
THE MAQASHID AL-SHARIAH APPROACH IN REGULATING THE ETHICS OF ARTIFICIAL INTELLIGENCE USE

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Abstract

The development of Artificial Intelligence (AI) presents both significant opportunities and serious ethical challenges, particularly in the context of technologies that can affect humanity, privacy, and justice. From an Islamic perspective, the ethics of technology use cannot be separated from the principles of Maqashid al-Shariah, which ensure the holistic well-being of humankind. This article aims to examine how the Maqashid al-Shariah approach can serve as a normative foundation for formulating AI usage ethics that align with Islamic values. This study employs a descriptive qualitative method based on a literature review. The findings indicate that the five principles of Maqashid (hifz al-din, al-nafs, al-'aql, al-nasl, and al-mal) are relevant as ethical guidelines in directing the use of AI so that it remains within the framework of protecting human values, spirituality, and social justice.

Keywords: Maqashid al-Shariah, Artificial Intelligence, Islamic Ethics, Psychology of Religion, Technology

Keywords:

INTRODUCTION

Artificial Intelligence (AI) has become a global phenomenon that is transforming the way humans work, learn, and interact. This technology is capable of imitating human cognitive processes, making decisions, and even learning from data. However, the advancement of AI also raises complex moral dilemmas, such as information manipulation, privacy violations, technological unemployment, and the potential for misuse by certain parties.¹ In the spiritual and religious context, the development of AI also prompts profound questions about human autonomy, ethical values, and moral boundaries in creating technology that approaches human-like consciousness. Islam, as a complete religion, views the advancement of science and technology

¹ Tegmark, M. (2017). *Life 3.0: Being Human in the Age of Artificial Intelligence*. Penguin Books.

as part of the trust (amanah) to prosper the earth, but it must remain within the framework of Sharia values.²

One normative approach in Islam that can be used to evaluate the ethics of AI usage is Maqashid al-Shariah. This concept emphasizes the importance of protecting five essential aspects: religion (din), life (nafs), intellect ('aql), lineage (nasl), and wealth (mal). This approach is holistic and places the welfare (maslahah) of the community as its primary orientation.³ In the psychology of religion, the use of technologies like AI affects not only intellectual aspects but also psychological and spiritual dimensions. Therefore, there needs to be an ethical framework capable of maintaining the balance between the benefits of technology and the integrity of human values. Maqashid al-Shariah offers an ethical foundation that can comprehensively address this challenge.⁴

The development of Artificial Intelligence (AI) technology has become a mainstream force in the global transformation that impacts every aspect of life. AI is no longer just a supporting tool—it has become a decision-maker in various sectors: from industry, finance, and the military to education and healthcare.⁵ While AI offers extraordinary efficiency and speed, it also raises profound questions about values, responsibility, and the moral limits of humans in creating an entity that can “think” without a soul.⁶ Various cases of AI misuse—such as automated disinformation, algorithmic bias, privacy violations, and mass surveillance—serve as ethical alarms for humanity.

From the perspective of the philosophy of technology, AI has moved beyond being a neutral object. Technology has now become an active actor that interacts with humans and influences social structures. Therefore, AI should not be viewed merely as a technical innovation but also as a moral and spiritual phenomenon.⁷ Religion, as a source of transcendent moral values, has an important position in responding to this development. Islam, as a rahmatan lil 'alamin (mercy to all creation), sees technology as a trust and a tool for human prosperity. However, its use must be within the boundaries of Sharia values and objectives.⁸

Maqashid al-Shariah is one of the normative approaches in Islam that holds rich conceptual resources to address contemporary ethical problems. The five main principles of maqashid—preserving religion (hifz al-din), life (al-nafs), intellect ('aql), lineage (nasl), and wealth (mal)—form an ethical framework for facing modern challenges.⁹ Ethical issues in AI usage cannot be separated from their impact on human values. For example, discriminatory algorithms can violate the principle of social justice, automated decision-making can erode moral responsibility, and the dominance of big data can subtly exploit human beings.¹⁰

² Rahman, F. (1982). *Islam and Modernity: Transformation of an Intellectual Tradition*. Chicago: University of Chicago Press.

³ Kamali, M. H. (2008). *Maqasid al-Shari'ah Made Simple*. London: International Institute of Islamic Thought.

⁴ Jalaluddin, R. (2000). *Psikologi Agama*. Jakarta: RajaGrafindo Persada.

⁵ Tegmark, M. (2017). *Life 3.0: Being Human in the Age of Artificial Intelligence*. Penguin Books.

⁶ Bostrom, N. (2014). *Superintelligence: Paths, Dangers, Strategies*. Oxford University Press.

⁷ Verbeek, P. P. (2011). *Moralizing Technology: Understanding and Designing the Morality of Things*. University of Chicago Press.

⁸ Rahman, F. (1982). *Islam and Modernity*. Chicago: University of Chicago Press.

⁹ Kamali, M. H. (2008). *Maqasid al-Shari'ah Made Simple*. IIIT.

¹⁰ O'Neil, C. (2016). *Weapons of Math Destruction*. New York: Crown.

In the Islamic world, discourse on the ethics of technology has not yet developed as extensively as discourse on fiqh of worship (ibadah) or transactions (muamalah). Yet, modern life increasingly demands an ethical foundation that is both universal and contextual. Maqashid al-Shariah can serve as a bridge between faith-based values and global ethical needs.¹¹ From the perspective of religious psychology, the use of AI is not merely a technical matter but also touches on the emotional, motivational, and spiritual dimensions of human life. As humans become more dependent on machines, there is a risk of alienation, psychological dependency, and even a loss of life's meaning.¹²

The psycho-spiritual consequences of AI use are important to examine because this technology not only changes behavior but also shapes how humans think and feel. Therefore, the maqashid framework can serve as a value system that safeguards the spiritual dimension of humans in the midst of digitalization.¹³ Islamic ethics is not static but dynamic, capable of adapting to the changes of time. Maqashid as a value orientation of Shariah has been widely applied in economics, law, and even politics. Integrating it into AI ethics is thus a logical continuation of contemporary ethical ijtiḥad.

It is not enough to speak only in terms of halal and haram when it comes to technology. A deeper understanding of benefits and harms in a systemic way is required. This is where maqashid becomes an essential framework—not only as a normative legal reference but also as a philosophical and contextual guide.¹⁴ AI that is not ethically framed has the potential to become a tool of dehumanization. When data is used to control humans, and algorithmic thinking replaces ethical judgment, the essence of humans as moral beings is threatened. Islam does not reject technology but places it in its proper role: as a tool, not a master.¹⁵

In the global context, AI ethics remains a gray area under continuous debate. The contribution of Islamic ethics—particularly the maqashid approach—can serve as an alternative ethical model that is holistic, spiritual, and grounded in the protection of universal values. This paper does not aim to reject AI technology but rather to encourage Muslims to take an active role in formulating Shariah-based ethical standards. Through the maqashid approach, Muslims can contribute to global AI ethics, which is currently dominated by Western perspectives.¹⁶

Accordingly, this article will explore in depth how the principles of Maqashid al-Shariah can serve as an ethical framework in regulating the use of Artificial Intelligence, particularly in the context of religious psychology and the preservation of human spirituality in the technological era. By examining both classical and contemporary literature and aligning the discourse on technology with the maqashid approach, it is hoped that an ethical proposal will emerge—one capable of addressing the challenges of the AI era proportionally and justly.¹⁷

¹¹ Auda, J. (2008). *Maqasid al-Shariah as Philosophy of Islamic Law*. IIIT.

¹² Jalaluddin, R. (2000). *Psikologi Agama*. Jakarta: RajaGrafindo Persada.

¹³ Nasr, S. H. (1996). *Religion and the Order of Nature*. Oxford University Press.

¹⁴ Al-Qaradawi, Y. (1994). *Fiqh al-Awlawiyyat*. Kairo: Dar al-Shuruq.

¹⁵ Zuboff, S. (2019). *The Age of Surveillance Capitalism*. PublicAffairs.

¹⁶ Dignum, V. (2019). *Responsible Artificial Intelligence*. Springer.

¹⁷ Sharkey, A. & Sharkey, N. (2010). The crying shame of robot nannies. *Interaction Studies*, 11(2), 161–190.

RESEARCH METHOD

This study employs a descriptive qualitative approach using the library research method. Data were collected from classical and contemporary Islamic literature, scholarly journals, and modern literature on AI and technology ethics. The analysis was conducted using a conceptual hermeneutic approach, which examines the texts and contexts of Maqashid al-Shariah in their relevance to the development of AI.¹⁸ The research adopts a normative qualitative approach, as its focus is the examination of normative Islamic concepts, particularly the principles of Maqashid al-Shariah, and how these concepts are integrated into the ethics of Artificial Intelligence (AI) usage. This approach enables an in-depth exploration of both classical and contemporary Islamic texts relevant to ethics and technology issues.¹⁹

This type of research is library-based, where data are obtained from high-quality scholarly literature, both primary and secondary. Primary sources include works by classical scholars of *usul al-fiqh* such as Al-Ghazali and Al-Shatibi, as well as modern maqashid thinkers such as Jasser Auda and Mohammad Hashim Kamali. Secondary sources include scholarly journals, reference books, and recent academic articles related to AI and digital ethics.²⁰ The data collection technique was carried out through systematic literature review by examining works relevant to the research theme. The researcher studied documents containing information on maqashid principles, the development of contemporary Islamic ethics, and analyses of AI risks from socio-technological and psychological perspectives.²¹

The data analysis method applied was content analysis, which serves to identify, classify, categorize, and draw conclusions from the meanings of the texts. The analysis was conducted on Islamic texts and AI ethics discourse to uncover the alignment of maqashid values in guiding the ethical use of modern technology.²² In addition, a contextual hermeneutic approach was employed—interpreting the texts while taking into account social, historical, and contemporary challenges. This approach is essential for extracting the practical significance of maqashid in facing the dynamic and often unpredictable realities of technology.²³

Validity in this type of qualitative study was tested through source triangulation, by comparing the analytical results from various credible scholarly references, both from Islamic scholars and technology ethics experts. The goal is to obtain an objective, balanced, and unbiased understanding that does not favor a single perspective.²⁴ The research also applies an interdisciplinary analysis principle, integrating the sciences of *usul al-fiqh*, Islamic ethics, philosophy of technology, and the psychology of religion. This approach aims to bridge the gap between the sharia-based concept of maqashid and the highly complex, multidisciplinary development of modern technology.²⁵

¹⁸ Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.

¹⁹ Moleong, L. J. (2014). *Metodologi Penelitian Kualitatif*. Bandung: PT Remaja Rosdakarya.

²⁰ Auda, J. (2008). *Maqasid al-Shariah as Philosophy of Islamic Law*. IIIT.

²¹ Sugiyono. (2018). *Metode Penelitian Kualitatif, Kuantitatif dan R&D*. Bandung: Alfabeta.

²² Krippendorff, K. (2004). *Content Analysis: An Introduction to Its Methodology*. Thousand Oaks: Sage.

²³ Ricoeur, P. (1981). *Hermeneutics and the Human Sciences*. Cambridge University Press.

²⁴ Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods*. Sage Publications.

²⁵ Dignum, V. (2019). *Responsible Artificial Intelligence*. Springer.

The relevance of the maqashid approach in this study is not limited to the legal dimension but also encompasses moral and social orientations. Thus, this method helps explain how maqashid can serve as a transformative ethical principle in responding to technological advancements in a civilized manner.²⁶ Through this literature-based qualitative method, the author seeks to offer an alternative comprehensive and Islamic ethical framework for AI usage—one that not only complies with positive law but also aligns with the values of spirituality, moral responsibility, and universal humanity.²⁷

RESULTS AND DISCUSSION

Results

Maqashid al-Shariah and Its Relevance in Technology Ethics

Maqashid al-Shariah aims to realize benefit (maslahah) and prevent harm (mafsadah) in human life. Its five main principles are not merely fiqh regulations but serve as an ethical and philosophical framework for addressing contemporary issues, including digital technology and AI.²⁸ The concept of hifz al-din (preservation of religion) emphasizes the importance of safeguarding human spirituality from being distorted by the dominance of machine rationality. AI used to spread hoaxes, pornography, or content that undermines faith clearly contradicts this principle.²⁹

Hifz al-nafs (preservation of life) is relevant in the context of AI used in military applications, mass surveillance, or oppression. Technologies that endanger human lives or cause physical and mental harm must be critically examined based on this principle.³⁰ Hifz al-‘aql (preservation of intellect) closely relates to the potential of AI to influence human thinking patterns and behavior. Algorithms that fuel political polarization, digital dependency, or weaken individuals’ critical thinking abilities can be considered as damaging the human intellect.³¹

Hifz al-nasl (preservation of progeny) can be linked to the impact of AI on social and family interactions. Dependency on social robots or AI-based parenting applications can disrupt human relationships and the sacred family values in Islam.³² Hifz al-mal (preservation of wealth) becomes crucial in the face of personal data capitalization and digital economic exploitation. The unjust distribution of technology and user exploitation through AI can be considered a form of property usurpation that contradicts maqashid principles.³³

The development of technology, particularly Artificial Intelligence (AI), has created new challenges for the framework of global ethical values. Technologies that once functioned as mere tools now possess decision-making autonomy with direct impacts on human life. Therefore, ethical

²⁶ Kamali, M. H. (2008). *Maqasid al-Shari’ah Made Simple*. IIIT.

²⁷ Rahman, F. (1982). *Islam and Modernity: Transformation of an Intellectual Tradition*. University of Chicago Press.

²⁸ Al-Ghazali, A. H. (n.d.). *Al-Mustashfa fi Usul al-Fiqh*. Beirut: Dar al-Kutub al-‘Ilmiyyah.

²⁹ QS. Al-Hujurat: 6

³⁰ Dignum, V. (2019). *Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way*. Springer.

³¹ O’Neil, C. (2016). *Weapons of Math Destruction*. New York: Crown Publishing Group.

³² Sharkey, A., & Sharkey, N. (2010). The crying shame of robot nannies. *Interaction Studies*, 11(2), 161–190.

³³ Zuboff, S. (2019). *The Age of Surveillance Capitalism*. PublicAffairs.

principles are needed to guide their use so as to uphold humanity, justice, and social balance.³⁴ In Islamic tradition, Maqashid al-Shariah serves as a normative ethical framework that not only emphasizes the legality of an action but also its benefits and underlying objectives. Maqashid focuses on the protection and preservation of five fundamental elements of life: religion, life, intellect, progeny, and wealth. These five values serve as the foundation for evaluating technology, including AI, to ensure it remains aligned with public benefit.³⁵

Technology ethics built upon maqashid avoids an overly technocratic or secular approach. Technology is not only assessed in terms of functionality and efficiency but also in terms of its impact on social structures, religious identity, and human dignity. In other words, maqashid offers a comprehensive value-based ethical approach.³⁶ In the context of AI, hifz al-din (preservation of religion) reminds us that technology should strengthen spirituality, not erode it. For example, social media algorithms that prioritize controversial content can foster social polarization and weaken the spirit of brotherhood (ukhuwah). Maqashid directs AI to be used in ways that support da'wah, education, and the correct understanding of religion.

Hifz al-nafs (preservation of life) highlights the importance of protecting human physical and mental safety from the negative impacts of technology. The use of AI in military systems or mass surveillance poses risks of fear, privacy violations, and even threats to life. From the maqashid perspective, the protection of life takes precedence over mere system efficiency.³⁷ Hifz al-'aql (preservation of intellect) becomes highly relevant when AI begins to replace human thinking processes. Overreliance on algorithms risks diminishing critical reasoning and spiritual reflection. Maqashid requires that the human intellect remain the central moral compass rather than submitting entirely to machines.³⁸

Similarly, hifz al-nasl (preservation of progeny) draws attention to AI's impact on social relations and the family institution. Excessive interaction with technology can reduce empathy and emotional warmth within families. AI-based parenting applications, for instance, cannot replace the affective role and moral education that should be provided by parents. The aspect of hifz al-mal (preservation of wealth) demands fairness in the distribution of technological benefits. In practice, the dominance of AI by large corporations has created digital divides that marginalize vulnerable groups. Maqashid requires that access to technology be equitable and free from economic exploitation.³⁹

The maqashid framework also aids in formulating AI ethical policies based on the balance of benefits and harms. In many cases, technological innovation is not accompanied by long-term consideration of its psychological, social, and spiritual impacts. Maqashid provides a perspective for weighing these consequences with cautionary principles. Thus, maqashid is not merely a theological concept but is also relevant as a principle for future technology ethics. This approach

³⁴ Tegmark, M. (2017). *Life 3.0: Being Human in the Age of Artificial Intelligence*. Penguin Books.

³⁵ Kamali, M. H. (2008). *Maqasid al-Shari'ah Made Simple*. London: IIIT.

³⁶ Auda, J. (2008). *Maqasid al-Shariah as Philosophy of Islamic Law*. IIIT.

³⁷ O'Neil, C. (2016). *Weapons of Math Destruction*. New York: Crown Publishing.

³⁸ Dignum, V. (2019). *Responsible Artificial Intelligence*. Springer.

³⁹ Zuboff, S. (2019). *The Age of Surveillance Capitalism*. PublicAffairs.

can address the moral dilemmas arising alongside AI advancements while grounding Islamic values as the foundation for shaping a just and humane technological ecosystem.⁴⁰

DISCUSSION

Integration of Spiritual Values in the Ethics of AI Usage

The ethics of AI in Islam cannot be solely built upon secular rationality but must be connected to divine consciousness. The concept of *taqwa* serves as the foundation that every innovation should be directed towards goodness, not merely efficiency or worldly gain. *Maqashid al-Shariah* guides that technology must be developed for the benefit of humanity, not as a replacement for humans.⁴¹ From the perspective of the psychology of religion, AI must not replace the spiritual role and the relationship between humans and their Creator. AI development should uphold values of honesty, moral responsibility, and benefit. Artificial intelligence should serve humanity, not rule over it.⁴²

Technology, including Artificial Intelligence (AI), is often viewed as a rational and neutral domain. However, in the Islamic context, AI cannot be separated from the dimension of spirituality. Islam teaches that every aspect of life, including technology, must be grounded in divine values. Therefore, the use of AI must be framed within moral responsibility and submission to the will of Allah.⁴³ Ethics in Islam is not merely about legal right or wrong but is closely related to the *maqasid* (objectives) of *Shariah*, which encompass justice, compassion, and respect for human dignity. When AI is used without spiritual awareness, it risks becoming a tool for oppression, manipulation, or disregard for human values.⁴⁴

Spiritual values integrated into technology use can provide a higher orientation than mere efficiency. From the perspective of *tawhid*, humans are beings entrusted with the stewardship of Allah's creation. Thus, every human action, including designing and applying AI, carries the dimension of *amanah* (trust) and *hisab* (accountability) in the Hereafter.⁴⁵ In the psychology of religion, spiritual values serve as the foundation for maintaining mental well-being. Reliance on technology without spiritual grounding can lead to alienation, existential anxiety, and a crisis of life's meaning. The integration of spiritual values in AI not only regulates user behavior but also influences the quality of human relationships with others and with God.⁴⁶

A concrete example of implementing spiritual ethics in AI can be seen in designing systems that avoid the exploitation of personal data. The values of honesty (*ṣidq*), trustworthiness (*amanah*), and responsibility (*mas'uliyah*) must be embedded in managing digital systems to ensure they do not harm people socially or psychologically. AI should also be designed to support human spiritual well-being. For instance, developing digital *dakwah* applications, worship reminders, or interactive Islamic educational systems powered by AI represents a form of

⁴⁰ Rahman, F. (1982). *Islam and Modernity: Transformation of an Intellectual Tradition*. University of Chicago Press.

⁴¹ Al-Qaradawi, Y. (1994). *Fiqh al-Awlawiyyat*. Cairo: Dar al-Shuruq.

⁴² Nasr, S. H. (1996). *Religion and the Order of Nature*. New York: Oxford University Press.

⁴³ Nasr, S. H. (1996). *Religion and the Order of Nature*. New York: Oxford University Press.

⁴⁴ Kamali, M. H. (2008). *Maqasid al-Shari'ah Made Simple*. London: IIIT.

⁴⁵ Al-Qur'an, QS. Al-Ahzab: 72.

⁴⁶ Jalaluddin, R. (2000). *Psikologi Agama*. Jakarta: RajaGrafindo Persada.

integrating spiritual values into technology. This shows that AI can be directed to strengthen the religious dimension of society rather than weaken it.⁴⁷

Spirituality is also essential in limiting human ambition to create technology that exceeds its proper bounds. The concept of kifayah in Islam teaches a balance between worldly and spiritual needs. Excessive use of AI without ethics can become a form of ghuluw (excessiveness) that ultimately destroys social and inner human order.⁴⁸ Furthermore, spiritual integration prevents the reduction of human beings into mere numbers, data, or algorithmic behaviors. Islam emphasizes that every human has an innate nature (fitrah) and dignity that cannot be substituted or replaced by artificial intelligence. Thus, this spiritual approach serves as a filter against dehumanization efforts in modern technological systems.⁴⁹

Spiritual ethics also nurtures the awareness that knowledge and technology are divine gifts, not solely the absolute result of human rationality. Therefore, AI must be directed toward public benefit (maslahah), not the pursuit of power. Sincerity (ikhlas) and taqwa must be internal values accompanying every innovation to prevent humanity from falling into arrogance and injustice. Therefore, integrating Islamic spiritual values into AI development is not optional but essential. This ensures that technological advancement aligns with the objectives of Shariah, maintains the balance between intellect and soul, and guarantees that AI remains a servant of humankind, not its master.

CONCLUSION

The development of Artificial Intelligence (AI) demands an ethical approach that is not only technical but also philosophical and spiritual. Islam, through the Maqashid al-Shariah framework, offers a comprehensive ethical foundation oriented toward the well-being of humanity. The five core principles of Maqashid—preserving religion, life, intellect, lineage, and wealth—provide a moral basis for guiding the use of AI so that it remains within the bounds of justice, responsibility, and the protection of human dignity.

In the context of the psychology of religion, AI that is not ethically governed has the potential to create spiritual alienation, psychological pressure, and the degradation of human values. Therefore, integrating spiritual values such as sincerity, trustworthiness, piety, and awareness of divine responsibility is essential to ensure that technology does not displace the role of humans as rational and moral beings. AI must serve as a tool to support human spiritual and social well-being, not replace their existential function.

By combining the Maqashid approach and spiritual values into AI ethics, Muslims can contribute to the development of technology that is not only logically intelligent but also morally wise and socially refined. This approach is crucial to ensuring that future technological innovations remain rooted in divine values and do not lose direction in the fast-paced and uncertain currents of modernity.

⁴⁷ Wahid, M. (2021). Etika Teknologi dan Spiritualitas Islam. *Jurnal Filsafat Islam*, 9(1), 44–58.

⁴⁸ Al-Ghazali, A. H. (2005). *Ihya' Ulumuddin*. Beirut: Dar al-Kutub al-'Ilmiyyah.

⁴⁹ Bostrom, N. (2014). *Superintelligence: Paths, Dangers, Strategies*. Oxford University Press.

REFERENCES

- Auda, J. (2008). *Maqasid al-Shariah as Philosophy of Islamic Law: A Systems Approach*. Herndon, VA: The International Institute of Islamic Thought.
- Al-Ghazali, A. H. (2005). *Ihya' Ulumuddin* (Jilid I). Beirut: Dar al-Kutub al-'Ilmiyyah.
- Al-Qaradawi, Y. (1994). *Fiqh al-Awlawiyyat: Dirasah Jadidah fi Daw'i al-Qur'an wa al-Sunnah*. Kairo: Dar al-Shuruq.
- Bostrom, N. (2014). *Superintelligence: Paths, Dangers, Strategies*. Oxford: Oxford University Press.
- Dignum, V. (2019). *Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way*. Springer.
- Jalaluddin, R. (2000). *Psikologi Agama*. Jakarta: RajaGrafindo Persada.
- Kamali, M. H. (2008). *Maqasid al-Shari'ah Made Simple*. London: International Institute of Islamic Thought.
- Nasr, S. H. (1996). *Religion and the Order of Nature*. New York: Oxford University Press.
- O'Neil, C. (2016). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. New York: Crown Publishing Group.
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Rahman, F. (1982). *Islam and Modernity: Transformation of an Intellectual Tradition*. Chicago: University of Chicago Press.
- Ricoeur, P. (1981). *Hermeneutics and the Human Sciences*. Cambridge: Cambridge University Press.
- Sugiyono. (2018). *Metode Penelitian Kualitatif, Kuantitatif, dan R&D*. Bandung: Alfabeta.
- Tegmark, M. (2017). *Life 3.0: Being Human in the Age of Artificial Intelligence*. New York: Penguin Books.
- Verbeek, P. P. (2011). *Moralizing Technology: Understanding and Designing the Morality of Things*. Chicago: University of Chicago Press.
- Wahid, M. (2021). Etika Teknologi dan Spiritualitas Islam. *Jurnal Filsafat Islam*, 9(1), 44–58.
- Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs.