

Islam and Global Technology Ethic: Moral Challenges for Muslims in the Era Artificial Intelligence

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Abstract

The rapid advancement of Artificial Intelligence (AI) has generated complex ethical challenges that require normative frameworks capable of guiding technological development responsibly. Within this context, Islamic ethics provides a rich moral foundation grounded in values such as *amanah* (trustworthiness and responsibility), *‘adl* (justice), and *maslahah* (public benefit). These principles offer alternative ethical pathways to predominantly Western frameworks and emphasize human accountability before God. This study aims to explore how Islamic ethical values can be applied to contemporary AI governance and to identify the moral foundations that Muslims can use to navigate emerging technological dilemmas. Using a qualitative literature review method, the research synthesizes publications from the past five years, including journal articles, policy documents, and scholarly analyses on Islamic ethics and AI. The findings show that Islamic ethical concepts, particularly *maqāṣid al-sharī‘ah*, provide a coherent theoretical structure for assessing the benefits and harms of AI systems. These values can inform global AI governance, especially regarding fairness, transparency, privacy, and protection of human dignity. However, the study also reveals a gap between ethical principles and practical implementation, indicating limited adoption of Islamic ethical guidelines within policy and technological industries. The study concludes that Islamic ethics has strong potential as a normative reference for AI governance, yet further empirical work is needed to translate these values into operational frameworks. Collaboration between scholars, engineers, policymakers, and ethicists is essential to ensure that AI development remains morally grounded and socially beneficial.

Keywords: Islamic ethics, artificial intelligence, *maqasid al-shariah*, moral values, technology governance.

Introduction

Global technological developments, particularly artificial intelligence (AI), have brought significant changes to the economy, education, communication, and religious practices. AI now functions not only as a technical tool, but also influences human mindsets, social behavior, and moral values. This raises questions about how Muslims respond to increasingly autonomous technology. Azka and Jenuri (2024) emphasize that modern technology presents new challenges for Muslims in applying religious values. Islam values scientific progress as a human responsibility, but progress without ethics can lead to dehumanization, inequality, and misuse of technology.

According to Fitriyanti (n.d.), the development of AI requires the

transformation of Islamic education so that it not only transfers knowledge but also instills ethics and spirituality. The principle of *maqāṣid al-syarī'ah*, which emphasizes *maslahah* (benefit) and the prevention of *mafsadah* (harm), is important for preserving humanity in the midst of modernity. Masruri et al. (2025) explain that the concept of humans as *khalīfah fi al-ardh* (stewards of the earth) provides an ethical foundation for innovation and the use of technology.

The ethical dilemma of AI is also multidimensional, covering algorithmic justice, privacy, system bias, and the potential for machine domination. Desisca, Ramadhanti, and Khan (2025) assess that Islamic ethics can be an alternative by offering the values of *tawāzun*, *'adl*, and *maslahah*. Akbar (2025) adds that AI should strengthen humanity in Islamic studies, in line with Insana and Satriah's (2024) view on the importance of digital da'wah ethics to avoid disinformation.

Chayati and Gunagraha (n.d.) highlight the importance of AI ethics in global Islamic education because Islamic values are universal. Meanwhile, Fauzi (2025) shows that AI opens up opportunities for digital da'wah as well as risks if there is no moral control. Overall, Islam offers an ethical framework that balances technological progress with morality, so that studies on Islam and AI ethics are very important to develop.

Methods

This study uses a literature review method, which is a research method that involves reading and analyzing various written sources such as books, journals, and scientific articles. This approach is descriptive qualitative, meaning that this study attempts to explain and understand Islamic views on ethics in the use of modern technology, especially artificial intelligence (AI) (Elmahjub, 2023, p. 5). The first step in this study was to collect relevant and recent literature from 2022–2025. The second step was to select credible sources that were relevant to the topic of discussion (Sinaga, 2024, p. 4). This is followed by content analysis, which involves reading and understanding the content of each source to identify important themes such as the objectives of Sharia (*maqāṣid al-sharī'ah*), moral responsibility, and Islamic values in technology (Mohadi & Tarshany, 2023, p. 84). All findings are then summarized to explain how Islam can serve as a moral guide in dealing with the advancement of AI (Muchtasor, 2025, p. 6)

Results

The results of the literature analysis show that the development of artificial intelligence (AI) presents multidimensional ethical challenges that require a response through a comprehensive and adaptive Islamic ethical framework. Studies from the 2022–2025 period consistently affirm that core Islamic values such as *maslahah*, *'adl*, *amanah*, and *ihsan* are relevant moral foundations for formulating fair and human-oriented AI governance (Elmahjub, 2023; Raquib et al., 2022). These principles are in line with the views of contemporary Muslim thinkers who emphasize that technological progress must remain within the corridor of Islamic ethical and spiritual values, as mentioned by Azka & Jenuri (2024) who see the potential for dehumanization and social inequality if technology is not guided by morality. The concept of humans as *khalīfah fi al-ardh*, as explained by Masruri et

al. (2025), also supports the idea that humans have an ethical responsibility to ensure that technological innovation does not exceed the limits of public interest.

Literature reviews can be grouped into three main themes. First, the relevance of Islamic ethical values to AI. Studies such as Auda (2022) and Aziz & Osman (2023) emphasize that *maqāṣid al-sharī'ah* can be interpreted as a moral evaluation framework to ensure that technological innovations protect religion, life, reason, lineage, and property. Second, the moral challenges arising from AI practices, including algorithmic bias, privacy violations, and the diminishing role of human morality in decision-making (Hamsin et al., 2023; Khan & Mubin, 2024). These challenges are seen as potentially conflicting with the values of justice and trust, thus encouraging the need for transparent, accountable, and fair systems (Azmi & Yaacob, 2023).

The third theme relates to the integration of Islamic values in global AI policy and governance. Recent research reveals the development of Islamic digital ethics discourse in the Middle East through efforts to combine Sharia ethics with international standards (Al-Essa & Ahmed, 2024; Ramadan, 2023). However, a number of studies, such as Sinaga (2024) and Mohadi & Tarshany (2023), highlight the gap between normative ideals and implementation practices, emphasizing the need for an interdisciplinary approach to strengthen the bridge between Islamic ethical concepts and the reality of global AI governance. Overall, the results of the study show that Islamic ethics has significant potential in addressing contemporary AI moral dilemmas.

Discussion

The results of the study indicate that Islamic ethical principles provide a strong normative foundation for addressing moral dilemmas in the era of artificial intelligence (AI). Values such as *amanah*, *'adl*, and *maslahah*, which are consistently discussed in contemporary Islamic ethical literature (Elmahjub, 2023, p.5; Raquib et al., 2022, p.4; Sinaga, 2024, p.6) gain theological legitimacy through verses such as QS. Al-Ahzab:72 and QS. Al-Mu'minun:8. The emphasis that humans are responsible for all forms of technology is also supported by Islamic digital theological studies that highlight the relationship between humans and technology as part of the realization of *amanah* (Rahman & Yusuf, 2024). This confirms that the development of AI is not merely a technical issue, but part of a moral obligation that must be carried out fairly and responsibly.

Compared to previous studies, studies focusing on bioethics and the environment (El-Hady & Zenrif, 2024, p.80) tend to center their discussions on the protection of living beings and ecological sustainability. However, this study contextualizes Islamic ethical principles within the much more complex ecosystem of AI. This approach is in line with the expansion of digital sharia governance studies that are rapidly developing in the Middle East (Al-Qaradawi & Nasr, 2025). The consistency between these findings and previous literature shows that *maqāṣid al-sharī'ah* can be used as an evaluation framework for AI policy and design. The principles of protecting religion, life, intellect, lineage, and property (Mohadi & Tarshany, 2023, pp. 84–90) are also reinforced by the *maqāṣid*-based technology evaluation model developed in recent research (Hussain & Kareem, 2024).

However, this study also found a significant gap between norms and practices. Islamic ethical guidelines have not been widely integrated into the AI industry (Hamsin et al., 2023, p.121; Siddique & Butt, 2025, p.194), in line with findings that global technology companies still dominate ethical standards without involving non-Western epistemologies (Mulla & Ibrahim, 2023). Other research shows that Muslim countries do not yet have Sharia-based algorithmic audit institutions (Farouq & Latif, 2024). This reinforces the need for implementative mechanisms involving religious authorities, regulators, and the technology industry.

This discussion also shows that Islamic virtue-based ethics makes an important contribution that complements Western AI ethics approaches, which tend to be procedural. The emphasis on intention, integrity, and spiritual responsibility (Raquib et al., 2022, p.6; Mustapha, 2025) is reinforced by research on the integration of *adab* and *akhlaq* in automated systems (Nurhayati & Shukri, 2024). This virtue-based approach results in a more holistic formulation of AI ethics, approaching the agent-centered moral model that is increasingly being studied in the Islamic technology community (Zahra & Malik, 2025).

Contemporary research also points to the need for the integration of Islamic values in national AI policy, as highlighted in the Saudi–UAE study (Al-Essa & Ahmed, 2024). These findings are consistent with the Islamic digital policy integration model being developed in Malaysia and Qatar (Syed & Rahimi, 2023)

These countries demonstrate that Sharia-based AI policies require strong legal infrastructure, technological education, and digital oversight institutions.

On the other hand, practical challenges have also been identified. Algorithmic bias continues to be a pressing issue (Ali et al., 2025, p.31), and other studies show that bias in large language models (LLMs) affects Muslim communities in the form of digital stereotypes (Hidayat & Osman, 2024). The dominance of global digital corporations weakens the ability of Muslim countries to develop independent technology (Khan & Mubin, 2024), compounded by weak data sovereignty regulations in South Asia and North Africa (Junaid & Kamal, 2025).

Methodologically, this study faces several limitations. As a literature study, the findings are prone to selection bias (Sinaga, 2024, p.4). Furthermore, technology literature quickly becomes outdated (Hamidi Ilhami et al., 2025), especially given the rapid development of generative AI (Mahfudz & Karim, 2024). Therefore, empirical data-based research, industry surveys, and policy analysis are needed.

To overcome these limitations, future research needs to develop cross-country studies of Muslim countries that map best practices in applying Islamic values to AI technology. The development of *maqāṣid*-based ethical metrics (Qasmi & Fareed, 2025) needs to be combined with *‘adl*-based algorithmic fairness indicators (Basri & Yunus, 2023). Islamic spiritual orientations such as *ihsān* need to be translated into AI design (Hassan & Rahman, 2023), in line with the latest spiritual-computational design research (Imran & Saeed, 2025). Thus, this discussion confirms that Islam offers a comprehensive ethical framework, but its realization requires collaboration between scholars, computer scientists, regulators, and industry players so that Islamic values become the foundation of global AI governance.

Conclusion

This study shows that Islamic ethics offers a strong normative foundation for guiding the responsible development and use of artificial intelligence (AI). Principles such as *amanah*, justice, *maslahah*, and *maqāsid al-sharī'ah* provide a comprehensive moral framework for assessing the impact of technology on humans and society. These values emphasize that every AI innovation must preserve human dignity, prevent harm, and create sustainable benefits.

The findings show that although there is compatibility between Islamic ethics and global ethical standards such as fairness, transparency, and accountability, the application of Islamic values in AI industry practices is still limited. This gap is mainly due to the lack of specific policies, the absence of technical guidelines, and the dominance of Western-centered ethical standards. Therefore, the integration of the Islamic perspective into public policy, technology design, and data governance is an urgent need to ensure that technology develops in line with the moral values of Muslim societies.

This study also emphasizes that scholars, computer scientists, regulators, and industry need to work collaboratively to translate Sharia principles into operational AI guidelines. Furthermore, further research needs to develop maqāsid-based evaluation models, algorithmic bias assessment instruments rooted in Islamic principles of justice, and cross-country empirical studies in Muslim countries. Thus, Islamic ethics will not only serve as a normative reference, but can also be implemented in AI designs and policies that are more humane, fair, and oriented towards public interest.

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Conflict of interests

The author declares that this research was conducted independently without any conflicts of interest, whether financial, academic, or personal. No parties were involved that could influence the objectivity, analysis, or interpretation of the research results in this work.

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