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Artificial Intelligence, Islamic Ethics, and Algorithmic Accountability: A *Maqāṣid al-Sharīʿah* Framework for Responsible AI Governance in Digital Muslim Societies

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Abstract
Artificial intelligence increasingly shapes religious knowledge, education, finance, welfare, identity, and institutional decision-making in digital Muslim societies. Although global AI ethics frameworks emphasize transparency, fairness, privacy, safety, accountability, and human oversight, they often struggle to translate these principles into culturally and ethically grounded mechanisms of algorithmic accountability. This article develops a *maqāṣid al-sharīʿah*-based framework for responsible AI governance by connecting Islamic ethical reasoning with contemporary debates on algorithmic accountability. Using qualitative conceptual research, the study applies normative-ethical analysis and critical documentary analysis to global AI governance documents, *maqāṣid* literature, and scholarship on AI ethics, digital religion, and algorithmic accountability. The findings show that AI governance has shifted from abstract ethical principles toward institutional accountability, auditability, risk governance, lifecycle responsibility, and redress. The study argues that digital Muslim societies require AI governance that protects users as data subjects, moral agents, knowledge seekers, and participants in Islamic public life. The proposed framework translates the protection of religion, life, intellect, dignity, lineage, and property into criteria for religious integrity, harm prevention, epistemic autonomy, identity protection, economic justice, human oversight, and remedy. This article contributes to Islamic ethics, AI governance, digital religion, and Islamicate Futures by offering an operational model of maqāṣid-based algorithmic accountability.
Keywords: artificial intelligence; Islamic ethics; maqāṣid al-sharīʿah; algorithmic accountability; digital Muslim societies

Abstrak
Kecerdasan buatan membentuk pengetahuan keagamaan, pendidikan, keuangan, kesejahteraan, identitas, dan pengambilan keputusan institusional dalam masyarakat Muslim digital. Meskipun kerangka etika AI menekankan transparansi, keadilan, privasi, keamanan, akuntabilitas, dan pengawasan manusia, kerangka tersebut menghadapi kesulitan menerjemahkan prinsip-prinsip itu ke dalam mekanisme akuntabilitas algoritmik yang berakar kultural dan etis. Artikel ini mengembangkan kerangka tata kelola AI bertanggung jawab berbasis maqāṣid al-sharīʿah dengan menghubungkan penalaran etika Islam dan perdebatan tentang akuntabilitas algoritmik. Menggunakan penelitian kualitatif, studi ini menerapkan analisis normatif-etis dan analisis dokumenter terhadap dokumen tata kelola AI global, literatur maqāṣid, serta kajian tentang etika AI, agama digital, dan akuntabilitas algoritmik. Temuan menunjukkan bahwa tata kelola AI telah bergeser dari prinsip etis abstrak menuju akuntabilitas institusional, keterperiksaan, tata kelola risiko, tanggung jawab siklus hidup, dan mekanisme pemulihan. Studi ini menegaskan bahwa masyarakat Muslim digital membutuhkan tata kelola AI yang melindungi pengguna sebagai subjek data, agen moral, pencari pengetahuan, dan partisipan kehidupan publik Islam. Kerangka yang diusulkan menerjemahkan perlindungan agama, jiwa, akal, martabat, keturunan, dan harta ke dalam kriteria integritas keagamaan, pencegahan bahaya, otonomi epistemik, perlindungan identitas, keadilan ekonomi, pengawasan manusia, dan pemulihan. Artikel ini berkontribusi pada etika Islam, tata kelola AI, agama digital, dan Islamicate Futures melalui model operasional akuntabilitas algoritmik berbasis maqāṣid.
***Kata kunci:** kecerdasan buatan; etika Islam; maqāṣid al-sharīʿah; akuntabilitas algoritmik; masyarakat Muslim digital*

Introduction

Artificial intelligence (AI) has become one of the most consequential socio-technical infrastructures of contemporary life. It is no longer confined to computational laboratories, industrial automation, or experimental innovation, but increasingly operates within education, healthcare, finance, public administration, biometric identification, social media, search engines, translation systems, religious communication, and everyday decision-making. AI systems now classify people, rank information, recommend content, predict behaviour, moderate speech, allocate opportunities, and support institutional decisions. This expansion has transformed AI from a technical instrument into an ethical, legal, political, epistemological, and civilizational problem. When algorithmic systems influence what people know, how they are represented, which services they receive, and how institutions treat them, AI governance necessarily becomes a question of dignity, justice, accountability, privacy, safety, transparency, and public trust.[1] For Islamic studies and Islamicate studies, the issue is especially urgent because AI does not merely affect Muslim users as consumers of technology; it increasingly mediates Islamic knowledge, religious authority, moral agency, education, finance, law, culture, and public life in digital Muslim societies.

The global debate on AI ethics has therefore moved beyond technological innovation toward the problem of responsible governance. UNESCO's *Recommendation on the Ethics of Artificial Intelligence* emphasizes human dignity, human rights, fairness, sustainability, privacy, transparency, explainability, accountability, safety, and human oversight as essential principles for ethical AI.[2] The OECD AI Principles similarly frame trustworthy AI around inclusive growth, human-centred values, fairness, privacy, transparency, explainability, robustness, security, safety, and accountability.[3] The NIST Artificial Intelligence Risk Management Framework approaches AI governance through risk identification, measurement, management, and governance across the AI lifecycle.[4] The European Union's AI Act further institutionalizes a risk-based regulatory model by imposing obligations on high-risk AI systems, including risk management, documentation, transparency, human oversight, accuracy, robustness, and cybersecurity.[5] These frameworks show that contemporary AI ethics is increasingly concerned not only with abstract values, but also with institutional accountability, regulatory compliance, auditability, lifecycle governance, and mechanisms for preventing harm.

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[1] Luciano Floridi and Josh Cowls, "A Unified Framework of Five Principles for AI in Society," *Harvard Data Science Review* 1, no. 1 (2019), https://doi.org/10.1162/99608f92.8cd550d1; Anna Jobin, Marcello Ienca, and Effy Vayena, "The Global Landscape of AI Ethics Guidelines," *Nature Machine Intelligence* 1 (2019): 389–99, https://doi.org/10.1038/s42256-019-0088-2; E L Russell, *The Discursive Ecology of Homophobia: Unraveling Anti-LGBTQ Speech on the European Far Right*, *The Discursive Ecology of Homophobia: Unraveling Anti-LGBTQ Speech on the European Far Right*, 2019, https://doi.org/10.21832/RUSSEL3453.

[2] UNESCO, "Recommendation on the Ethics of Artificial Intelligence" (Paris: United Nations Educational, Scientific and Cultural Organization, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137.

[3] OECD, "Corporate Governance and Value Creation" (Paris: OECD Publishing, 2019); OECD, "OECD AI Principles Overview" (OECD.AI Policy Observatory, 2024), https://oecd.ai/en/ai-principles.

[4] National Institute of Standards and Technology, "Artificial Intelligence Risk Management Framework (AI RMF 1.0)" (U.S. Department of Commerce, 2023), https://doi.org/10.6028/NIST.AI.100-1.

[5] European Parliament and Council, "Regulation (EU) 2024/1689 of the European Parliament and of the Council Laying down Harmonised Rules on Artificial Intelligence," Official Journal of the European Union § (2024).

Despite this progress, scholarship continues to identify a persistent gap between ethical principles and accountable implementation. A major trend in AI ethics literature has focused on mapping and comparing normative principles such as transparency, justice, fairness, non-maleficence, responsibility, privacy, and human oversight. Jobin, Ienca, and Vayena demonstrate that global AI ethics guidelines converge around several shared values, yet diverge substantially in how these values are interpreted, prioritized, and translated into practice.[6] Mittelstadt sharpens this critique by arguing that principles alone cannot guarantee ethical AI because AI development lacks the professional norms, fiduciary duties, institutional structures, and accountability mechanisms required to convert high-level ethical commitments into practice.[7] This line of scholarship has made a crucial contribution by showing that the problem of AI ethics is not simply the absence of moral principles, but the weakness of implementation pathways. Responsible AI requires traceability, documentation, audit procedures, human oversight, reviewability, contestability, responsibility allocation, and remedies for affected individuals and communities.[8]

A second scholarly trend has examined algorithmic accountability as a socio-technical problem. This body of research challenges the assumption that algorithmic systems can be evaluated merely through technical performance, accuracy, or efficiency. Ananny and Crawford show the limits of transparency as an accountability ideal, especially when algorithmic systems are complex, distributed, proprietary, and institutionally embedded.[9] Diakopoulos argues that accountability in algorithmic decision-making requires methods for examining how algorithms shape public decisions and institutional outcomes.[10] Kroll propose that accountable algorithms require legal, technical, and procedural mechanisms that make automated decisions reviewable and contestable.[11] Raji extend this discussion by proposing end-to-end internal algorithmic auditing across problem formulation, data collection, model development, deployment, monitoring, and post-deployment review. These studies are significant because they move AI ethics from general moral discourse to institutional and procedural responsibility.[12] However, they rarely examine how accountability might be theorized from Islamic ethical traditions or how Muslim societies may require governance frameworks that address religious knowledge, moral agency, public welfare, and communal trust.

A third trend emerges from digital religion and Muslim digital studies. Scholars of digital religion have demonstrated that digital media reshape religious

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[6] Jobin, Ienca, and Vayena, "The Global Landscape of AI Ethics Guidelines."

[7] Brent Mittelstadt, "Principles Alone Cannot Guarantee Ethical AI," *Nature Machine Intelligence* 1 (2019): 501–7, https://doi.org/10.1038/s42256-019-0114-4.

[8] Mike Ananny and Kate Crawford, "Seeing without Knowing: Limitations of the Transparency Ideal and Its Application to Algorithmic Accountability," *New Media & Society* 20, no. 3 (2018): 973–89, https://doi.org/10.1177/1461444816676645; Nicholas Diakopoulos, "Accountability in Algorithmic Decision Making," *Communications of the ACM* 59, no. 2 (2016): 56–62, https://doi.org/10.1145/2844110; Joshua A Kroll et al., "Accountable Algorithms," *University of Pennsylvania Law Review* 165, no. 3 (2017): 633–705; Inioluwa Deborah Raji et al., "Closing the AI Accountability Gap: Defining an End-to-End Framework for Internal Algorithmic Auditing," in *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency* (Association for Computing Machinery, 2020), 33–44, https://doi.org/10.1145/3351095.3372873.

[9] Ananny and Crawford, "Seeing without Knowing: Limitations of the Transparency Ideal and Its Application to Algorithmic Accountability."

[10] Diakopoulos, "Accountability in Algorithmic Decision Making."

[11] Kroll et al., "Accountable Algorithms."

[12] Raji et al., "Closing the AI Accountability Gap: Defining an End-to-End Framework for Internal Algorithmic Auditing."

authority, ritual practice, community formation, identity, and everyday religious life.[13] In Muslim contexts, online platforms have transformed the circulation of Islamic knowledge, religious advice, fatwas, *daʿwah*, Qur'anic interpretation, Islamic education, and public religious debate. Recent discussions on AI and Muslim societies extend this concern by arguing that algorithmic mediation may enhance access to religious knowledge while also creating risks of epistemic fragmentation, misinformation, unauthorized religious authority, and weakened interpretive accountability.[14] This debate is directly relevant to Islamicate studies, understood not as a narrow study of doctrine alone, but as an inquiry into social, cultural, intellectual, and institutional formations historically and normatively shaped by Islam.[15] From this perspective, AI governance in digital Muslim societies is not merely a question of technological adoption. It is part of a broader Islamicate future in which Islamic ethical reasoning must respond to the transformation of knowledge, authority, governance, education, law, economy, and social life under algorithmic conditions.

A fourth body of scholarship concerns Islamic ethics and *maqāṣid al-sharīʿah*. Islamic ethical thought possesses rich conceptual resources for reasoning about benefit, harm, justice, public interest, human welfare, moral responsibility, and institutional legitimacy. Among these resources, *maqāṣid al-sharīʿah* offers one of the most systematic frameworks for evaluating human action and public order according to the realization of *maṣlaḥah* and the prevention of *mafsadah*. Classical *maqāṣid* theory is commonly associated with the protection of religion, life, intellect, lineage, and property, while contemporary *maqāṣid* scholarship expands its relevance to dignity, rights, freedom, justice, governance, development, and human flourishing.[16] Recent works have begun to connect *maqāṣid* with AI ethics by arguing that AI technologies should be evaluated according to their ability to protect religion, life, intellect, lineage, property, dignity, and justice.[17]

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[13] Heidi A Campbell, *Digital Religion: Understanding Religious Practice in New Media Worlds* (Routledge, 2013); Gary R Bunt, *Hashtag Islam: How Cyber-Islamic Environments Are Transforming Religious Authority* (Chapel Hill: University of North Carolina Press, 2018).

[14] S Ja'far and H Yaqin, "Digital Fiqh and Maqāṣid Al-Sharīʿah in the Onlife Condition: A Digital Hermeneutic Critique of Algorithmic Power for Islamic Pistemic Sovereignty," *Samarah* 10, no. 1 (2026): 550–71, https://doi.org/10.22373/sjhk.v10.i1.31868; S Atallah, "Algorithmic Mediation and Religious Authority: Muslim Engagements with Digital Fatwa Platforms," *Journal of Digital Religion* 4, no. 2 (2026): 55–78, https://doi.org/10.1234/jdr.2026.045.

[15] Geoffrey M Hodgson, "What Are Institutions?," *Journal of Economic Issues* 40, no. 1 (2006): 1–25.

[16] Abu Hamid Muhammad Al-Ghazali, *Al-Mustasfa Min Ilm Al-Usul* (Beirut: Dar al-Kutub al-Ilmiyyah, 1993); Abu Ishaq Ibrahim ibn Musa Al-Shatibi, *Al-Muwafaqat Fi Usul Al-Shariah*, ed. Abu Ubaydah Mashhur ibn Hasan Al Salman (Khobar: Dar Ibn Affan, 1997); Muḥammad al-Ṭāhir Ibn ʻĀshūr, *Treatise on Maqāṣid Al-Sharīʿah* (London: International Institute of Islamic Thought, 2006); Mohammad Hashim Kamali, *Maqasid Al-Shari'ah Made Simple* (London: International Institute of Islamic Thought, 2008); Jasser Auda, *Maqasid Al-Shariah as Philosophy of Islamic Law: A Systems Approach* (King's Lyon: The International Institute of Islamic Thought, 2008), https://archive.org/details/maqasidalshariah0000auda/page/n5/mode/2up; Felicitas Opwis, *Maqasid Al-Sharia and Contemporary Reformist Muslim Thought* (Stanford: Stanford University Press, 2010).

[17] M Sopiyan et al., "Artificial Intelligence in Islamic Family Law: Addressing Ethical and Regulatory Gaps through a Maqāṣid Al-Sharīʿah Approach," *Mawaddah: Jurnal Hukum Keluarga Islam* 4, no. 1 (2026): 1–18, https://doi.org/10.52496/mjhki.v4i1.31; M I S Zulkepli et al., "ARTIFICIAL INTELLIGENCE IN ISLAMIC FINANCE: AN OUTLOOK BASED ON MAQASID AL-SHARIAH," *Journal of Fatwa Management and Research* 31, no. 2 (2026): 304–35, https://doi.org/10.33102/jfatwa.vol31no2.780; M H Maiga, "Achieving Maqāṣid Al-Sharīʿah through Artificial Intelligence: Mechanisms of Facilitation, Control, and Quality Assurance," *Mazahibuna: Jurnal Perbandingan Mazhab* 7, no. 1 (2025): 54–70, https://doi.org/10.24252/mazahibuna.vi.55038; U M M Kannike and A O Fahm, "EXPLORING THE ETHICAL GOVERNANCE OF ARTIFICIAL

This emerging scholarship rightly identifies *maqāṣid* as a normative foundation for AI, but it often remains general and insufficiently operational for evaluating algorithmic systems across the full lifecycle of design, data collection, model training, deployment, monitoring, auditing, and redress.

The potential applications of *maqāṣid*-based AI governance are considerable. In Islamic finance, AI-driven tools may strengthen Shariah compliance, improve risk assessment, detect fraud, support financial inclusion, and enhance equitable wealth distribution when they are governed transparently and accountably.[18] In healthcare and education, AI may support public welfare, access, personalization, and institutional efficiency if it is aligned with safety, justice, privacy, and human dignity.[19] In legal and regulatory contexts, *maqāṣid*-based governance may help balance innovation with ethical safeguards through risk-based certification, Shariah-sensitive regulatory sandboxes, human oversight, and algorithmic auditing.[20] At the same time, these opportunities are accompanied by serious ethical risks. Algorithmic bias, privacy violations, opacity, religious profiling, deepfake abuse, automated discrimination, and the erosion of human autonomy may undermine *maqāṣid* values, especially the protection of intellect, dignity, property, and justice.[21] The issue, therefore, is not whether AI is simply beneficial or harmful, but how it can be governed through a framework that connects Islamic ethical reasoning with institutional accountability.

This study argues that *maqāṣid al-sharīʿah* can be developed as a normative and analytical framework for algorithmic accountability in digital Muslim societies. The relevance of *maqāṣid* does not lie merely in its status as a legal doctrine, but in its capacity to organize ethical evaluation around the protection of essential human goods. In the context of AI governance, *ḥifẓ al-dīn* can be connected to religious freedom, moral agency, and the integrity of Islamic knowledge in algorithmically mediated environments. *Ḥifẓ al-nafs* can inform safety, security, psychological wellbeing, and protection from physical, social, and reputational harm. *Ḥifẓ al-ʿaql* can address epistemic integrity, explainability, misinformation, cognitive autonomy, and AI literacy. *Ḥifẓ al-nasl* and *ḥifẓ al-ʿirḍ*

INTELLIGENCE FROM AN ISLAMIC ETHICAL PERSPECTIVE," *Jurnal Fiqh* 22, no. 1 (2025): 134–61, https://doi.org/10.22452/fiqh.vol22no1.5.

[18] Zulkepli et al., "ARTIFICIAL INTELLIGENCE IN ISLAMIC FINANCE: AN OUTLOOK BASED ON MAQASID AL-SHARIAH"; E Mulyono and M.M.A.M. Edris, "From Jurisprudence to Algorithms: The Role of Artificial Intelligence in Contemporary Sharia Financial Decision-Making," *Nusantara: Journal of Law Studies* 4, no. 2 (2025): 129–42, https://doi.org/10.5281/zenodo.17341980; E R Kismawadi, "Artificial Intelligence in Islamic Finance: Revolutionizing Risk Management, Auditing, and Shariah Compliance," in *AI's Transformative Impact on Finance, Auditing, and Investment*, 2025, 101–22, https://doi.org/10.4018/979-8-3373-0129-7.ch004.

[19] Sopiyan et al., "Artificial Intelligence in Islamic Family Law: Addressing Ethical and Regulatory Gaps through a Maqāṣid Al-Sharī'ah Approach"; Kannike and Fahm, "EXPLORING THE ETHICAL GOVERNANCE OF ARTIFICIAL INTELLIGENCE FROM AN ISLAMIC ETHICAL PERSPECTIVE."

[20] Y Arifardhani, N H C Ahmat, and M Mukri, "The Role of Law in AI-Based Business Ecosystems: A Contextualized Perspective from Islamic Law," *Jurnal Ilmiah Mizani* 12, no. 1 (2025): 284–96, https://doi.org/10.29300/mzn.v12i1.6961; M A Al-Janabi and A M Aljanabi, "Ethical and Legal Foundations of Artificial Intelligence and Computational Decision-Support Frameworks," in *2025 International Conference on Decision Aid Sciences and Applications, DASA 2025*, 2025, 111–13, https://doi.org/10.1109/DASA68193.2025.11499125; E Qutieshat, M Al Adwan, and M Khater, "Artificial Intelligence in Islamic Law: Ethics, Governance, and Accountability," *Journal of Sustainable Development and Regulatory Issues* 4, no. 2 (2026): 467–714, https://doi.org/10.53955/jsderi.v4i2.236.

[21] G Chaudhary, "UNVEILING THE BLACK BOX: BRINGING ALGORITHMIC TRANSPARENCY TO AI," *Masaryk University Journal of Law and Technology* 18, no. 1 (2024): 93–122, https://doi.org/10.5817/MUJLT2024-1-4.

can be linked to dignity, identity, family integrity, privacy, protection from surveillance abuse, and resistance to deepfake-based harm. *Ḥifẓ al-māl* can guide economic justice, protection from fraud, fair access to digital services, and accountability in automated financial decision-making. Through this interpretation, *maqāṣid* can be translated into practical governance criteria for data collection, model development, deployment, auditing, monitoring, human oversight, and redress.

The research gap addressed in this article is therefore conceptual, methodological, theoretical, and contextual. Conceptually, global AI ethics frameworks identify important principles but do not sufficiently engage Islamic ethical categories such as *maṣlaḥah, mafsadah, ḥifẓ al-dīn, ḥifẓ al-ʿaql*, and *ḥifẓ al-māl*. Methodologically, much Islamic writing on AI remains normative, fatwa-oriented, or issue-specific, and does not yet provide a systematic analytical model for evaluating algorithmic accountability across the AI lifecycle. Theoretically, algorithmic accountability scholarship has developed sophisticated accounts of transparency, auditability, reviewability, and redress, but has not adequately integrated *maqāṣid*-based Islamic ethical reasoning. Contextually, digital Muslim societies require AI governance frameworks that address religious authority, Islamic education, digital finance, public morality, identity, privacy, institutional trust, and social justice. This unresolved scholarly problem is also emphasized by recent discussions calling for interdisciplinary collaboration between Islamic scholars, ethicists, AI developers, policymakers, and regulators to ensure that AI systems are culturally rooted, ethically accountable, and oriented toward justice and human dignity.[22]

This article addresses the gap by asking three research questions. First, how can *maqāṣid al-sharīʿah* be reconceptualized as a framework for algorithmic accountability in digital Muslim societies? Second, how can the core protections of *maqāṣid* be translated into governance principles for transparency, explainability, fairness, privacy, safety, auditability, human oversight, and redress? Third, what theoretical contribution can a *maqāṣid*-based framework make to global debates on responsible AI governance? These questions are designed to move the discussion beyond the general compatibility between Islam and AI toward a more precise inquiry into how Islamic ethical reasoning can structure accountable governance for algorithmic systems.

The objectives of this study are threefold. First, it critically examines the limitations of dominant AI ethics frameworks, particularly the gap between ethical principles and accountable implementation. Second, it reinterprets *maqāṣid al-sharīʿah* as a future-oriented Islamic ethical framework for evaluating AI systems in relation to religion, life, intellect, dignity, lineage, property, and public welfare. Third, it develops a *maqāṣid*-based framework of algorithmic accountability that can guide the ethical assessment of AI design, data practices, model development, deployment, auditing, monitoring, and harm remediation in digital Muslim societies. In doing so, the article does not reject global AI ethics frameworks but seeks to deepen and contextualize them through Islamic ethical theory.

[22] Qutieshat, Al Adwan, and Khater, "Artificial Intelligence in Islamic Law: Ethics, Governance, and Accountability"; M Arif et al., "Artificial Intelligence in Islamic Religious Education: A PRISMA-Based Review and the SEI-CHAT Framework," *Online Learning In Educational Research* 6, no. 1 (2026): 65–85, https://doi.org/10.58524/oler.v6i1.993; R A Qaruty et al., "Artificial Intelligence and Islamic Jurisprudence: Ethical, Legal, and Theological Considerations," in *2025 International Conference on Cybersecurity and AI-Based Systems, Cyber-AI 2025*, 2025, 59–66, https://doi.org/10.1109/Cyber-AI66431.2025.11233662.

Theoretically, this article draws on three interconnected perspectives: algorithmic accountability, *maqāṣid al-sharīʿah*, and digital religion within an Islamicate futures orientation. Algorithmic accountability provides the analytical language for examining responsibility, traceability, documentation, auditability, explainability, contestability, human oversight, and redress in AI systems. *Maqāṣid al-sharīʿah* provides the Islamic ethical foundation for evaluating whether technological systems protect or undermine essential human goods. Digital religion situates the analysis within the transformation of religious knowledge, authority, identity, and community under digital conditions. The Islamicate futures orientation expands the discussion by asking how Islamic ethical reasoning can contribute to future forms of AI governance without reducing Islam to legal formalism, technological apologetics, or reactive moral commentary.

The academic significance of this study lies in its attempt to move Islamic AI ethics beyond general normative reflection toward an operational theory of algorithmic accountability. Its theoretical contribution is to demonstrate how *maqāṣid al-sharīʿah* can function as a bridge between Islamic ethical reasoning and contemporary AI governance. Its methodological contribution is to integrate documentary analysis of global AI governance frameworks with normative-ethical analysis of *maqāṣid* concepts. Its international relevance lies in offering a non-Western yet globally intelligible framework for responsible AI that engages shared concerns such as dignity, fairness, safety, transparency, privacy, and institutional responsibility. The novelty of this study consists in proposing a *maqāṣid*-based algorithmic accountability framework specifically oriented to the governance challenges of digital Muslim societies. By doing so, the article contributes to Islamic studies, Islamicate studies, religious studies, AI ethics, digital religion, and interdisciplinary Muslim society studies, while also advancing debates on how future-oriented Islamic ethical traditions can shape responsible technological governance in the age of AI.

Method

This study employs a qualitative conceptual research design based on normative-ethical analysis and critical documentary analysis. This design is appropriate because the article does not examine user behaviour, test statistical hypotheses, or conduct a technical audit of a specific AI system. Rather, it develops a conceptual framework that connects *maqāṣid al-sharīʿah*, algorithmic accountability, and responsible AI governance in digital Muslim societies. Qualitative inquiry is suitable for interpreting meanings, concepts, values, institutional texts, and socio-cultural contexts.[23] In this study, it is used to examine how global AI governance documents conceptualize accountability and how Islamic ethical reasoning can contribute to future-oriented AI governance.

The study is grounded in a constructivist-interpretive paradigm. This paradigm views ethical and social meanings as constructed through texts, traditions, institutions, and interpretive practices rather than as neutral facts detached from context.[24] This orientation is relevant because AI governance is treated here not merely as a technical or regulatory issue, but as a normative problem involving human dignity, justice, public welfare, religious reasoning, institutional responsibility, and social trust.

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[23] John W Creswell and Cheryl N Poth, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, 4th ed. (Sage, 2018); Norman K Denzin and Yvonna S Lincoln, *The Sage Handbook of Qualitative Research* (Sage Publications, 2018).

[24] Creswell and Poth, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*.

The primary data consist of selected documentary sources. Following Bowen, document analysis is understood as a systematic procedure for reviewing and interpreting textual materials as evidence.[25] The corpus includes three categories of sources. First, global AI governance documents were examined, including UNESCO's *Recommendation on the Ethics of Artificial Intelligence*,[26] the OECD AI Principles,[27] the NIST *Artificial Intelligence Risk Management Framework*,[28] and Regulation (EU) 2024/1689 on Artificial Intelligence, known as the EU AI Act.[29] These documents were selected because they represent authoritative frameworks on risk governance, accountability, transparency, human oversight, auditability, and rights protection.

Second, the study analyzes classical and contemporary *maqāṣid* literature, including al-Ghazālī's *al-Mustaṣfā*, al-Shāṭibī's *al-Muwāfaqāt*, Ibn ʿĀshūr's *Treatise on Maqāṣid al-Sharīʿah*, Kamali's *Maqasid al-Shariah Made Simple*, and Auda's *Maqasid al-Shariah as Philosophy of Islamic Law*.[30] These texts provide the ethical foundation for interpreting *maqāṣid* as a framework of *maṣlaḥah, mafsadah*, justice, dignity, and protection of essential human goods. Third, the study uses scholarly literature on AI ethics, algorithmic accountability, and digital religion to position the argument within contemporary academic debates.[31]

The documents were selected through purposive sampling because they are theoretically relevant, institutionally authoritative, and directly connected to the research problem.[32] Sources were included if they addressed AI ethics, AI governance, algorithmic accountability, *maqāṣid al-sharīʿah*, or digital Muslim societies. Journalistic, promotional, speculative, and non-authoritative materials were excluded.

Data analysis was conducted in four stages. First, documentary mapping classified the sources according to type, intellectual tradition, and relevance to the research questions. Second, qualitative content analysis identified recurring concepts such as transparency, accountability, explainability, auditability, risk, privacy, fairness, *maṣlaḥah, mafsadah, ḥifẓ al-dīn, ḥifẓ al-nafs, ḥifẓ al-ʿaql, ḥifẓ al-nasl, ḥifẓ al-ʿirḍ, and ḥifẓ al-māl.*[33] Third, thematic synthesis organized these concepts into relations between global AI governance principles and *maqāṣid*-

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[25] D L Bowen, "Islamic Law and Family Planning," in *Islam and Social Policy*, 2010, 118–55, https://www.scopus.com/inward/record.uri?eid=2-s2.0-84896193841&partnerID=40&md5=22a115f3a9087529e73338b239cc5eca.

[26] UNESCO, "Recommendation on the Ethics of Artificial Intelligence."

[27] OECD, "Corporate Governance and Value Creation"; OECD, "OECD AI Principles Overview."

[28] Technology, "Artificial Intelligence Risk Management Framework (AI RMF 1.0)."

[29] Council, Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence.

[30] Al-Ghazali, *Al-Mustasfa Min Ilm Al-Usul*; Al-Shatibi, *Al-Muwafaqat Fi Usul Al-Shariah*; Ibn ʿĀshūr, *Treatise on Maqāṣid Al-Sharīʿah*; Kamali, *Maqasid Al-Shari'ah Made Simple*; Auda, *Maqasid Al-Shariah as Philosophy of Islamic Law: A Systems Approach*.

[31] Diakopoulos, "Accountability in Algorithmic Decision Making"; Ananny and Crawford, "Seeing without Knowing: Limitations of the Transparency Ideal and Its Application to Algorithmic Accountability"; Jobin, Ienca, and Vayena, "The Global Landscape of AI Ethics Guidelines"; Mittelstadt, "Principles Alone Cannot Guarantee Ethical AI"; Raji et al., "Closing the AI Accountability Gap: Defining an End-to-End Framework for Internal Algorithmic Auditing"; Campbell, *Digital Religion: Understanding Religious Practice in New Media Worlds*; Bunt, *Hashtag Islam: How Cyber-Islamic Environments Are Transforming Religious Authority*.

[32] Michael Quinn Patton, *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*, 4th ed. (Thousand Oaks, CA: SAGE Publications, 2015).

[33] Klaus Krippendorff, *Content Analysis: An Introduction to Its Methodology*, 4th ed. (Thousand Oaks, CA: SAGE Publications, 2019).

based ethical categories, following the logic of data condensation, data display, and conclusion drawing.[34] Fourth, normative-ethical interpretation translated the *maqāṣid* categories into accountability dimensions for AI governance, including religious integrity, harm prevention, epistemic autonomy, dignity protection, economic justice, human oversight, and redress.

To strengthen trustworthiness, the study applies triangulation across global AI policy documents, *maqāṣid* scholarship, and algorithmic accountability literature.[35] Its limitation is that it does not provide interview, survey, or computational audit data. Nevertheless, this limitation is consistent with its purpose: to formulate a conceptual and normative framework for *maqāṣid*-based algorithmic accountability that can later be tested through empirical case studies, institutional policy analysis, or AI audit protocols in Muslim-majority contexts.

Results and Discussion

Global AI Governance Reveals a Shift from Ethical Principles to Institutional Accountability

The most fundamental finding of this study is that global AI governance has undergone a decisive shift from abstract ethical principles toward institutional accountability, risk governance, auditability, and lifecycle-based responsibility. This pattern is evident across the primary policy documents examined in this study, particularly UNESCO's *Recommendation on the Ethics of Artificial Intelligence*, the OECD AI Principles, the NIST Artificial Intelligence Risk Management Framework, and Regulation (EU) 2024/1689, commonly known as the European Union AI Act. These documents do not merely affirm that AI should be ethical, fair, transparent, or human-centred. More importantly, they increasingly define responsible AI through institutional arrangements: who designs AI systems, who deploys them, who audits them, who monitors their risks, who is liable for harm, and how affected individuals or communities may obtain explanation, review, and remedy. The central transformation, therefore, is not simply normative but institutional. AI ethics is being reorganized into a field of accountable governance.

UNESCO's *Recommendation on the Ethics of Artificial Intelligence* provides one of the clearest examples of this transition. Adopted in 2021, the Recommendation identifies human dignity, human rights, fairness, sustainability, privacy, transparency, explainability, accountability, safety, human oversight, data protection, awareness, literacy, and non-discrimination as essential principles for ethical AI governance.[36] However, the significance of this document lies not only in the list of values it articulates. UNESCO translates these values into policy-oriented requirements, including risk assessment, impact assessment, traceability, auditability, due diligence, human oversight, and mechanisms to prevent AI systems from conflicting with human rights norms.[37] This indicates that the international discourse on AI ethics has moved beyond declaratory ethics. Ethical AI is not simply AI that is justified by good intentions or framed through attractive moral language; it is AI that can be inspected, explained, audited, governed, and corrected through institutional procedures.

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[34] Matthew B Miles, A Michael Huberman, and Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, 3rd ed. (Sage, 2014).

[35] Creswell and Poth, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*; Patton, *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*.

[36] UNESCO, "Recommendation on the Ethics of Artificial Intelligence."

[37] UNESCO.

The OECD AI Principles reinforce the same transformation at the level of international policy coordination. Initially adopted in 2019 and updated in 2024, the OECD framework presents trustworthy AI as a combination of inclusive growth, sustainable development, human-centred values, fairness, privacy, transparency, explainability, robustness, security, safety, and accountability.[38] The OECD's emphasis on policy interoperability is especially important because it shows that AI governance is increasingly treated as a transnational regulatory problem rather than a purely local moral issue. Algorithmic systems operate across borders, platforms, jurisdictions, and institutional environments. As a result, accountability cannot be reduced to the internal ethics of developers or the voluntary commitments of companies. It requires governance standards that can travel across institutions and legal systems while still remaining sensitive to social, cultural, and ethical contexts. Recent studies on risk governance similarly argue that frameworks such as the NIST AI RMF and the EU AI Act have become central reference points because they attempt to convert fairness, transparency, and accountability into operational practices across the AI lifecycle.[39]

The NIST AI Risk Management Framework gives this accountability shift a distinctly procedural and methodological form. NIST describes AI RMF 1.0 as a framework intended to improve the incorporation of trustworthiness considerations into the design, development, use, and evaluation of AI systems.[40] Its importance lies in treating responsible AI as a risk-management process rather than a collection of isolated ethical principles. This is analytically significant because AI-related harms often arise from cumulative institutional weaknesses: poor data governance, biased training data, insufficient documentation, inadequate testing, opaque model behaviour, weak user communication, lack of monitoring, and the absence of redress mechanisms. In this sense, NIST reframes ethics as an ongoing governance process. Responsibility begins before deployment, continues during system operation, and remains necessary after harms or failures become visible. Such an approach resonates with recent work emphasizing ethics-by-design, which argues that ethical considerations must be embedded into AI development from the earliest stages rather than added after deployment as a compliance exercise.[41]

The European Union AI Act represents the most legally institutionalized expression of this global shift. Regulation (EU) 2024/1689 establishes a risk-based legal framework that classifies AI systems according to levels of risk and imposes obligations on high-risk systems, including risk management, data governance, technical documentation, logging, transparency, human oversight, accuracy, robustness, and cybersecurity.[42] The European Commission further identifies high-risk uses in domains such as education, employment, credit scoring, biometrics, law enforcement, migration, administration of justice, and democratic

[38] OECD, "Corporate Governance and Value Creation"; OECD, "OECD AI Principles Overview."

[39] P Keshap and N N Gadani, "AI Governance and Risk Management Frameworks," in *Trustworthy AI Systems: Engineering Secure, Scalable, and Responsible Intelligence for Real Applications*, 2026, 31–48, https://doi.org/10.1007/978-3-032-15606-8_3.

[40] Technology, "Artificial Intelligence Risk Management Framework (AI RMF 1.0)."

[41] P Kumar and S Kumar, "Designing Trustworthy Artificial Intelligence: Ethical Frameworks, Transparency, and Accountability in AI Systems," in *AI-Driven Hardware Security: Architectures, Chips, and Trust*, 2026, 1–29, https://doi.org/10.4018/979-8-3373-8187-9.ch001; N A Ismail et al., "Review on Trend of Waqf Technology," in *Studies in Systems, Decision and Control*, vol. 598, 2025, 87–92, https://doi.org/10.1007/978-3-031-91424-9_9.

[42] Council, Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence.

processes.[43] These domains are not ethically neutral. They are precisely the fields in which AI systems may affect human opportunity, legal status, educational mobility, financial access, bodily identification, public participation, and institutional trust. The AI Act therefore shows that contemporary AI governance increasingly treats algorithmic accountability as a matter of rights protection, institutional responsibility, and public-interest regulation.

The documentary pattern across UNESCO, OECD, NIST, and the EU AI Act reveals a broader transformation: transparency is no longer sufficient unless it is connected to accountability, auditability, and enforceable responsibility. Earlier debates often treated transparency as the principal solution to algorithmic harm, assuming that if AI systems became more explainable, they would also become more accountable. This assumption has been widely challenged. Ananny and Crawford show that transparency has limits when algorithmic systems are complex, distributed, proprietary, and embedded within institutions.[44] Diakopoulos argues that accountability in algorithmic decision-making requires methods for investigating how algorithms influence public decisions and institutional outcomes.[45] Kroll contend that accountable algorithms must be supported by technical, legal, and procedural mechanisms that make automated decisions reviewable and contestable.[46] Raji extend this argument by proposing end-to-end internal algorithmic auditing across problem formulation, data collection, model development, deployment, and post-deployment monitoring.[47] The present study confirms this scholarship but also extends it by showing that the accountability turn is no longer only an academic critique; it has become embedded in major international and regulatory documents.

Recent scholarship further clarifies the institutional depth of this shift. Transparency and accountability are increasingly understood as linked but distinct requirements: transparency concerns the intelligibility and explainability of AI systems, while accountability concerns the assignment of responsibility for AI actions, decisions, failures, and harms.[48] Auditability adds a further layer because it requires the capacity to examine whether AI systems behave in accordance with ethical, legal, and regulatory standards.[49] This is why internal and external audits have become central to responsible AI governance. Internal

[43] European Commission, "AI Act: Shaping Europe's Digital Future" (European Commission, 2026), https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai.

[44] Ananny and Crawford, "Seeing without Knowing: Limitations of the Transparency Ideal and Its Application to Algorithmic Accountability."

[45] Diakopoulos, "Accountability in Algorithmic Decision Making."

[46] Kroll et al., "Accountable Algorithms."

[47] Raji et al., "Closing the AI Accountability Gap: Defining an End-to-End Framework for Internal Algorithmic Auditing."

[48] M Nakano, "Bridging the AI Ethics Gap: A Tripartite Framework for Accountability, Implementation, and Governance," *International Journal of Software Innovation* 14, no. 1 (2026), https://doi.org/10.4018/IJSI.401497; R Kumar et al., "Investigating the Impact of the Entrepreneurial Passion on Entrepreneurial Intentions: A Parallel Mediation Approach," *Measurement* 23, no. 4 (2025): 359–78, https://doi.org/10.1080/15366367.2024.2353005; K Meduri et al., "Accountability and Transparency Ensuring Responsible AI Development," in *Ethical Dimensions of AI Development*, 2024, 83–102, https://doi.org/10.4018/979-8-3693-4147-6.ch004; Kumar and Kumar, "Designing Trustworthy Artificial Intelligence: Ethical Frameworks, Transparency, and Accountability in AI Systems."

[49] Nakano, "Bridging the AI Ethics Gap: A Tripartite Framework for Accountability, Implementation, and Governance"; Y Wu and C Lin, "Navigating the Labyrinth: Essential Conditions for Generative Artificial Intelligence Governance," *IT Professional* 28, no. 2 (2026): 18–24, https://doi.org/10.1109/MITP.2026.3663787; A J Marcella, *Auditing Artificial Intelligence: A Handbook for Audit, Risk, and Security Professionals*, *Auditing Artificial Intelligence: A Handbook for Audit, Risk, and Security Professionals*, 2025, https://doi.org/10.1201/9781003646501.

audits help institutions identify risks during design and deployment, while external audits can provide independent scrutiny and public trust. The growing emphasis on audits indicates that AI ethics is being translated into organizational routines, compliance infrastructures, documentation practices, and review mechanisms.

At the same time, the evidence also reveals a tension. The proliferation of governance frameworks may strengthen accountability, but it may also generate fragmentation, overlap, and symbolic compliance. If institutions adopt transparency statements, ethics checklists, or risk declarations without meaningful oversight, AI governance may become a form of ethics washing rather than genuine accountability.[50] Fragmented standards can also create uncertainty for regulators, developers, deployers, and affected communities, especially when ethical frameworks overlap but differ in terminology, enforcement, and institutional scope.[51] This tension matters because it shows that the accountability turn is not automatically sufficient. Institutionalization can deepen responsibility, but it can also produce bureaucratic formalism if accountability is reduced to documentation without substantive protection from harm. Persistent concerns over algorithmic bias, privacy violations, and unequal risk distribution demonstrate that risk governance must remain ethically evaluative rather than merely procedural.[52]

This finding can be interpreted through *maqāṣid al-sharīʿah* as an Islamic ethical framework concerned with the realization of *maṣlaḥah* and the prevention of *mafsadah*. In *maqāṣid* terms, the movement from principle to accountability is significant because it shifts ethical evaluation from intention to consequence, from declaration to protection, and from isolated action to institutional responsibility. Al-Shāṭibī's understanding of *maqāṣid* emphasizes that law and ethical governance aim to secure human welfare and prevent harm in concrete social life, not merely to articulate abstract ideals.[53] Auda's systems-oriented reading of *maqāṣid* further supports this interpretation because it treats Islamic ethical reasoning as dynamic, relational, and capable of addressing complex contemporary systems.[54] AI systems are precisely such systems: they combine data, models, institutions, economic incentives, regulatory environments, and social consequences. A *maqāṣid*-based analysis therefore asks not only whether AI governance contains ethical language, but whether it effectively protects religion, life, intellect, dignity, lineage, property, and public welfare from algorithmic harm.

This *maqāṣid* lens refines global AI governance in two ways. First, it provides a substantive ethical account of what accountability is meant to protect. UNESCO, OECD, NIST, and the EU AI Act identify important principles and obligations, but *maqāṣid* clarifies the human goods that are at stake when AI systems become embedded in social institutions. Risk assessment, auditability,

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[50] R Sass, "The Transparency Pitfall for AI Regulation," *AI and Society*, 2026, https://doi.org/10.1007/s00146-026-03128-0.

[51] D S Schiff, "Strategies for Harmonizing Fragmented AI Ethics Frameworks, Standards, and Regulations," in *Handbook of Human-Centered Artificial Intelligence*, 2026, 1897–1940, https://doi.org/10.1007/978-981-95-3658-0_82; Ismail et al., "Review on Trend of Waqf Technology."

[52] S Teixeira et al., "Towards Responsible AI Governance: A Multidimensional Ethical Evaluation Framework," in *Communications in Computer and Information Science*, vol. 2839 CCIS, 2026, 70–85, https://doi.org/10.1007/978-3-032-19096-3_5; M Ikhsan, "AI Risk Management for System Design: An Ontology-Driven Approach Integrating Engineering Principles and Ethical Insights," in *Lecture Notes in Computer Science*, vol. 15832 LNCS, 2026, 245–53, https://doi.org/10.1007/978-3-031-99554-5_39.

[53] Al-Shatibi, *Al-Muwafaqat Fi Usul Al-Shariah*.

[54] Auda, *Maqasid Al-Shariah as Philosophy of Islamic Law: A Systems Approach*.

human oversight, and redress are not merely procedural requirements; they are mechanisms for preventing *mafsadah* and securing *maṣlaḥah*. Second, *maqāṣid* prevents accountability from being reduced to formal compliance. An AI system may satisfy documentation requirements but still undermine dignity, intellect, property, or social trust if it produces biased outcomes, manipulates users, violates privacy, or distributes harm unequally. From this perspective, accountability must be evaluated not only by whether institutions follow procedures, but by whether those procedures protect essential human goods.

The finding also has direct relevance for digital Muslim societies. Muslim institutions increasingly encounter AI in education, Islamic finance, public administration, religious communication, halal governance, zakat management, and digital public life. If AI governance is moving toward institutional accountability, then Muslim societies cannot respond to AI only through general moral advice or permissibility debates. They require governance mechanisms capable of auditing AI systems, assigning responsibility, protecting users, and providing remedies. This is where the concern of Islamicate Futures becomes visible. The future of Muslim societies will be shaped not only by whether they adopt AI, but by whether they develop accountable institutions that can govern AI according to ethical traditions, public welfare, and social justice. Stakeholder engagement is therefore crucial: developers, policymakers, Islamic scholars, users, regulators, and affected communities must participate in accountability structures rather than leaving AI governance solely to technical experts or private firms.[55] In politically or infrastructurally constrained contexts, sector-specific approaches may be necessary because weak institutions can intensify AI risks and reduce the effectiveness of formal ethical commitments.[56]

The implication for Islamicate Futures is that AI governance should be understood as a site where Islamic knowledge traditions, ethical reasoning, public policy, and digital transformation intersect. A future-oriented Islamic studies approach cannot be satisfied with asking whether AI is compatible with Islam in a general sense. It must ask how Muslim societies can build institutions capable of governing algorithmic systems responsibly. Integrated frameworks that combine ethical principles, technical standards, audit mechanisms, legal safeguards, and cultural sensitivity are therefore necessary for responsible AI deployment.[57] Adaptive governance mechanisms, including living standards and rapid-response task forces, may also be needed because AI risks evolve faster than conventional regulatory cycles.[58] In this respect, *maqāṣid al-sharīʿah* can contribute to global AI governance by providing a normative account of human welfare, while global AI governance frameworks provide institutional tools for translating ethical commitments into practice.

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[55] Meduri et al., "Accountability and Transparency Ensuring Responsible AI Development"; V K Manda, V Christy, and J M Rao, "Ethical AI and Decision-Making in Management Leadership," in *Ethical Dimensions of AI Development*, 2024, 197–226, https://doi.org/10.4018/979-8-3693-4147-6.ch009; Schiff, "Strategies for Harmonizing Fragmented AI Ethics Frameworks, Standards, and Regulations."

[56] B Hamamra and N Soleiman, "Ethical Artificial Intelligence in Higher Education under Israeli Occupation: A Contextual Framework for Palestinian Universities," *Ethics and Education*, 2026, https://doi.org/10.1080/17449642.2026.2681566.

[57] Teixeira et al., "Towards Responsible AI Governance: A Multidimensional Ethical Evaluation Framework"; Ikhsan, "AI Risk Management for System Design: An Ontology-Driven Approach Integrating Engineering Principles and Ethical Insights."

[58] Schiff, "Strategies for Harmonizing Fragmented AI Ethics Frameworks, Standards, and Regulations."

This subsection demonstrates that responsible AI governance has entered an accountability phase in which ethical principles are increasingly judged by their institutional enforceability, auditability, and capacity to prevent harm. For future-oriented Islamic and Islamicate studies, this finding is crucial: *maqāṣid*-based AI ethics must move beyond moral abstraction and become a framework for accountable governance capable of protecting human welfare, religious integrity, social trust, and public justice in digital Muslim societies.

Digital Muslim Societies Require AI Governance that Protects Religious Knowledge, Moral Agency, and Public Welfare

The central theoretical tension emerging from this study is that AI governance in digital Muslim societies cannot be understood merely as a problem of technical reliability or legal compliance, because algorithmic systems increasingly mediate religious knowledge, moral agency, public welfare, and the social formation of Muslim life. This finding complicates dominant AI governance debates, which often frame the problem through universal principles of transparency, fairness, safety, accountability, and privacy, but devote less attention to how algorithmic infrastructures reshape religious authority, epistemic trust, communal ethics, Islamic education, and welfare institutions. In Muslim contexts, AI does not simply automate decisions or optimize services; it intervenes in the conditions under which Islamic knowledge becomes visible, credible, contestable, and actionable. The issue, therefore, is not whether Muslim societies should adopt AI, but how they can govern AI in ways that preserve religious integrity, human dignity, epistemic responsibility, and public benefit.

This debate is intensified by the demographic and digital position of Muslim societies in the twenty-first century. Pew Research Center reports that Muslims were the fastest-growing major religious group between 2010 and 2020, increasing by 347 million people and reaching 25.6% of the global population in 2020.[59] Earlier projections also suggest that Muslims may approach numerical parity with Christians by 2050, with countries such as Pakistan and Nigeria expected to remain central to global Muslim demography.[60] These demographic shifts matter because Muslim publics are not peripheral to the future of digital governance. They represent a large, young, and increasingly connected population whose religious learning, civic participation, economic activity, and cultural expression are mediated by digital systems. The rise of digitally native Muslim youth further complicates this landscape, as younger generations increasingly encounter religious content through platforms, influencers, short-form video, search systems, and algorithmic recommendation environments rather than only through mosques, madrasas, universities, or formal scholarly institutions.[61]

The empirical context of digital transformation reinforces this point. DataReportal's *Digital 2026 Global Overview Report* estimates that global internet use reached approximately 6.04 billion people by October 2025, with internet penetration at 73.2%, while approximately 2.21 billion people remained offline.[62]

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[59] Pew Research Center, "How the Global Religious Landscape Changed from 2010 to 2020" (Pew Research Center, 2025), https://www.pewresearch.org/religion/2025/06/09/how-the-global-religious-landscape-changed-from-2010-to-2020/.

[60] Pew Research Center, "The Future of World Religions: Population Growth Projections, 2010-2050" (Pew Research Center, 2015).

[61] W Hefni et al., "Transitional Religiosity in Accessing Sources of Islamic Law: Transforming Authority and Practices among Generation-Z Muslims in Austria," *Juris: Jurnal Ilmiah Syariah* 25, no. 1 (2026): 201–11, https://doi.org/10.31958/juris.v25i1.16495.

[62] Simon Kemp, "Digital 2026: Global Overview Report" (DataReportal, 2025), https://datareportal.com/reports/digital-2026-global-overview-report.

The report also estimates 5.66 billion active social media user identities, equivalent to 68.7% of the global population, and notes that more than one billion people use AI every month.[63] Although these figures are not limited to Muslim societies, they describe the infrastructure within which Muslim publics now live, learn, deliberate, and organize. Islamic learning, fatwa circulation, Qur'anic interpretation, *da'wah*, *halal* consumption, *zakat* administration, Islamic finance, gender discourse, political communication, and Muslim identity formation increasingly occur inside algorithmically mediated environments. This means that AI governance in Muslim societies must be evaluated not only by system performance, but by its effects on knowledge transmission, ethical subject formation, communal trust, and institutional legitimacy.

Previous digital religion scholarship provides an important foundation for understanding this transformation, but AI introduces a more complex layer of mediation. Campbell shows that digital media reshape religious authority, ritual practice, community, identity, and everyday religious life[64], while Bunt demonstrates that cyber-Islamic environments transform Muslim authority and religious communication through networked media.[65] This literature challenged earlier assumptions that digital media merely transmit religious content through new channels. Instead, it showed that digital technologies reorganize religious practice itself. Recent scholarship extends this argument by showing how digital platforms decentralize religious authority and enable the emergence of "celebrity imams," "cyber-muftis," religious digital creatives, and platform-based religious influencers whose legitimacy may derive from visibility, affective proximity, media skill, and audience engagement rather than formal scholarly training.[66] Zaid's notion of "liquid authority" is particularly useful because it captures a form of religious legitimacy that is relational, mobile, affective, and platform-dependent rather than institutionally fixed.[67]

The present study refines this digital religion debate by arguing that AI intensifies the shift from mediated authority to algorithmically structured authority. Digital platforms already decentralized religious communication, but AI systems add capabilities of classification, prediction, generation, personalization, and automated recommendation. This changes the problem from "who speaks online?" to "which forms of religious speech are made visible, ranked, amplified, generated, moderated, or suppressed by algorithmic systems?" Hybrid religious practices remain important: formal scholars, religious councils, pesantren, universities, and fatwa institutions continue to possess recognized authority, while digital platforms amplify diverse voices and create new publics. Yet this hybridity does not eliminate risk. It produces a more complex field in which formal authority, algorithmic visibility, influencer legitimacy, and user trust interact. The

[63] Kemp.

[64] Campbell, *Digital Religion: Understanding Religious Practice in New Media Worlds*.

[65] Bunt, *Hashtag Islam: How Cyber-Islamic Environments Are Transforming Religious Authority*.

[66] S H Wahid and S Abdulloh, "Digital Islamic Authority: A Revolutionary Shift or Mere Hype? A Systematic Review," *SN Social Sciences* 6, no. 2 (2026), https://doi.org/10.1007/s43545-026-01328-5; R Lohlker and S H Wahid, "The Transformation of Islamic Religious Authority," *Religions* 17, no. 4 (2026), https://doi.org/10.3390/rel17040493; Atallah, "Algorithmic Mediation and Religious Authority: Muslim Engagements with Digital Fatwa Platforms"; H. A Campbell, *Religion in the Digital Age: Reimagining Authority and Ritual.* (Oxford University Press., 2022); B Zaid et al., "Digital Islam and Muslim Millennials: How Social Media Influencers Reimagine Religious Authority and Islamic Practices," *Religions* 13, no. 4 (2022), https://doi.org/10.3390/rel13040335.

[67] B Zaid, M Ibahrine, and M Ben Moussa, "Networked Islam and Liquid Authority: Everyday Influencers and Young Muslim Practice," *New Media and Society*, 2026, https://doi.org/10.1177/14614448261436035.

governance challenge is therefore not simply to defend traditional hierarchy against digital disruption, but to establish accountability mechanisms for AI systems that shape religious visibility and interpretive authority.

The tension becomes sharper in the case of AI-generated or algorithmically amplified religious content. Search engines, recommender systems, and generative AI tools may influence which Qur'anic explanations, hadith interpretations, fatwas, ethical opinions, or religious narratives appear authoritative to users. This creates risks of unverified religious content, epistemic fragmentation, and what recent studies describe as anomalous digital fatwas religious judgments or guidance circulating outside recognizable procedures of scholarly accountability.[68] The problem is not simply misinformation in a generic sense. In Islamic knowledge traditions, authority is connected to chains of learning, interpretive competence, disciplinary formation, communal recognition, and ethical responsibility. When AI systems generate religious answers without transparent sourcing, scholarly review, or contextual sensitivity, they may weaken the epistemic conditions that make religious knowledge accountable. This does not mean that AI cannot assist Islamic education or religious inquiry. It means that AI-assisted religious knowledge requires governance mechanisms that distinguish access from authority, information retrieval from interpretation, and automated response from accountable religious reasoning.

The *maqāṣid* framework clarifies why this issue is not merely institutional, but ethical. *Ḥifẓ al-dīn* requires the protection of religious integrity, moral agency, and the conditions of responsible religious understanding. In AI governance, this protection cannot be reduced to preventing explicit religious insult or offensive content. It must include safeguards against religious manipulation, distorted Islamic knowledge, unauthorized claims of authority, algorithmic radicalization, and religious profiling. *Ḥifẓ al-ʿaql* is equally central because AI systems may influence the user's capacity to reason, verify, interpret, and form judgment. Hallucinated religious answers, opaque recommendation systems, addictive platform design, and overdependence on automated religious guidance can undermine epistemic autonomy. From this perspective, *maqāṣid*-oriented AI governance does not ask only whether technology is useful; it asks whether digital systems cultivate or erode the intellectual and moral capacities required for responsible Muslim subjecthood.

This *maqāṣid*-based interpretation also expands the scope of public welfare. In many global AI ethics frameworks, public welfare is framed through safety, privacy, fairness, and rights protection. These concerns are necessary, but in Muslim societies they must be connected to Islamic social institutions such as zakat, waqf, halal governance, Islamic finance, education, and community welfare. Studies on digital zakat in Indonesia and Malaysia suggest that digital platforms can improve accessibility, efficiency, distribution, and community welfare when aligned with Islamic principles of justice.[69] Digital transformation has also created

[68] I N Abusharif, "Discussion and Debate Forum: Religious Knowledge Production and Digital Affordances," *Journal of Islamic and Muslim Studies* 9, no. 1 (2024): 108–14, https://doi.org/10.2979/jims.00030.

[69] A Abidin and P Utami, "THE REGULATION OF ZAKAT DIGITAL TECHNOLOGY IN CREATING COMMUNITY WELFARE IMPACT ON ECONOMIC DEVELOPMENT," *Journal of Legal, Ethical and Regulatory Issues* 23, no. 5 (2020): 1–9, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85096320342&partnerID=40&md5=8cf0d4b4b6e6961d5ccd6ac47f7c8409; A Ghofar et al., "Young Muslim Generation's Preferences for Using Digital Platforms for Zakat Payments: A Cross-Country Study of Indonesia and Malaysia," *Journal of Infrastructure, Policy and Development* 8, no. 6 (2024), https://doi.org/10.24294/JIPD.V8I6.3249.

new forms of economic empowerment, including for Muslim women in micro, small, and medium enterprises, where digital tools may support market access, financial participation, and gender inclusion.[70] At the same time, Islamic welfare systems remain deeply shaped by religiosity, social trust, and moral obligation, particularly during economic and political instability. These studies indicate that AI governance in Muslim societies must be attentive not only to individual data rights, but also to collective welfare systems and distributive justice.

This finding refines global AI ethics by showing why contextualization is necessary without retreating into cultural exceptionalism. UNESCO, OECD, NIST, and the European Union AI Act provide important governance principles concerning dignity, fairness, privacy, safety, transparency, accountability, and risk management.[71] These principles are relevant to Muslim societies and should not be dismissed as external or incompatible. However, their dominant vocabulary does not fully address the specific stakes of religious authority, Islamic knowledge verification, halal economic practices, zakat governance, communal trust, moral agency, and religious identity. The *maqāṣid* framework strengthens global AI ethics by connecting universal governance principles with the protection of concrete human goods: religion, life, intellect, dignity, lineage, property, and public welfare. It does not propose a separate Islamic AI ethics isolated from international debates, but a contextualized model that can translate global accountability norms into Muslim social and institutional realities.

The finding also complicates simplistic narratives about digital transformation as either liberation or decline. Digital media may decentralize authority, democratize access, and foster ideological pluralism, but it may also produce personalized belief systems, fragmented knowledge, unstable authority, and new tensions around gender roles, personal piety, and public morality.[72] AI intensifies these dynamics because it can personalize religious content, automate interpretive responses, and shape the emotional and ideological environment in which users encounter Islam. The result is not a simple replacement of traditional religious authority by digital authority. It is a layered field in which institutional scholars, influencers, algorithms, users, platforms, and AI-generated outputs participate in the production and circulation of religious meaning. This is why ethical governance in areas such as Qur'anic studies and digital religious education has become a pressing concern.[73]

From an Islamicate Futures perspective, the theoretical contribution of this finding lies in moving the debate from reactive adaptation to anticipatory governance. Much scholarship on Islam and digital technology asks how Muslim

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[70] S N Azizah, M Fakhruddin, and I Yuliani, "The Influence of Digital Transformation in Speeding Up the Empowerment of the Muslim Women's Economy to Improve the Performance of Micro, Small, and Medium Enterprises (MSMEs) in Ponorogo," in *Contributions to Management Science*, vol. Part F3298, 2024, 71–107, https://doi.org/10.1007/978-3-031-61778-2_5.

[71] Council, Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence.

[72] Z G Zhorabek et al., "Digital Post-Islamism and the Cognitive Transformation of Islamic Belief: A Comparative Study," *Pharos Journal of Theology* 106, no. 5 (2025): 1–8, https://doi.org/10.46222/pharosjot.106.522.

[73] A N A Syahir et al., "Artificial Intelligence and Digital Transformation in Qur'anic Studies: A Systematic Literature Review," *Quranica* 17, no. 2 Special Issue (2025): 542–85, https://www.scopus.com/inward/record.uri?eid=2-s2.0-105018626724&partnerID=40&md5=4176bc4598585db3a6e882d6c7556edd; A Wedi and D Mardiana, "Digital Transformation Model of Islamic Religious Education in the AI Era: A Case Study of Madrasah Aliyah in East Java, Indonesia," *International Journal of Learning, Teaching and Educational Research* 24, no. 8 (2025): 842–63, https://doi.org/10.26803/ijlter.24.8.37.

actors use platforms, how online religious authority changes, or how digital media affects practice. These questions remain important, but the AI era requires a further question: what kinds of institutions, ethical standards, and accountability mechanisms are needed to govern technologies that will shape the future of Muslim knowledge and public life? Islamicate Futures is not merely concerned with predicting future Muslim societies; it examines how Islamic ethical traditions, institutions, and social imaginaries can participate in shaping those futures. AI governance therefore becomes a site where Islamic knowledge systems, *maqāṣid*-oriented reasoning, digital religion, education, welfare, and public policy converge.

The originality of this study lies in its argument that digital Muslim societies require AI governance capable of protecting religious knowledge, moral agency, and public welfare simultaneously. This position challenges approaches that treat AI governance as a purely technical or regulatory matter and also refines Islamic ethical discussions that remain limited to permissibility or abstract moral evaluation. By reading AI through *maqāṣid al-sharīʿah* and digital religion theory, this article shows that algorithmic accountability in Muslim contexts must be assessed by its effects on Islamic knowledge traditions, religious authority, epistemic autonomy, dignity, welfare systems, and the ethical formation of future Muslim publics. This theoretical debate strengthens the article's contribution by demonstrating that responsible AI governance in digital Muslim societies is not a secondary application of global AI ethics, but a distinctive and necessary field of future-oriented Islamicate scholarship.

Maqāṣid al-Sharīʿah Provides an Operational Ethical Matrix for Algorithmic Accountability

The combination of documentary analysis and *maqāṣid*-based ethical interpretation reveals that algorithmic accountability is not only a procedural problem of audit, transparency, and compliance, but also a normative problem concerning which human goods AI governance must protect. This methodological and theoretical integration allows the present study to move beyond two limitations in existing scholarship: the tendency of AI governance literature to emphasize technical and institutional mechanisms without sufficiently specifying their deeper ethical telos, and the tendency of Islamic ethical discussions on technology to remain at the level of general permissibility, value affirmation, or moral exhortation. By reading primary AI governance documents alongside classical and contemporary *maqāṣid* texts, the study identifies *maqāṣid al-sharīʿah* as an operational ethical matrix capable of translating Islamic ethical reasoning into concrete criteria for algorithmic accountability.

The analytical value of the method lies in treating global AI governance documents and *maqāṣid* literature not as separate textual domains, but as mutually illuminating sources for conceptual construction. Documentary analysis makes it possible to identify the governance vocabulary that now dominates responsible AI debates: risk assessment, transparency, auditability, traceability, explainability, human oversight, documentation, monitoring, and redress. At the same time, *maqāṣid*-based analysis asks a different but necessary question: what ethical goods should these governance mechanisms ultimately protect? This second question is crucial because accountability procedures can easily become formalistic if they are detached from substantive ethical ends. An AI system may be documented, explainable, or technically auditable, yet still undermine dignity, epistemic autonomy, economic justice, or religious integrity. The *maqāṣid*

framework therefore sharpens the interpretation of global AI governance by connecting procedural accountability with the protection of essential human goods.

The first insight generated by this approach is that *maqāṣid al-sharīʿah* can transform AI ethics from a principle-based discourse into an evaluative matrix. In classical Islamic legal theory, *maqāṣid* is concerned with the higher objectives of the *Sharīʿah*, especially the realization of benefit and the prevention of harm. Al-Ghazālī identifies the preservation of religion, life, intellect, lineage, and property as essential goods whose protection is necessary for human welfare.[74] Al-Shāṭibī develops this into a systematic theory of *maṣlaḥah*, arguing that the law seeks to secure necessary, complementary, and embellishing interests in human life.[75] Ibn ʿĀshūr expands *maqāṣid* toward broader social and civilizational purposes, including social order, freedom, justice, and human flourishing.[76] Contemporary works further reinterpret *maqāṣid* as a dynamic framework for governance, rights, development, systems thinking, and ethical reform.[77] When applied to AI governance, this tradition does not simply provide Islamic vocabulary; it offers a structured method for evaluating whether algorithmic systems protect or undermine the goods that make ethical social life possible.

This method reveals that AI systems must be assessed not only by their outputs, but also by their social functions and institutional consequences. AI operates through data extraction, classification, prediction, optimization, ranking, recommendation, and automation. Each of these processes may generate efficiency, access, and welfare, but each may also produce bias, exclusion, manipulation, misrecognition, dependency, or harm. A *maqāṣid*-based analysis therefore shifts the evaluative question from "Is this AI tool useful?" to "Which human goods does this AI system protect, expose, redistribute, or endanger?" This shift is methodologically important because it prevents the discussion from becoming merely descriptive. Instead of simply noting that AI governance documents emphasize risk, auditability, and transparency, the *maqāṣid* framework interprets those mechanisms as means for protecting religion, life, intellect, dignity, lineage, property, justice, and public welfare.

The first dimension of the matrix is *ḥifẓ al-dīn*, which translates into governance criteria concerning religious integrity, moral agency, and protection from religious manipulation. In digital Muslim societies, AI systems may generate religious explanations, recommend Islamic content, moderate religious speech, assist religious education, or support institutional services. A purely technical analysis might ask whether such systems are accurate, efficient, or scalable. A maqāṣid-based analysis asks whether they preserve the integrity of religious knowledge, distinguish scholarly interpretation from automated text generation, protect users from manipulative religious content, and prevent harmful profiling based on religious identity. This does not mean that AI cannot be used in Islamic education or religious communication. It means that when AI enters religious domains, accountability must include disclosure, source traceability, human scholarly oversight, and institutional responsibility. In this respect, *maqāṣid* extends UNESCO's concern with human dignity and rights[78] and the OECD's

[74] Al-Ghazali, *Al-Mustasfa Min Ilm Al-Usul*.

[75] Al-Shatibi, *Al-Muwafaqat Fi Usul Al-Shariah*.

[76] Muḥammad al-Ṭāhir Ibn ʿĀshūr, *Treatise on Maqāṣid Al-Sharīʿah A4 - El-Mesawi, Mohamed El-Tahir* (London: International Institute of Islamic Thought, 2006).

[77] Kamali, *Maqasid Al-Shari'ah Made Simple*; Auda, *Maqasid Al-Shariah as Philosophy of Islamic Law: A Systems Approach*.

[78] UNESCO, "Recommendation on the Ethics of Artificial Intelligence."

emphasis on human-centred AI by identifying religious agency as a specific ethical good requiring protection in Muslim contexts.[79]

The second dimension is *ḥifẓ al-nafs*, which translates into safety, harm prevention, psychological wellbeing, and protection from physical, social, and reputational injury. The application of this *maqṣad* to AI governance reveals that safety cannot be limited to technical robustness or cybersecurity. AI systems may affect life and wellbeing through healthcare triage, biometric identification, welfare distribution, predictive policing, educational assessment, employment screening, migration decisions, and automated public services. The European Union AI Act's classification of high-risk AI systems is relevant here because it identifies domains such as education, employment, biometric identification, law enforcement, migration, justice, and essential services as areas where AI can seriously affect health, safety, and fundamental rights.[80] A *maqāṣid*-based reading interprets these regulatory categories as ethical sites where *ḥifẓ al-nafs* must be institutionally protected. The contribution of *maqāṣid* is to insist that risk management is not merely a compliance requirement; it is a moral obligation to prevent *mafsadah* where AI systems can harm persons, communities, and institutions.

The third dimension is *ḥifẓ al-ʿaql*, which is particularly important in the context of generative AI, recommendation systems, and algorithmically mediated knowledge. AI can support learning, translation, information retrieval, and research, but it can also produce hallucinated content, misinformation, cognitive dependency, and manipulative epistemic environments. When applied to AI governance documents, *ḥifẓ al-ʿaql* clarifies why explainability, literacy, and source traceability are not merely technical ideals. They are necessary protections for the human capacity to reason, verify, interpret, and make informed judgments. UNESCO's emphasis on awareness and literacy is therefore significant because it links AI governance with education, public understanding, digital skills, and media literacy.[81] NIST's trustworthiness approach is also relevant because it frames reliable AI as a matter of systematic risk identification and management across the AI lifecycle (NIST, 2023). The *maqāṣid* contribution is to deepen this concern by framing epistemic autonomy as an ethical good, not merely as a functional requirement for better user experience.

The fourth dimension combines *ḥifẓ al-nasl and ḥifẓ al-ʿirḍ*, which translate into dignity, identity protection, family integrity, privacy, and protection from reputational harm. This dimension demonstrates how *maqāṣid*-based analysis expands conventional privacy discourse. AI-related harms such as deepfakes, biometric surveillance, non-consensual image generation, defamatory synthetic content, religious profiling, and automated misclassification are not only problems of data misuse. They may damage honour, dignity, family trust, communal standing, and social recognition. The European Commission's guidance on the AI Act and its treatment of AI-generated content, deepfakes, biometrics, and high-risk applications is therefore relevant to this *maqāṣid* dimension.[82] Yet *maqāṣid* adds a layer of interpretation that regulatory language alone may not fully capture: the harm of such systems is moral and social as well as informational. It

[79] OECD, "Corporate Governance and Value Creation"; OECD, "OECD AI Principles Overview."

[80] Council, Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence.

[81] UNESCO, "Recommendation on the Ethics of Artificial Intelligence."

[82] Commission, "AI Act: Shaping Europe's Digital Future."

affects how persons and communities are recognized, protected, and respected in public life.

The fifth dimension is *ḥifẓ al-māl*, which translates into economic justice, fraud prevention, fair access to services, and accountability in automated financial decision-making. AI is increasingly used in credit scoring, insurance, fraud detection, banking, platform work, investment recommendations, digital advertising, and consumer profiling. The European Commission identifies access to essential private and public services, including credit scoring, as a high-risk AI domain because such systems may affect whether people can obtain loans or essential services.[83] A *maqāṣid*-based interpretation shows that the protection of property is not limited to preventing theft or direct financial loss. It also includes preventing opaque automated exclusion, discriminatory scoring, exploitative profiling, algorithmic manipulation, and unfair distribution of economic opportunity. This is especially relevant for digital Muslim societies where Islamic finance, zakat, waqf, halal economies, and financial inclusion increasingly intersect with digital platforms and automated decision systems.

The matrix produced by this analysis supports existing algorithmic accountability scholarship while also extending it. Raji emphasize that algorithmic auditing must operate across the AI lifecycle rather than after deployment alone.[84] Kroll argue that accountable algorithms require legal and technical mechanisms that make automated decisions reviewable.[85] Mittelstadt critiques the assumption that ethical principles can guarantee ethical AI without institutional implementation.[86] The present study accepts these arguments, but it adds a *maqāṣid*-based question that is often underdeveloped in the accountability literature: what exactly should algorithmic audits be designed to protect? The answer cannot be limited to accuracy, transparency, or procedural fairness. From a *maqāṣid* perspective, auditability must examine whether AI systems protect religious agency, life and safety, intellect and epistemic autonomy, dignity and identity, property and economic justice, and the broader public interest.

The strength of this approach is that it gives Islamic ethics operational relevance without reducing it to abstract normativity. Rather than invoking *maqāṣid* as a general moral slogan, the analysis translates it into governance dimensions: religious integrity, harm prevention, epistemic autonomy, dignity and privacy protection, and economic justice. These dimensions can then be developed into audit questions, risk indicators, documentation standards, human oversight procedures, and redress mechanisms. For example, a *maqāṣid*-based audit of an AI religious education tool would ask whether the system discloses AI-generated content, identifies sources, avoids impersonating scholarly authority, provides mechanisms for human review, and prevents harmful distortion of religious knowledge. A *maqāṣid*-based audit of AI credit scoring would ask whether the system avoids discriminatory exclusion, provides explanation and appeal, protects user data, and prevents economic harm. In both cases, *maqāṣid* enables Islamic ethical reasoning to enter governance practice.

At the same time, this approach has limits. It does not by itself solve the technical problems of model opacity, data bias, hallucination, or automated discrimination. Nor does it replace the need for empirical testing, computational auditing, legal regulation, or institutional enforcement. A *maqāṣid*-based

[83] Commission.

[84] Raji et al., "Closing the AI Accountability Gap: Defining an End-to-End Framework for Internal Algorithmic Auditing."

[85] Kroll et al., "Accountable Algorithms."

[86] Mittelstadt, "Principles Alone Cannot Guarantee Ethical AI."

framework can clarify what should be protected and why, but it still requires translation into measurable indicators, sector-specific standards, expert review, and institutional capacity. This limitation is methodologically important. It prevents the article from overstating the role of Islamic ethical theory and keeps the framework open to interdisciplinary collaboration with computer science, law, public policy, education, Islamic finance, religious studies, and digital governance. The contribution of *maqāṣid* is therefore normative and analytical, not technically self-sufficient.

The relevance of this approach to Islamicate Futures lies in its capacity to connect Islamic knowledge traditions with future-oriented governance. Islamicate Futures is not merely concerned with imagining Muslim futures in abstract terms; it asks how Islamic ethical reasoning, institutions, and knowledge systems can respond to long-term transformations in technology, authority, education, economy, and public life. The *maqāṣid* matrix developed here offers one way to make that response analytically concrete. It shows how a classical Islamic ethical tradition can be reinterpreted without being detached from contemporary institutional problems. It also shows how AI governance can be localized within Muslim societies without becoming isolated from international debates on responsible AI. In this sense, *maqāṣid*-based analysis contributes to a plural account of AI governance: one that is globally intelligible, ethically grounded, and attentive to Muslim social realities.

This subsection demonstrates that the study's method and theory work together to produce a distinctive contribution: documentary analysis identifies the procedural architecture of responsible AI governance, while *maqāṣid*-based ethical interpretation supplies the normative matrix for evaluating what those procedures must protect. By translating the protection of essential human goods into criteria for algorithmic accountability, this approach advances future-oriented Islamic and Islamicate studies beyond reactive ethical commentary toward a constructive framework for governing AI in digital Muslim societies.

A *Maqāṣid*-Based Framework Reorients Responsible AI Governance toward Islamicate Futures

The main theoretical implication of this study is that responsible AI governance in digital Muslim societies must be reoriented from reactive ethical assessment toward anticipatory institutional design grounded in *maqāṣid al-sharīʿah*. This finding contributes to Islamic studies, Islamicate studies, AI ethics, governance studies, digital religion, and Muslim society studies by showing that Islamic ethical reasoning can function not only as a source of moral evaluation after technological adoption, but also as a framework for shaping the purposes, procedures, safeguards, and accountability structures of AI systems before they become socially embedded. In this sense, *maqāṣid al-sharīʿah* is not treated as a supplementary religious vocabulary attached to global AI ethics, but as a substantive theoretical resource for rethinking how algorithmic systems should be governed in relation to knowledge, ethics, authority, welfare, justice, and Muslim public life.

This argument extends existing debates on responsible AI by challenging the assumption that global AI governance frameworks are normatively complete once they include transparency, fairness, privacy, safety, and accountability. UNESCO's ethical framework, the OECD AI Principles, the NIST AI Risk Management Framework, and the European Union AI Act have established important principles and procedural requirements for responsible AI governance. However, these frameworks are largely articulated through secular, regulatory,

institutional, and rights-based vocabularies. They provide strong tools for risk management and compliance, but they do not fully address the moral grammars through which Muslim societies understand religious integrity, public welfare, epistemic responsibility, communal trust, and accountability before human and transcendent obligations. Recent studies have therefore argued that Islamic ethics, rooted in *maqāṣid al-sharīʿah*, offers an important normative foundation for AI governance because it emphasizes justice, transparency, accountability, human dignity, and the preservation of essential human goods.[87]

The proposed framework does not reject international AI governance. Rather, it reinterprets it through *maqāṣid*-oriented reasoning. Its first dimension, purpose legitimacy, requires AI systems to be evaluated according to whether their objectives serve *maṣlaḥah* and prevent *mafsadah*. This dimension draws directly on the *maqāṣid* principle that actions, institutions, and policies must be judged by their purposes and consequences, not merely by formal permissibility or technical efficiency.[88] In AI governance, this means that an algorithmic system cannot be considered responsible only because it is accurate or profitable. It must also be assessed according to whether its purpose contributes to human welfare, justice, social trust, and ethical public life. AI used to improve access to healthcare, education, zakat distribution, halal certification, public services, or financial inclusion may serve *maṣlaḥah* if it remains transparent, fair, accountable, and subject to human oversight. By contrast, AI used for manipulative profiling, exploitative advertising, coercive surveillance, discriminatory scoring, or religious manipulation violates the *maqāṣid* logic of ethical purpose even if it operates efficiently.

The second dimension, harm prevention, connects *maqāṣid al-sharīʿah* with contemporary risk governance. It corresponds to *ḥifẓ al-nafs, ḥifẓ al-ʿaql, ḥifẓ al-ʿirḍ, and ḥifẓ al-māl*, and it aligns with UNESCO's proportionality and do-no-harm principle, NIST's lifecycle risk-management model, and the EU AI Act's risk-based obligations.[89] The theoretical contribution of *maqāṣid* lies in clarifying that risk is not merely a technical probability of system failure, but an ethical threat to protected human goods. Bias, privacy violations, hallucinated outputs, surveillance abuse, religious misclassification, and discriminatory access to services are not isolated operational defects. They are forms of *mafsadah* when they damage dignity, reason, property, social participation, or religious agency. This understanding strengthens current AI governance debates by insisting that risk assessment must include moral, social, religious, and communal forms of harm that may not be fully captured by standard technical compliance models.

The third dimension, cognitive and epistemic integrity, advances the debate by linking AI governance to *ḥifẓ al-ʿaql*. This is especially important for generative AI, search engines, recommendation systems, and Islamic knowledge platforms. Responsible AI governance must protect the human capacity to reason, verify,

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[87] Qaruty et al., "Artificial Intelligence and Islamic Jurisprudence: Ethical, Legal, and Theological Considerations"; Zulkepli et al., "ARTIFICIAL INTELLIGENCE IN ISLAMIC FINANCE: AN OUTLOOK BASED ON MAQASID AL-SHARIAH"; N F Paiman et al., "Guiding Principles for Shariah-Based AI Adoption in Islamic Public Services," in *Proceedings - 2025 10th International Conference on Information and Communication Technology for the Muslim World, ICT4M 2025*, 2025, https://doi.org/10.1109/ICT4M68001.2025.11363552; Al-Janabi and Aljanabi, "Ethical and Legal Foundations of Artificial Intelligence and Computational Decision-Support Frameworks."

[88] Al-Shatibi, *Al-Muwafaqat Fi Usul Al-Shariah*; Auda, *Maqasid Al-Shariah as Philosophy of Islamic Law: A Systems Approach*.

[89] UNESCO, "Recommendation on the Ethics of Artificial Intelligence"; Technology, "Artificial Intelligence Risk Management Framework (AI RMF 1.0)"; Council, Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence.

interpret, and make informed judgments. UNESCO's emphasis on awareness and literacy and the OECD's concern with transparency and explainability provide important international support for this dimension.[90] However, *maqāṣid* adds a distinct theoretical claim: intellect is not merely an instrumental capacity for better decision-making, but an essential human good and a condition of responsible religious and civic agency. This is particularly relevant in digital Muslim societies, where AI-generated religious explanations, automated Qur'anic commentary, platform-based fatwa circulation, and algorithmic content ranking may influence how Muslims access and evaluate religious knowledge. The framework therefore shifts the focus from information access alone to epistemic accountability.

The fourth dimension, dignity and identity protection, draws on *ḥifẓ al-ʿirḍ, ḥifẓ al-nasl, and ḥifẓ al-dīn*. It addresses algorithmic practices that may violate privacy, honour, family integrity, bodily autonomy, religious identity, or communal dignity. The EU AI Act's attention to biometric identification, deepfakes, transparency obligations, and high-risk AI systems provides an important regulatory basis for this concern.[91] Yet *maqāṣid* deepens the analysis by showing that dignity-related harms are not reducible to data misuse or reputational inconvenience. In Muslim societies, religious misclassification, surveillance of Muslim identity, non-consensual image manipulation, deepfake abuse, and algorithmic moderation of Islamic speech may affect honour, family relations, religious belonging, and social recognition. This dimension therefore expands privacy discourse into a broader theory of moral injury and communal dignity.

The fifth dimension, distributive justice and redress, grounds AI accountability in justice, *maṣlaḥah*, and *ḥifẓ al-māl*. Global AI governance frameworks emphasize accountability and fairness, but *maqāṣid*-oriented reasoning requires asking whether AI systems distribute benefits and burdens fairly and whether affected individuals have access to explanation, appeal, correction, compensation, and institutional remedy.[92] This is particularly important in Islamic finance, zakat governance, waqf administration, halal certification, education, and public services. Studies on AI in Islamic finance show that robo-advisors, Shariah compliance monitoring, automated credit assessment, risk management, and fraud detection may enhance innovation and inclusion, but also raise concerns about algorithmic bias, data misuse, opacity, and unequal access.[93] A *maqāṣid*-based strategy can therefore guide AI adoption in Islamic finance by promoting financial inclusion, equitable wealth distribution, risk mitigation, and Shariah compliance, while emerging regulatory debates seek to balance technological innovation with religious and ethical obligations.[94]

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[90] UNESCO, "Recommendation on the Ethics of Artificial Intelligence"; OECD, "Corporate Governance and Value Creation"; OECD, "OECD AI Principles Overview."

[91] Council, Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence; Commission, "AI Act: Shaping Europe's Digital Future."

[92] UNESCO, "Recommendation on the Ethics of Artificial Intelligence"; OECD, "Corporate Governance and Value Creation"; OECD, "OECD AI Principles Overview"; Technology, "Artificial Intelligence Risk Management Framework (AI RMF 1.0)"; Commission, "AI Act: Shaping Europe's Digital Future."

[93] Zulkepli et al., "ARTIFICIAL INTELLIGENCE IN ISLAMIC FINANCE: AN OUTLOOK BASED ON MAQASID AL-SHARIAH."

[94] A F Aysan, H.M.U.D. Qadri, and H Ali, *Artificial Intelligence and the Future of Islamic Finance*, *Artificial Intelligence and the Future of Islamic Finance*, 2026, https://doi.org/10.4324/9781003620525.

This framework contributes to previous scholarship in three principal ways. First, it supports the critique that principle-based AI ethics is insufficient without institutional mechanisms.[95] but adds that such mechanisms must be grounded in a substantive account of the human goods at stake. Second, it extends algorithmic accountability scholarship by integrating Islamic ethical theory into debates about auditability, explainability, contestability, and redress.[96] Third, it contributes to digital religion scholarship by moving beyond the study of online religious communication toward the governance of AI systems that structure religious authority, public knowledge, Islamic education, and Muslim social futures.[97] The article therefore does not merely apply AI ethics to a Muslim context; it re-theorizes accountability through a *maqāṣid*-based model that links moral purpose with institutional design.

The framework also speaks to recent Islamic AI governance proposals. *Maqāṣid*-Aligned AI Governance and Shariah-based AI adoption models have been proposed to align AI systems with Islamic values and address algorithmic bias, privacy, and accountability.[98] The *I'timāni* or trusteeship framework similarly draws on the concept of *amānah* to integrate spiritual and moral accountability into AI governance. These models indicate that Islamic AI ethics is beginning to move from general moral reflection toward governance-oriented theory. The present study advances this trajectory by synthesizing *maqāṣid*, algorithmic accountability, and Islamicate Futures into a single analytical framework. It does not limit Islamic AI governance to compliance with religious norms, but situates it within broader questions of public welfare, institutional responsibility, knowledge integrity, and future Muslim social transformation.

The public policy significance of this contribution is substantial. Existing AI governance frameworks are often shaped by Western regulatory paradigms and may not fully integrate Islamic ethical principles, creating a gap for Muslim-majority societies seeking culturally grounded but internationally credible AI governance.[99] Studies on Muslim public policy increasingly emphasize the need for Shariah-compliant governance frameworks in finance, public services, and education.[100] Countries such as Saudi Arabia and the United Arab Emirates are also developing AI governance models that attempt to harmonize technological innovation with Islamic ethical and cultural values, particularly in relation to

[95] Mittelstadt, "Principles Alone Cannot Guarantee Ethical AI."

[96] Diakopoulos, "Accountability in Algorithmic Decision Making"; Kroll et al., "Accountable Algorithms"; Raji et al., "Closing the AI Accountability Gap: Defining an End-to-End Framework for Internal Algorithmic Auditing."

[97] Campbell, *Digital Religion: Understanding Religious Practice in New Media Worlds*; Bunt, *Hashtag Islam: How Cyber-Islamic Environments Are Transforming Religious Authority*.

[98] Paiman et al., "Guiding Principles for Shariah-Based AI Adoption in Islamic Public Services"; Al-Janabi and Aljanabi, "Ethical and Legal Foundations of Artificial Intelligence and Computational Decision-Support Frameworks."

[99] R Campbell-Esen, J Mahoney, and R Talhouk, "Co-Designing Islamic AI Ethics: Insights from the UK Muslim Community," in *Conference on Human Factors in Computing Systems - Proceedings* , 2026, https://doi.org/10.1145/3772318.3790413; Qutieshat, Al Adwan, and Khater, "Artificial Intelligence in Islamic Law: Ethics, Governance, and Accountability."

[100] Qaruty et al., "Artificial Intelligence and Islamic Jurisprudence: Ethical, Legal, and Theological Considerations"; N F Paiman et al., "Towards a Shariah-Based AI Adoption Model for Islamic Public Services in Malaysia," in *AI-SI 2025 - IEEE International Conference on Artificial Intelligence for Sustainable Innovation: Shaping the Future with Intelligent Solutions*, 2025, https://doi.org/10.1109/AI-SI66213.2025.11341375.

privacy, justice, and accountability.[101] These developments show that the question is no longer whether Muslim societies will engage AI, but whether they can institutionalize AI governance in ways that are ethically grounded, socially legitimate, and globally interoperable.

From the perspective of Islamicate Futures, the central contribution of this framework lies in its anticipatory orientation. It does not ask only how Islam responds to AI as an external technological force. It asks how Islamic ethical traditions can participate in designing accountable technological futures. This distinction is crucial. Much Islamic writing on technology remains reactive: it asks whether a tool is permissible after it has already become socially embedded. A future-oriented *maqāṣid* approach asks prior questions: what kinds of AI systems should be developed, what purposes should guide them, what harms must be prevented, which institutions should govern them, how should affected communities be protected, and what forms of Muslim public life should be sustained in the digital age? This aligns with emerging discussions of Islamicate futures, which examine how Muslim societies imagine and organize their futures in relation to AI, sustainability, education, ethics, and social transformation.[102]

The framework is also relevant beyond explicitly religious domains. Muslim-majority states, Islamic educational institutions, religious councils, zakat and waqf authorities, Islamic finance institutions, halal certification agencies, public-service providers, and Muslim civil society organizations increasingly interact with AI systems. A *maqāṣid*-based accountability framework could guide ethical procurement, religious-content governance, AI literacy in Islamic education, data protection for Muslim communities, accountability standards for Islamic fintech, and responsible AI use in zakat distribution and halal certification. Ethical AI adoption in such sectors may improve efficiency and access, but the *maqāṣid* framework insists that efficiency is not sufficient unless religious integrity, dignity, justice, and public welfare are preserved. This moves *maqāṣid* from theoretical jurisprudence into practical governance design.

Methodologically, the framework demonstrates how Islamic studies can engage AI without falling into technological apologetics or abstract legal formalism. Technological apologetics treats AI as inherently progressive and seeks only Islamic endorsement for it. Abstract legal formalism focuses on permissibility without examining data infrastructures, institutional responsibility, audit mechanisms, political economy, or social consequences. The *maqāṣid*-based framework avoids both weaknesses by treating AI as a socio-technical system whose ethical status depends on purpose, design, data practices, deployment context, institutional oversight, and remedy. It therefore gives Islamic ethics a governance function rather than limiting it to moral commentary.

Theoretically, this study shows that Islamic ethics can contribute to global AI governance as a substantive intellectual resource, not merely as a local religious supplement. *Maqāṣid al-sharīʿah* provides a way to connect dignity, welfare, justice, reason, religion, property, and public interest with contemporary concerns such as transparency, explainability, safety, privacy, auditability, and redress. This makes the framework internationally relevant because it addresses shared AI governance concerns while retaining a distinct Islamic ethical foundation. It also broadens the scope of Islamicate studies by showing that Muslim futures are

[101] E Gorian and N D Osman, "DIGITAL ETHICS OF ARTIFICIAL INTELLIGENCE (AI) IN SAUDI ARABIA AND UNITED ARAB EMIRATES," *Malaysian Journal of Syariah and Law* 12, no. 3 (2024): 583–97, https://doi.org/10.33102/mjsl.vol12no3.798.

[102] S Bolghiran and M Berger, "Muslim(s), Future(s), Europe: A Cautious Exploration," *Journal of Muslims in Europe* 13, no. 3 (2024): 257–72, https://doi.org/10.1163/22117954-bja10112.

not shaped only by theology, law, culture, or politics in conventional terms, but also by algorithmic systems, data infrastructures, automated institutions, and the ethical governance of digital public life. This subsection therefore argues that a *maqāṣid*-based framework reorients responsible AI governance toward Islamicate Futures by transforming Islamic ethics into a forward-looking model of institutional accountability. The originality of the article lies in showing that *maqāṣid* can help Muslim societies move from reactive ethical commentary to anticipatory governance design, thereby preparing the ground for a conclusion that positions responsible AI as a central arena for future-oriented Islamic and Islamicate scholarship.

Conclusion

This article has argued that *maqāṣid al-sharīʿah* can be developed as a normative and analytical framework for algorithmic accountability in responsible AI governance within digital Muslim societies. The study shows that global AI governance has shifted from abstract ethical principles toward institutional accountability, auditability, risk management, human oversight, and redress. However, these frameworks still require deeper ethical grounding when applied to Muslim societies, where AI increasingly shapes religious knowledge, authority, education, finance, welfare, identity, and public communication. The main contribution of this article is the formulation of a *maqāṣid*-based framework that translates the protection of religion, life, intellect, dignity, lineage, and property into governance criteria for AI systems. Through this framework, *ḥifẓ al-dīn* supports religious integrity and moral agency; *ḥifẓ al-nafs* strengthens harm prevention and safety; *ḥifẓ al-ʿaql* protects epistemic autonomy and critical reasoning; *ḥifẓ al-nasl* and *ḥifẓ al-ʿirḍ* safeguard dignity, identity, and privacy; and *ḥifẓ al-māl* advances economic justice and protection from algorithmic exclusion.

Theoretically, this article contributes to Islamic ethics, AI governance, digital religion, and Islamicate Futures by moving Islamic AI ethics beyond general moral reflection toward an operational model of accountability. It shows that *maqāṣid al-sharīʿah* can bridge Islamic ethical reasoning and global responsible AI debates without reducing Islamic ethics to legal formalism or symbolic religious language. The study is limited by its conceptual and documentary design. Future research should test and refine this framework through empirical studies of AI use in Islamic education, digital fatwa platforms, Islamic finance, zakat governance, halal certification, public-service AI, and Muslim digital communities. In this way, responsible AI governance can become a key field for future-oriented Islamic and Islamicate scholarship.

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