Practice provide a practical avenue to navigating the ethical challenges of technological advancements in digital age.

Keywords: Artificial Intelligence, Digital Ethics, Islamic Pedagogy

Introduction

Today, the world is going through profound changes due to advancements in information and technology. The evolution of the digital age bridges the gap, providing hybrid forms of learning, management and access (Ibrahim & Aliyu, 2024). One of the key outcomes of the digital age is the increased access it provides to education, particularly where access to education can be limited by a lack of physical infrastructure, geography, and other socio-economic factors (Echono, 2023). Since the COVID-19 pandemic, many educational institutions have been pushed to explore alternative means of imparting knowledge, skills, disseminating ideas and management of educational enterprises.

The rapid changes in the information and technological world have posed many challenges in the digital era which has led to social vices and ethical challenges such as dishonesty, disrespect, disloyalty, pride, indecent dressing, get rich –quick syndrome, religious and social intolerance, poor value orientation among others. These negative tendencies have become so prevalent to the point of crises which have adversely affected the ethics and value orientations of the citizens as well the productivity of the nation. To overcome these challenges, there is a need to explore a pragmatic approach to tackle the problem from the source; Islamic Education is relevant in this regard.

Islamic Education has consistently emphasized the holistic development of students, integrating moral, intellectual, and spiritual growth. It aims to foster a balanced nature in individuals and promotes the sustainable growth of all facets of human development. It prioritizes not only instilling academic excellence in its students but also embedding strong moral values that contribute positively to society as a whole (Abbas, Marhamah & Rifa'i; 2021). To effectively navigate the digital age there is a need to explore ethical implications of technological advancements in digital age through the lens of Islamic principles.

Concept of Digitalisation of Education

The term “Digitalisation” is a generic term which can be viewed from different perspectives. For instance, Jagboro, Omotayo and Aboyade in Niyi, Abubakar and Jibril (2023) viewed digitization as all the steps involved in the process of making collections of historical and other materials available online. This definition viewed digitization from the perspective or course of converting analog

information to a digital format for effective teaching and learning as well as management. Vial (2019) defined digital transformation as the integration of digital technology into all aspects and operations of an organisation which in turn leads to infrastructural changes on how the organisation is operated and delivers value to its customers. It aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies. It is an initiative that incorporates digital technology across all areas of an organisation

Digitalisation aims to bring about democracy of knowledge where learning and management of education becomes a collaborative and self-driven enterprise to meet up with global trend. It also unravels an opportunity to develop a cognitive resource-based mechanism in learners and improve the skills, lifelong learning and continuous education which could be conveyed in many different methods. It evaluates and modernises an organisation processes, products, operations and technology stack to enable continual, rapid, customer-driven innovation.

According to Zaharah, Basyit, Husein, Fauzi, Arif and Sina (2024), the vibrant fields of AI application in the realm of education include:

- 1 Virtual tutoring services that offer personalized and tailored assistance to students,
- 2 Intelligent and responsive chatbots designed for interactive and engaging learning experiences,
- 3 AI-based curriculum development tools that significantly enhance both the quality and accessibility of instructional materials.
- 4 Autonomous decision-making technologies found in sophisticated personalized tutoring systems,
- 5 Innovative calligraphy recognition systems that assist in cultivating writing skills, and
- 6 Creative and imaginative machine-generated rhythm compositions that provide valuable support in musical education.

Concept of Ethical Values

The concept of ethics is based on the premise of good and evil, right and wrong, acceptable and unacceptable, justice and injustice, virtue and vice, basically guiding all human conduct (Olaniran, & Baruwa, 2020). Jumare (2025) defined ethical value simply refers to the desirable behaviour of any individual or group based on social norms, customs and etiquettes of any society. It guides people's behaviours and allow them to interact harmoniously with others. According to Eheazu (2022), ethical

values generally refer to rules of conduct for a particular class of human actions in a particular group of culture.

Nirupama and Donald (2021) viewed ethical values as the basic norms that guide human actions. It describes the personal qualities required to guide individual actions; the sort of individual people ought to be; the manner in which people treat themselves and others, and their interaction with the world around. Ejeh (2022) noted that the knowledge of what is morally right and what is morally wrong helps to mold human conduct in such a way that they are enabled to live in accordance with the norms of the moral law. Human beings, as social beings have a wholesome capacity to think and make choices, and with that, they become solely answerable for all actions and decisions taken and made. Ethical values help in cultivating in people a sound way of determining and judging actions that are morally right or wrong.

Overview of Islamic Ethical Principles

Islamic ethical principles encompass a complete way of life. Its teachings embrace a comprehensive approach to the advancement of individuals, incorporating the development of their spirituality, morality, and intellect (Brooks & Ezzani, 2022). The concepts drawn from the Qur'an and Hadith offer a strong basis for comprehending and dealing with various ethical challenges, encompassing social justice, environmental stewardship, and digital ethics (Dauda, 2025). Ibrahim, Islam, Zohriah and Azid (2024) noted that amidst the intricate difficulties of our world, Islamic education presents an enduring and all-encompassing system of principles that advocate for fairness, empathy, and reverence towards all forms of existence. Islamic education has consistently emphasized the holistic development of students, integrating moral, intellectual, and spiritual growth. It aims to foster a balanced nature in individuals and promotes the sustainable growth of all facets of human development.

The ultimate aim of Islamic education is to nurture individuals who embody completeness in every aspect. In this regard, Dauda (2025) noted that the aim of Islamic Education is to produce a good and righteous man, he who worships Allah the Creator and acts according to the dictates of Shari'ah. Islamic education prioritizes not only instilling academic excellence in its students but also embedding strong moral values that contribute positively to society as a whole (Abbas et al; 2021). In

other words, it strives to create individuals who are not only knowledgeable but also possess the ethical foundation necessary to guide their actions and decisions. Additionally, it plays an essential role in rejuvenating and uplifting the human spirit, making it a significant aspect of a child's development and their overall journey in life. It focuses on developing character alongside intellect.

Islamic injunctions are universal, dynamic and relevant which are appropriate and acceptable at all time and place. In this regard, Issa and Mustapha (2025) noted that the use of artificial intelligence tools for teaching, learning and research had made a remarkable landscape in the field of education which immensely contributed to all aspects of teaching including Arabic and Islamic Studies. Karimullah (2024) also observed that Artificial intelligence tools have become easier search engines that can provide deep and efficient capabilities in providing comprehensive knowledge of the trends of Islam and its civilization, different current position of schools of thought on various aspects of lives and newly developed techniques in the application of reasoning. There is a need to incorporate Islamic perspectives and values into AI applications, making them appropriate for the unique context of Islamic Education. In this regard, Sebastian and Alkaff (2024) noted that integrating AI into Islamic education requires deep respect for cultural and religious sensitivities. This requires collaboration between technologists, educators, and religious scholars to create AI tools that improve learning while upholding Islamic principles. These ethical practices are vital for building trust, promoting equality, and ensuring AI supports social justice and Islamic values (Elmahjub, 2023). Espartinez (2024) observed that the path forward requires a balanced and contextually sensitive approach that leverages AI's potential while preserving the essence of traditional Islamic pedagogical approaches, upholding ethical standards, and addressing the challenges of the digital divide.

Ethical Implications of Technological Advancements from Islamic Education

The integration of AI in Islamic Education raises certain ethical issues. Islamic scholars highlighted significant ethical concerns surrounding AI adoption, focusing on the following issues:

- 1 **Data Privacy:** In Islamic educational contexts, the issue of data privacy is heightened by the need to protect religious values while adopting new technologies. Achruh, Rusdi, and Idris (2024) observed that AI's use of student data raises concerns about privacy breaches. Students' data can

enhance personalized learning, but it raises worries about privacy breaches and the misuse of sensitive information related to students' vital information.

- 2 **Algorithmic Bias:** The issue of algorithmic bias is another major concern; if not carefully managed, AI systems can perpetuate existing inequalities and reinforce social biases. In this regard, Aswathy and Tyagi (2022) noted that algorithmic bias could deepen existing inequalities and disadvantage certain groups. For instance, biased algorithms may disproportionately affect certain groups, as demonstrated in studies of algorithmic fairness in non-religious educational systems, where data-driven decisions have sometimes led to biased academic recommendations and differential treatment (Ferrara, 2024). Such outcomes are incompatible with the values of equity and fairness central to Islamic educational principles.
- 3 **Effects on Human Agency:** Islamic scholars emphasized the importance of maintaining human oversight to ensure AI enhances rather than replaces human abilities, safeguarding the crucial role of educators in mentoring students (Achruh et al; 2024). Robust data protection and transparency are essential. While AI can enhance learning, people must not over-rely on it. Human agency and critical thinking remain crucial in Islamic education, which must be protected all the time.
- 4 **Data Manipulation:** Islamic principles lay emphasis on transparency, trust, equity and fairness. It frowns at unfaithfulness, manipulation and breach of trust. The promotion of automated education may inadvertently create significant challenges in various educational environments, where only machines and human-computer interactions exist, ultimately resulting in the preservation of human voices becoming obsolete. Tai and Chen (2024). Noted that in many circumstances, the diverse facets of education are not solely regarded as rational processes; instead, they encompass vital aspects of persistent value-based human interactions that emphasize the importance of direct human content and connection. Therefore, data manipulation conducted in a biased manner can serve as a solid foundation for ethical concerns.

Conclusion

From the discussion so far, it is evident that the perspectives of Islamic principles on AI adoption in Islamic education paint a picture of cautious optimism tempered by a profound awareness of the complexities involved. To ensure that Islamic educators, scholars and students faithfully uphold the

teaching and tradition of Islamic education, the type of content and algorithm used in AI systems should truly reflect the same, thereby preventing a blanket technological approach that may undermine the essence of the learning experience. The path forward requires a balanced and contextually sensitive approach that leverages AI's potential while preserving the essence of traditional Islamic pedagogical approaches, upholding ethical standards, and addressing the challenges of the digital divide.

Recommendations

To effectively navigate the huddles of ethical implications of technological advancements in digital age through the lens of Islamic education, the following suggestions are put forward:

- 1 Islamic perspectives and values should be infused into the design and implementation of AI tools to ensure they align with Islamic education.
- 2 AI should be designed and implemented to respect and uphold Islamic values, addressing both the spiritual and intellectual needs of students.
- 3 There is a need to guarantee that in introducing AI technology to Islamic educational environments or in any other educational institutions, there will be no existence of a digital divide so as to guarantee equal access to these resources.
- 4 Islamic Educators need to be empowered to use AI confidently and creatively in their classrooms.
- 5 There is a need for effective stakeholder's engagement which is fundamental at each step, that is, whether or not integrating and applying AI in Islamic education settings.

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