**Nizham**
Journal of Islamic Studies

Vol. 14. No. 01, Tahun 2026
P-ISSN: 2339-1235 E-ISSN 2541-7061
https://e-journal.metrouniv.ac.id/index.php/nizham

# Contemporary Ijtihad: History, Implementation Methods, and Challenges in The Age of Artificial Intelligence

**Siti Zumrotus Sa'adah[1] Siti Nur Jannah[2] Ariza Umami[3]**
[12]Universitas Islam Negeri Jurai Siwo Lampung, Indonesia
[3]Universitas Muhammadiyah Metro, Indonesia
Corresponding author: umahzum2022@gmail.com

DOI: https://doi.org/10.32332/nizham.v14i01.13514

| Received: 17-04-2026 | Revised: 10-05-2026 | Accepted: 19-06-2026 |
|---|---|---|

**Abstract**

This study aims to examine contemporary ijtihad by tracing its historical continuity within the tradition of usul al-fiqh, formulating its methodological implementation in the era of Artificial Intelligence, and identifying the epistemological, social, and ethical challenges that emerge when AI enters the domain of Islamic legal reasoning and fatwa production. This research uses a qualitative approach with a limited normative-empirical Islamic legal study. The normative dimension analyzes classical and contemporary sources of usul al-fiqh, maqasid al-shariah, and ijtihad, while the limited empirical dimension captures expert perspectives on the role of AI as an assistive tool rather than an autonomous legal authority. The findings show that contemporary ijtihad is not a rupture from classical tradition, but a continuation of Islamic legal reasoning that integrates textual evidence, reason, maqasid, and social reality. AI can support ijtihad by accelerating legal source retrieval, mapping madhhab differences, comparing arguments, and simulating legal impacts. The study concludes that AI should be positioned within a "digitally supervised ijtihad" model, where technological efficiency remains controlled by scholars, fatwa institutions, domain experts, and ethical-algorithmic audit mechanisms to preserve legal validity, public benefit, and Islamic scholarly responsibility.

**Keywords**: Contemporary ijtihad, *usul al-fiqh*, maqasid al-shariah, artificial intelligence, digital fatwa.

Copyright © 2026. Siti Zumrotus Sa'adah, et. all.
This work is licensed under Attribution-ShareAlike 4.0 International

**Abstrak**

Penelitian ini bertujuan untuk mengkaji ijtihad kontemporer dengan menelusuri kesinambungan historisnya dalam tradisi usul al-fiqh, merumuskan implementasi metodologisnya di era Kecerdasan Buatan, dan mengidentifikasi tantangan epistemologis, sosial, dan etika yang muncul ketika AI memasuki ranah penalaran hukum Islam dan produksi fatwa. Penelitian ini menggunakan pendekatan kualitatif dengan kajian hukum Islam normatif-empiris yang terbatas. Dimensi normatif menganalisis sumber-sumber klasik dan kontemporer usul al-fiqh, maqasid al-syariah, dan ijtihad, sedangkan dimensi empiris terbatas menangkap perspektif ahli tentang peran AI sebagai alat bantu daripada otoritas hukum otonom. Temuan menunjukkan bahwa ijtihad kontemporer bukanlah pemisahan dari tradisi klasik, melainkan kelanjutan dari penalaran hukum Islam yang mengintegrasikan bukti tekstual, akal, maqasid, dan realitas sosial. AI dapat mendukung ijtihad dengan mempercepat pengambilan sumber hukum, memetakan perbedaan mazhab, membandingkan argumen, dan mensimulasikan dampak hukum. Studi ini menyimpulkan bahwa AI harus diposisikan dalam model "ijtihad yang diawasi secara digital", di mana efisiensi teknologi tetap dikendalikan oleh cendekiawan, lembaga fatwa, pakar domain, dan mekanisme audit etika-algoritmik untuk menjaga validitas hukum, manfaat publik, dan tanggung jawab ilmiah Islam.

**Kata Kunci**: Ijtihad kontemporer, *usul al-fiqh*, maqasid syariah, kecerdasan buatan, fatwa digital.

## Introduction

The history of ijtihad demonstrates that Islamic law does not operate as a static system. The tradition of usul al-fiqh, beginning with al-Shafi'i, has structured the relationship between revelation, language, reason, and social reality so that the law can be formulated responsibly. A classic academic debate arose regarding the thesis of the "closure of the door of ijtihad." Hallaq rejects this thesis because the practice of ijtihad continues in the forms of takhrij, tarjih, fatwa, and the development of furu'.[1] Makdisi also points out that usul al-fiqh emerged as an argumentative discipline, not merely a collection of formal rules.[2] This fact underscores that contemporary ijtihad must be understood as a continuation of scholarly history, not as an act of breaking with tradition.

[1] Wael B Hallaq, "Was the Gate of Ijtihad Closed?," *International Journal of Middle East Studies* 16, no. 1 (1984): 3-41 DI-10.1017/S0020743800027598; Wael B Hallaq, "From Fatwas to Furu': Growth and Change in Islamic Substantive Law," *Islamic Law and Society* 1, no. 1 (1994): 29-65 DI-10.1163/156851994X00147.

[2] George Makdisi, "The Juridical Theology of Shafi'i: Origins and Significance of Usul al-Fiqh," *Studia Islamica* 59 (1984): 5–12.

Contemporary methods of ijtihad have evolved through the integration of textual evidence, qiyas, istihsan, istislah, maslahah, and maqasid al-shariah. Al-Shatibi posits maqasid as a framework for safeguarding religion, life, reason, lineage, and property, while Ibn Ashur expands this to include dignity, freedom, and social order.[3] Academic debates arise when the maqasid approach is applied too broadly, risking the undermining of textual discipline. Opwis notes that maslahah is never divorced from the educational context, social standing, and historical environment of legal scholars.[4] Al-Qaradawi then proposes ijtihad intiqa'i, ijtihad insya'i, and a combination of the two to address new issues while maintaining methodological rigor.[5]

Social realities of the digital age underscore the urgency of this study. APJII reports that the number of internet users in Indonesia in 2024 reached 221,563,479, with a penetration rate of 79.5 percent.[6] UGM cites an APJII survey from 2025 showing that 43.7 percent of Gen Z are active AI users, the highest percentage compared to other generations.[7] The Indonesian government has also formulated the 2020–2045 National Artificial Intelligence Strategy, which covers ethics, policy, talent, data infrastructure, research, and priority sectors.[8] These conditions mean that the practice of seeking religious answers is no longer limited to religious study circles, Islamic boarding schools, fatwa forums, or books on Islamic jurisprudence. People are beginning to use chatbots, semantic search engines, and AI-based applications to quickly obtain legal explanations.

Recent literature highlights two major trends. The first trend argues that Artificial Intelligence can assist in tracing legal arguments, mapping differences between schools of thought, processing previous fatwas, and accelerating the analysis of Islamic legal data.[9] The second trend emphasizes the risks of

---

[3] Abu Ishaq Al-Shatibi, *Al-Muwafaqat fi Usul al-Shari'ah*, ed. oleh Abdullah Darraz (Dar Ibn Affan, 1997); Muhammad al-Tahir Ibn Ashur, *Treatise on Maqasid al-Shariah* (International Institute of Islamic Thought, 2006).

[4] Felicitas Opwis, "Maslaha in Contemporary Islamic Legal Theory," *Islamic Law and Society* 12, no. 2 (2005): 182–223.

[5] Yusuf Al-Qaradawi, *Al-Ijtihad al-Mu'asir Bayn al-Indibat wa al-Infirat* (Cairo: Dar al-Tawzi' wa al-Nashr al-Islamiyyah, 1994), 83–97.

[6] APJII, "APJII Jumlah Pengguna Internet Indonesia Tembus 221 Juta Orang" (Asosiasi Penyelenggara Jasa Internet Indonesia, 2024), https://apjii.or.id/berita/d/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang.

[7] Universitas Gadjah Mada, "Gen Z Leads AI Adoption, UGM Expert Shares Tips for Using Artificial Intelligence Wisely" (Universitas Gadjah Mada, 2025), https://ugm.ac.id/en/news/gen-z-leads-ai-adoption-ugm-expert-shares-tips-for-using-artificial-intelligence-wisely/.

[8] Badan Pengkajian dan Penerapan Teknologi, "Strategi Nasional Kecerdasan Artifisial Indonesia 2020-2045" (Jakarta: BPPT, 2020), 29–35, https://korika.id/document/strategi-nasional-kecerdasan-artifisial-indonesia-2020-2045/.

[9] Suud Sarim Karimullah, "The Application of Artificial Intelligence in Islamic Law Discovery," *Mutawasith: Jurnal Hukum Islam* 6, no. 2 (2023): 109-121 DI-10.47971/mjhi.v6i2.748; Muhammad Edo Rahman, Fadilla Syahriani, dan Wilibaldus Jampa, "Islamic Law in Tthe Digital

algorithmic bias, black-box opacity, contextual errors, the erosion of the mufti's authority, and the lack of moral accountability when machines are treated as legal determinants.[10] Jobin, Ienca, and Vayena found that global AI ethical principles often converge on transparency, fairness, accountability, privacy, and harm prevention, but differ in their implementation.[11] This debate is relevant to ijtihad because Islamic legal rulings require competence, propriety, intention, and scholarly authority.

A research gap is evident in the continued separation of studies on the history of ijtihad, methods of implementing contemporary ijtihad, and the challenges posed by Artificial Intelligence. Some studies discuss ijtihad as a legal theory, while others address AI as a tool for issuing fatwas; however, few have comprehensively mapped out the genealogical, methodological, and ethical connections required for contemporary Islamic legal scholarship. This research is important because AI should not be viewed merely as a neutral technology, but rather as a knowledge infrastructure capable of shaping how the Muslim community accesses, understands, and practices Islamic law. Based on this gap, the research questions are: how has the history of contemporary ijtihad emerged from the tradition of usul al-fiqh; how can its implementation methods be formulated in the era of Artificial Intelligence; and what epistemological, social, and ethical challenges arise when AI enters the realm of ijtihad and fatwa. Thus, this article aims to explain the historical continuity of contemporary ijtihad within the tradition of usul al-fiqh, formulate methods for implementing ijtihad in the era of Artificial Intelligence, and analyze the epistemological, social, and ethical challenges that arise when AI is used in the realm of ijtihad and fatwa.

To address this issue, this article employs a qualitative approach with a limited normative-empirical study of Islamic law. The normative approach is used to examine the construction of ijtihad within the traditions of usul al-fiqh, maqāṣid, and contemporary Islamic legal literature, while the limited empirical aspect is used to capture experts' views on the role of AI as an auxiliary tool, rather than a law-making authority. The analysis is conducted through historical-critical, normative-maqāṣidī, and ethical-algorithmic approaches to assess the continuity of ijtihad, the feasibility of its implementation, and the limits of AI use within the Islamic legal sphere. This article does not propose a hypothesis because it does not use a quantitative design, but proceeds from the argument that AI can strengthen the process of ijtihad as an instrument of search, mapping, and

Era: Artificial Intelligence as A Revolutionary Legal Tool in The 21st Century," *Al-Hurriyah: Jurnal Hukum Islam*, 2024, https://doi.org/10.30983/al-hurriyah.v9i2.8545.

[10] Brent D Mittelstadt et al., "The Ethics of Algorithms: Mapping the Debate," *Big Data & Society* 3, no. 2 (2016): 1-21 DI-10.1177/2053951716679679; Iyad Rahwan, "Society-in-the-Loop: Programming the Algorithmic Social Contract," *Ethics and Information Technology* 20, no. 1 (2018): 5–8.

[11] Anna Jobin dan Marcello Ienca, "The Global Landscape of AI Ethics Guidelines," *Nature Machine Intelligence* 1, no. 9 (2019): 389–99, https://doi.org/10.1038/s42256-019-0088-2.

simulation, yet cannot replace the mujtahid because ijtihad requires sharia competence, moral awareness, etiquette, and epistemic responsibility.

## Discussion

### The Genealogy of Contemporary Ijtihad within the Tradition of Usul al-Fiqh

The results of the study show that contemporary ijtihad was not born from empty space, but from the long continuation of the tradition of fiqh proposals that from the beginning regulated the relationship between texts, language, reason, and social change. This finding rejects a reading that positions modern ijtihad as a break from the classical school. Bibliographic data show that the practice of takhrīj, tarjīḥ, fatwa, and the development of furū' continued after the codification period of the madhhab, so the thesis of the closing of the door of ijtihad needs to be read critically.[12] The theory in this context serves to describe the genealogy of ijtihad as an argumentative tradition, not just a personal activity of the mujtahid. The Makdisi framework also emphasizes that the proposition of fiqh is a theological-juridical building that combines the legitimacy of revelation and the rational apparatus.[13]

More than just the personal activity of a mujtahid, various scholarly sources confirm that ijtihad is essentially a structured tradition of argumentation. The theoretical framework developed by George Makdisi, a leading Orientalist, plays a crucial role in describing this genealogy.[14] Makdisi consistently demonstrates that usul al-fiqh is not a narrow and dry legal discipline, but rather a theological-juridical framework that originally integrates the legitimacy of revelation with a highly sophisticated rational apparatus. Makdisi delves deeply into how the legal schools in the medieval Islamic world served as the vanguard of religious orthodoxy, while simultaneously developing dialectical methodology (jadal) as a vital instrument for reasoning about the law and resolving differences of opinion (khilāf) among them.[15] Therefore, the appropriate theoretical position is to view ijtihad as a continuous system of public reasoning, in which the interaction between reason and text is never severed.

Classical ijtihad has established strict methodological boundaries that remain highly relevant in today's digital age. Imam al-Shafi'i, in his magnum opus *"Al-Risālah"*, fundamentally placed *"qiyās"* (analogy) and "*istidlāl*" (deductive reasoning) within a robust framework of control over "*ra'yu*" (personal opinion)[16]. The aim is to ensure that legal reasoning does not devolve into unrestrained,

---

[12] Hallaq, "Was the Gate of Ijtihad Closed?," 3–6.

[13] Makdisi, "The Juridical Theology of Shafi'i: Origins and Significance of Usul al-Fiqh," 5–12.

[14] Makdisi, "The Juridical Theology of Shafi'i: Origins and Significance of Usul al-Fiqh."

[15] Makdisi.

[16] Muḥammad ibn Idrīs Shāfi'ī, *al-Imām Muḥammad ibn Idris al-Shāfi'ī's al-Risāla fī uṣūl al-fiqh : treatise on the foundations of Islamic jurisprudence*, 1987, https://archive.org/details/alimmmuammadibni0000shfi/page/n5/mode/2up.

unfettered opinion and lose its strong normative grounding in primary sources. This firm stance is critical amidst the frenzy of artificial intelligence, which can generate answers rapidly yet fundamentally lacks the intent, propriety, and moral responsibility of a human legal subject. The theory of usul al-fiqh serves to explain that extraordinarily high information processing speed is never synonymous with legal validity and the truth of knowledge. The truth of an ijtihad still requires conformity with valid evidence, precision in linguistic analysis, a deep understanding of the social context, and the scholarly authority of a mujtahid. Thus, although artificial intelligence can be a powerful tool in data and document retrieval, it cannot -and must not- be constructed as an independent holder of sharia authority (Islamic legal authority).

A historical-critical analysis of the trajectory of Islamic legal thought reveals that the doctrine of maqāṣid al-sharīʿah (the universal objectives of the Sharia) has served as the most significant epistemological bridge between the continuity of the classical tradition and the need for legal reform in the modern era. Al-Shātibī, in Al-Muwāfaqāt, systematically formulated five fundamental objectives -the protection of religion, life, intellect, lineage, and property- as the fundamental orientation of every process of Islamic legislation. However, contemporary ijtihad cannot stop there. Findings indicate that later thinkers, such as Ibn ʿĀsyūr (Ibn Ashur) of Tunisia, boldly expanded the scope of the maqāṣid to include noble values such as human dignity, freedom of thought and will, and social order arising from a spirit of cooperation and justice.[17]

This finding is highly significant because it demonstrates that contemporary ijtihad -especially when the subject of study is technology that evolves at an extraordinary pace, such as artificial intelligence- cannot simply stop at a textual search for literal evidence, but must actively interpret and anticipate the broader social consequences of a legal decision. Within this framework, the theory of maqāṣid functions predictively, enabling a mujtahid to assess the potential benefits (*jalb al-maṣāliḥ*) as well as the potential harms (*dar' al-mafāsid*) of a digital innovation, long before its destructive impacts become a widespread and uncontrollable social crisis.[18]

A review of contemporary literature shows that maṣlaḥah (public interest) has consistently remained a highly operational key concept in ijtihad, yet its application must be strictly governed by the discipline of evidence and established principles of usul. Felicitas Opwis, an expert on contemporary Islamic law, offers an important warning in her study of maṣlaḥah. This concept is never truly objectively neutral because it is always closely linked to subjective factors such as the educational background of the scholars who use it, the institutional authorities

[17] Muḥammad al-Ṭāhir bin Muḥammad bin Muḥammad al-Ṭāhir bin ʿĀsyūr al-Tūnisī (w. 1393 H), *al-Maqashid al-Syari'ah*, ed. oleh Muḥammad al-Ḥabīb Ibn al-Khūjah (w. 1433 H) (Qathar: Wazarah al-Auqaf wa al-Syu'un Islamiyah, 2004), https://shamela.ws/book/17094/1517.

[18] Mahroof Athambawa, "Ijtihād Maqāṣidī and Legal Adaptation: A Comparative Analysis of Contemporary Islamic Jurisprudence in Responding to Emerging Issues," 2025.

they represent, and the social and historical environments in which they live and work. This finding is highly relevant for understanding artificial intelligence as a knowledge infrastructure that is also not neutral.

The datasets used to train the model, the choice of algorithmic architecture, the dominant programming languages that carry cognitive biases, and the implicit preferences of technical developers. In this context, the theory of maṣlaḥah serves not only to describe technological benefits but also to critically explain why every claim of benefit from a digital technology must be rigorously tested against the time-tested fundamental values of Sharia.[19] Therefore, contemporary ijtihad must consciously maintain a critical distance from excessive technological enthusiasm, ensuring that maṣlaḥah does not degenerate into a mere pragmatic justification that relaxes moral standards in the name of efficiency and illusory speed.

**Methods for Implementing Contemporary Ijtihad with the Aid of Artificial Intelligence**

Research findings regarding methodology indicate that the most appropriate approach to implementing contemporary ijtihad involves a combination of ijtihad intiqā'i, ijtihad insyā'i, and integrative ijtihad. Al-Qaraḍāwī positions ijtihad intiqā'i as the selection of the strongest opinion from the fiqh tradition, while ijtihad insyā'i is used to formulate new laws when no direct precedent is found for an issue.[20] This finding provides a framework for the use of AI. AI systems can help map out the opinions of the schools of thought, trace legal justifications, and compile comparisons of evidence. The final decision remains with the scholars or fatwa institutions that possess expertise in usul, fiqh, maqāṣid, and an understanding of reality. This model maintains the efficiency of technology without displacing human authority.

Ijtihad in the AI era must shift from an individual approach to a collective-institutional one. Al-Alwānī emphasizes the importance of source-based methodology so that legal reform remains grounded in Islamic epistemological discipline.[21] Kamali views fiqh as having adaptive capacity as long as social change is interpreted through the principles of usul and the objectives of sharia.[22] These findings demonstrate that AI requires an ijtihad team comprising experts in usul al-fiqh, subject matter specialists, data scientists, and digital ethicists. Such

---

[19] Muhamad Ikhsanudin dan Zuhdiyah Zuhdiyah, "Sources Of Islamic Law: An Epistemological Study And Its Relevance In The Contemporary Context," *Sosioedukasi: Jurnal Ilmiah Ilmu Pendidikan Dan Sosial* 14, no. 4 (2025): 4786–93.

[20] Al-Qaradawi, *Al-Ijtihad al-Mu'asir Bayn al-Indibat wa al-Infirat*, 83–97.

[21] Taha Jabir Al-Alwani, *Source Methodology in Islamic Jurisprudence: Usul al-Fiqh al-Islami*, 3 ed. (International Institute of Islamic Thought, 2003), 21–30.

[22] Mohammad Hashim Kamali, "Fiqh and Adaptation to Social Reality," *The Muslim World* 86, no. 1 (1996): 62-84 DI-10.1111/j.1478-1913.1996.tb03632.x; Mohammad Hashim Kamali, *Principles of Islamic Jurisprudence* (The Islamic Texts Society, 2003), https://www.google.co.id/books/edition/Principles_of_Islamic_Jurisprudence/3Wf9DwAAQBAJ.

collaboration is necessary because new legal objects often contain technical elements that cannot be explained solely through classical fiqh frameworks. Collective ijtihad provides a space for cross-validation of legal arguments, data, and social risks.

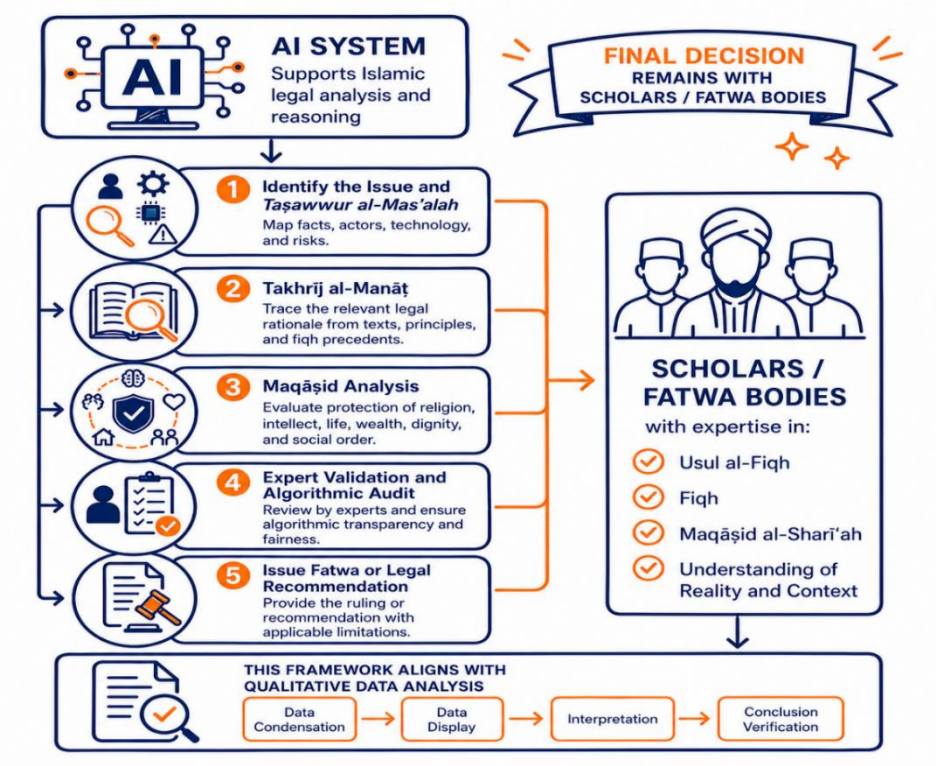


*Figure 1 AI System Supports Islamic Legal Analisis*

Mapping library data yields a multi-layered framework for implementing AI-assisted ijtihad. The first stage involves identifying the problem and taṣawwur al-mas'alah through the mapping of facts, actors, technologies, and risks. The second stage is takhrīj al-manāṭ by tracing the relevant legal characteristics from the text, principles, and fiqh precedents. The third stage is the analysis of maqāṣid to assess the protection of religion, reason, life, property, dignity, and social order. The fourth stage is expert validation and algorithmic audit. The fifth stage is the drafting of a fatwa or legal recommendation accompanied by its scope of application. This framework aligns with qualitative data analysis, which progresses from condensation, presentation, and interpretation to the verification of conclusions.[23]

[23] Matthew B Miles, A Michael Huberman, dan Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, 3 ed. (SAGE Publications, 2014), 31–32.

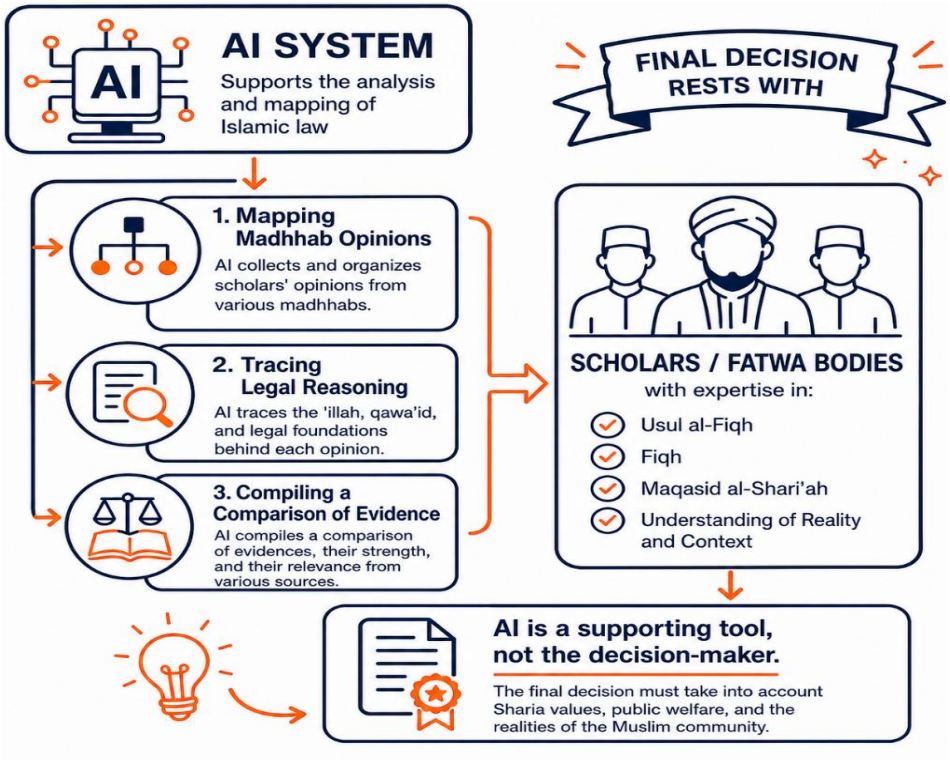


*Figure 2 AI System*

The next practical finding positions AI as a research tool, not a decision-maker. Karimullah found that AI can accelerate the identification of legal trends, agreements, and doctrinal differences through extensive literature analysis.[24] Rahman, Syahriani, and Jampa also view AI as a transformative instrument in accessing Islamic law in the digital age.[25] This potential does not eliminate the need for tahqīq, tabayyun, and scientific accountability. AI's answers often appear convincing because they are fluently composed, yet linguistic fluency does not always reflect the truth of the argument. Contemporary ijtihad methods must distinguish between computational capability and normative authority so that society does not turn machines into practical muftis.

A synthesis of research findings indicates the need for ethical protocols before AI is used in the fatwa domain. Ab Rahim and colleagues emphasize that the integration of AI in the issuance of fatwas must be subject to the oversight of Sharia experts and must take into account accuracy, transparency, and

[24] Karimullah, "The Application of Artificial Intelligence in Islamic Law Discovery," 109–21.

[25] Rahman, Syahriani, dan Jampa, "Islamic Law in Tthe Digital Era: Artificial Intelligence as A Revolutionary Legal Tool in The 21st Century," 102–15.

accountability.[26] Priantina and colleagues demonstrate that AI can enhance the efficiency of Islamic financial fatwas, but risks of error, bias, and overreliance must still be managed. These findings highlight a strong interplay between the two fields.[27] Islamic legal literature demands authority, while AI literature demands governance. The convergence of these two fields gives rise to the need for human-supervised ijtihad models, technological audits, and methodological transparency.

**Epistemological Challenges in the Age of Artificial Intelligence**

The most fundamental epistemological challenge lies in the opaque nature of algorithmic systems. The problem of opacity (al-ghumūḍ al-khwarizmī) in artificial intelligence systems poses a fundamental challenge to the validity of the knowledge they produce. Contemporary philosophers of science assert that the "black box" architecture of machine learning algorithms renders their internal reasoning processes inaccessible even to their own developers, thereby posing serious problems for accountability and trust in the generated output. Mittelstadt, Allo, Taddeo, Wachter, and Floridi, in their mapping of algorithmic ethics, explicitly demonstrate that the gap between algorithmic design and operation can lead to severe ethical consequences for both individuals and society at large, particularly because this opacity extends beyond mere technical complexity and touches upon fundamental epistemological issues.[28] From the perspective of the philosophy of science, the inability to trace the reasons and sources of algorithmic decisions constitutes a central obstacle to attributing knowledge in the classical sense as emphasized in the epistemology of reliability, trust can only be justified if there is a transparent causal mechanism between the process of belief formation and the truth of the resulting propositions.[29]

This epistemological tension becomes increasingly crucial when applied to the methodology of ijtihad in usul al-fiqh. Scholars of usul have established that the process of deriving legal rulings cannot be separated from a mastery of clear lines of reasoning and the ability to methodically test conclusions. Al-Ghazālī, in Al-Mustaṣfā min 'Ilm al-Uṣūl, emphasizes that the study of usul al-fiqh must revolve around four fundamental pillars: al-ahkām (legal rulings), al-adillah (sources of evidence), ṭarīqah al-istinbāṭ (methods of deriving legal rulings from sources), and, no less importantly, taqwīm al-mujtahid (evaluation of the legal scholar's qualifications). Furthermore, al-Ghazālī explicitly states that:

[26] Siti Farahiyah Ab Rahim et al., "Artificial Intelligence for Fatwa Issuance: Guidelines and Ethical Considerations," *Journal of Fatwa Management and Research* 30, no. 1 (2025): 76–100.

[27] Anita Priantina et al., "AI in Fatwa Formulation: Transforming Sharia-Compliant Finance," *Journal of Central Banking Law and Institutions* 4, no. 3 (2025): 595–634.

[28] Mittelstadt et al., "The Ethics of Algorithms: Mapping the Debate"; Éloïse Boisseau, "Expertise, opacity, and trust in AI systems," *Synthese* 207, no. 3 (2026): 104.

[29] Will Fleisher, "Understanding, idealization, and explainable AI," *Episteme* 19, no. 4 (2022): 534–60.

المفتي المجهول الذي لا يدرى أنه بلغ رتبة الاجتهاد أم لا، لا يجوز للعامي قبول قوله

*"A mufti whose status as an expert in ijtihad is unknown should not be followed by laypeople."*

On the other hand, al-Shāṭibī, in Al-Muwāfaqāt, defines ijtihad as (the exertion of one's full capacity to acquire knowledge or a strong presumption regarding the law). This definition implicitly requires that the mujtahid must be able to follow a line of reasoning that is methodologically accountable, and it is this characteristic that fundamentally cannot be fulfilled by an AI system structured as a black box.

Based on the theoretical framework outlined above, fatwas generated by AI without adequate methodological explanations will undermine scientific accountability and invalidate their claim to be valid ijtihad. Algorithmic ethics theory explains that transparency is not merely a technical requirement, but an unavoidable epistemic condition, because legal decisions whose reasons and sources cannot be traced are difficult to justify as required by the scholarly framework of usul al-fiqh. Contemporary Arabic literature on digital fiqh offers a critical perspective that aligns with this. It is evident that al-Ghazālī warned that a mujtahid whose qualifications are unknown must not be followed, and this analogy can unequivocally be applied to AI systems that lack any subjective capacity to meet the personal qualities (al-ṣifāt al-shakhṣiyyah) that are fundamental prerequisites for ijtihad, such as justice, piety, and the capacity for reasoning accompanied by full methodological awareness.[30] Thus, although AI can function as an adāh musā'idah (auxiliary tool) in the process of identifying and classifying initial data, the final authority for legal determination must remain in the hands of human mujtahids who meet the epistemic and moral qualifications as established in the tradition of usul al-fiqh.

**Social Challenges in the Age of Artificial Intelligence**

The most prominent social challenge in the use of AI for fatwas stems from a shift in public behavior, with people increasingly preferring artificial intelligence as a source of religious answers that is easy, inexpensive, and fast, rather than scholars, Islamic boarding schools, or formal fatwa institutions. This phenomenon is inextricably linked to the massive penetration of the internet and the culture of instant gratification on digital platforms. Jobin, Ienca, and Vayena, in their mapping of global AI ethical guidelines, demonstrate that nearly all ethical frameworks converge on the principles of transparency, fairness, accountability, privacy, and non-maleficence.[31]

From the perspective of usul al-fiqh, these five principles align with the maqāṣid al-sharī'ah, specifically ḥifẓ al-dīn (preserving religion), ḥifẓ al-nafs (preserving life), and ḥifẓ al-'aql (preserving reason). Al-Shātibī, in Al-Muwāfaqāt,

[30] Abī Ḥāmid Muḥammad bin Muḥammad Al-Ghazālī, *al-Mustaṣfā min 'Ilm al-Uṣul* (Dar Al Kotob Al Ilmiyah ٢٠١٤ ,دار الكتب العلمية).

[31] Jobin dan Ienca, "The Global Landscape of AI Ethics Guidelines."

asserts that the Sharia was revealed to eliminate mafsadah (harm) and bring about maṣlaḥah (public interest). Therefore, this social challenge is not merely technical but also ethical-religious: when the public accesses fatwas from AI without the filtering of religious scholars, there is a potential violation of the principles of al-ḍarar yuzāl (harm must be removed) and sadd al-dzarīʿah (blocking the means to harm). Findings from contemporary Arabic literature such as Ibrāhīm Abū al-'Adas's article in "Majallah Jarash lil-Buḥūth wa al-Dirāsāt" also confirm that the lack of algorithmic transparency can obscure the chain of reasoning, whereas methodological clarity is a non-negotiable epistemological requirement in ijtihad.[32]

The second social challenge concerns the crisis of legitimacy facing conventional religious authorities. If fatwa institutions, Islamic boarding schools, and councils of scholars are unable to provide credible, timely, and accessible digital services without sacrificing scholarly depth, then the public -especially the younger generation- will increasingly rely on AI, even though its outputs are often superficial and lack accountability. This has been predicted by various studies on AI ethics: the rise of the commodification of religion and the phenomenon of copy-pasting fatwas from chatbots reinforce the social challenge of the erosion of institutional authority. In usul al-fiqh, al-Ghazālī in Al-Mustaṣfā stipulates that a mufti must be known for his scholarly capacity (maʿrifat al-mujtahid), and fatwas without a clear methodology are not valid to follow.[33]

Furthermore, Dar al-Ifta al-Misriyyah and the Indonesian Ulema Council (through K.H. Cholil Nafis) have issued a warning that AI lacks consciousness (al-waʿy) and social contextual understanding (fiqh al-wāqiʿ), and therefore cannot replace the role of religious scholars.[34] Therefore, this social challenge demands institutional transformation that positions AI as an auxiliary tool (adāh musāʿidah) in the process of identifying initial evidence, while the final decision remains in the hands of mujtahids who meet epistemic and moral qualifications. Only in this way can the Muslim community avoid the digital fitnah that threatens the integrity of fatwas and the continuity of religious authority in the era of artificial intelligence.

**Ethical Challenges in the Age of Artificial Intelligence**

The most significant ethical challenges in the use of AI for fatwas are potential linguistic bias, sectarian bias, and source bias. AI trained on specific corpora tends to highlight dominant viewpoints while obscuring minority opinions that actually have a strong foundation in the fiqh tradition. Cath, Wachter, Mittelstadt, Taddeo, and Floridi point out that AI governance across

---

[32] Al-'Adas, "Madā imkāniyyah tawẓīf adawāt al-dhakā' al-iṣṭināʿī fī al-fatwā, dirāsah taṭbīqiyyah."

[33] Al-Ghazālī, *al-Mustaṣfā min ʿIlm al-Uṣūl*.

[34] ed: Nashih Sadam, "Mengapa AI tidak Bisa Dijadikan Rujukan dalam Persoalan Hukum Agama?," *Majelis Ulama Indonesia*, 2025, https://mui.or.id/baca/berita/mengapa-ai-tidak-bisa-dijadikan-rujukan-dalam-persoalan-hukum-agama.

various regions faces divergent values, institutional interests, and inconsistent regulatory standards. This diversity is actually in harmony with the reality of fiqh, which recognizes ikhtilāf and tarjīḥ as a blessing, as affirmed by al-Qarāfī in Anwār al-Burūq. Therefore, to address these ethical challenges, AI must be designed to display the plurality of sources, the reasons for differing opinions, and the limits of certainty for each answer. A single output that closes the space for ikhtilāf risks reducing the deliberative fiqh tradition to a mere black-and-white formula devoid of the spirit of usul al-fiqh. The Journal of the Fiqh Council also cautions that disregarding the principle of murā'āt al-ikhtilāf (respecting differences of opinion) will undermine the epistemic validity of digital ijtihad.[35]

The second challenge concerns the position of authority, since ijtihad is not merely a cognitive process, but also a moral and spiritual act. Khaled Abou El Fadl emphasizes that Islamic legal authority requires four things: competence, honesty, sincerity, and the ability to account for claims made in the name of God.[36] From the perspective of usul al-fiqh, al-Shātibī in Al-Muwāfaqāt also asserts that a mujtahid must possess al-malakah al-rāsikhah (a solid capacity) built upon sincerity and piety. AI lacks moral agency, the intention of worship (al-niyyah al-'ibādiyyah), fear of Allah (khashyat Allāh), or social responsibility for the consequences of fatwas. These limitations present ethical challenges that cannot be overcome merely through technical improvements to algorithms. On this basis, AI cannot be constructed as a mujtahid, but only as an adāh musā'idah (auxiliary tool) under the control of competent humans.

The role of authority is a key finding because ijtihad is not merely a cognitive process, but also a moral act. El Fadl emphasizes that Islamic legal authority requires competence, honesty, sincerity, and the ability to account for claims made in the name of God. AI lacks moral agency, the intention to worship, fear of God, or social responsibility for the consequences of fatwas. These limitations make it impossible to construct AI as a mujtahid. Its role is more appropriately that of a support tool under the control of competent humans. This finding simultaneously establishes a new theoretical boundary: the validity of digital ijtihad is not determined by the sophistication of the system, but by the quality of supervision, accountability, and its alignment with Sharia methodology.

**Synthesis of the Digital Supervised Ijtihad Model**

An analysis of inter-data relationships yields a conceptual model of "digital supervised ijtihad." This model assigns AI three specific functions such as data collection, argument mapping, and impact simulation. The data collection function aids in the retrieval of literature and previous fatwas. The argument mapping function helps compare legal arguments, fiqh principles, objectives, and school of thought opinions. The impact simulation function helps predict

[35] Majma' Fiqh al-Islami Al-Dauliy, https://iifa-aifi.org/ar/1661.html, 1986, https://iifa-aifi.org/ar/1661.html.

[36] Khaled Abou El Fadl, *Speaking in God's name: Islamic law, authority and women* (Simon and Schuster, 2014).

potential benefits and harms within a social context. Rahwan emphasizes the need for a "society-in-the-loop" approach to ensure that social values continue to oversee the algorithmic system.[37] This concept can be interpreted within Islamic law as "sharia-in-the-loop," meaning the involvement of scholars, fatwa institutions, and the scholarly community in evaluating the outputs of technology. This model establishes a balanced relationship between humans and machines.

The "digitally supervised ijtihad" model also opens up the possibility of developing new theories in the study of contemporary Islamic law. This theory does not replace usul al-fiqh, but expands its scope of application to computational environments. The descriptive function of the theory is evident in its mapping of the living history of ijtihad. The explanatory function of the theory is evident in its explanation of why AI is useful as a tool but not valid as an authority. The theory's predictive function is evident in its ability to identify risks of bias, opacity, and shifts in authority before they become broader legal problems. Floridi and Cowls emphasize the importance of the principles of beneficence, non-maleficence, autonomy, justice, and explicability in an AI-based society[38]. These principles reinforce the need for ijtihad that is adaptive, ethical, and remains rooted in the maqāṣid.

**Table 1: Summary of Research Findings on Contemporary Ijtihad in the Age of Artificial Intelligence**

| No. | Focus of Findings | Theoretical/Data Basis | Description |
|---|---|---|---|
| 1 | Contemporary ijtihad is a continuation of the usul al-fiqh tradition | Hallaq, Makdisi, al-Shafi'i | Ijtihad is not understood as a break from the classical schools, but as a continuation of the Islamic legal reasoning tradition |
| 2 | AI can assist the ijtihad process, but it cannot become a fatwa authority | Karimullah, Rahman et al., Ab Rahim et al. | AI is useful for tracing legal evidence, mapping schools of thought, and simulating impacts, but legal decisions remain with qualified humans |
| 3 | The main challenges of AI in ijtihad are bias, opacity, context reduction, and the shift of authority | Mittelstadt et al., Jobin et al., Cath et al. | Algorithmic risks need to be controlled through transparency, ethical audits, and supervision by ulama |
| 4 | The proposed model is digitally supervised ijtihad | Author's synthesis of *usul al-fiqh, maqāṣid,* and AI ethics | AI is positioned as an analytical support tool under the oversight of ulama, fatwa institutions, relevant experts, and algorithmic audit mechanisms |

[37] Rahwan, "Society-in-the-Loop: Programming the Algorithmic Social Contract," 5–14.

[38] Luciano Floridi dan Josh Cowls, "A Unified Framework of Five Principles for AI in Society," *Harvard Data Science Review* 1, no. 1 DI-10.1162/99608f92.8cd550d1 (2019): 1–15.

## Conclusion

Contemporary ijtihad in the era of Artificial Intelligence is a continuation of the tradition of usul al-fiqh, which from the outset has placed the text (nass), reason, language, the objectives of Islamic law (maqāṣid al-sharīʿah), and social reality in a mutually reinforcing relationship. Research findings indicate that AI can be utilized as a tool for tracing legal evidence, mapping school of thought opinions, comparing arguments, and simulating legal impacts; however, it cannot be positioned as a mujtahid or a fatwa-issuing authority because it lacks sharia competence, moral awareness, intention, etiquette, and epistemic responsibility. The use of AI in ijtihad must be guided by a "digitally supervised ijtihad" model. This model is essential to ensure that digital efficiency does not undermine textual discipline, scientific accountability, and the protection of the public interest. Further research is recommended to test this model on specific fatwa cases, such as Islamic finance, bioethics, digital worship, or AI-based Islamic legal consultation services, so that this conceptual framework can be developed into more operational practical guidelines.

## References

Ab Rahim, Siti Farahiyah, Muhamad Firdaus Ab Rahman, Hussein Azeemi Abdullah Thaidi, Nik Nur Muhammad Alif Nik Mohd Azimi, dan Munawar Rizki Jailani. "Artificial Intelligence for Fatwa Issuance: Guidelines and Ethical Considerations." *Journal of Fatwa Management and Research* 30, no. 1 (2025): 76-100 DI-10.33102/jfatwa.vol30no1.654.

Abū Isḥāq Ibrāhīm bin Mūsā al-Syāṭibī (w.790). *al-Muwafaqat*. Diedit oleh Abū 'Ubaydah Masyhūr bin Ḥasan Āl Salmān. 1 ed. Kairo Mesir: Dar Ibnu Affan, 1997. https://shamela.ws/book/11435/2329.

Al-Alwani, Taha Jabir. *Source Methodology in Islamic Jurisprudence: Usul al-Fiqh al-Islami*. 3 ed. International Institute of Islamic Thought, 2003.

Al-Qaradawi, Yusuf. *Al-Ijtihad al-Mu'asir Bayn al-Indibat wa al-Infirat*. Cairo: Dar al-Tawzi' wa al-Nashr al-Islamiyyah, 1994.

Al-Shatibi, Abu Ishaq. *Al-Muwafaqat fi Usul al-Shari'ah*. Diedit oleh Abdullah Darraz. Dar Ibn Affan, 1997.

APJII. "APJII Jumlah Pengguna Internet Indonesia Tembus 221 Juta Orang." Asosiasi Penyelenggara Jasa Internet Indonesia, 2024. https://apjii.or.id/berita/d/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang.

Asy-Syafi'i, Imam. *Ar-Risalah: Panduan Lengkap Fikih dan Ushul Fikih*. Pustaka Al-Kautsar, 2018.

Cath, Corinne, Sandra Wachter, Brent Mittelstadt, Mariarosaria Taddeo, dan Luciano Floridi. "Artificial Intelligence and the Good Society: The US, EU, and UK Approach." *Science and Engineering Ethics* 24, no. 2 (2018): 505–7.

Fadl, Khaled Abou El. *Speaking in God's Name: Islamic Law, Authority and Women*. Oxford: Oneworld Publications, 2001.

Floridi, Luciano, dan Josh Cowls. "A Unified Framework of Five Principles for

AI in Society." *Harvard Data Science Review* 1, no. 1 DI-10.1162/99608f92.8cd550d1 (2019).

Hallaq, Wael B. "From Fatwas to Furu': Growth and Change in Islamic Substantive Law." *Islamic Law and Society* 1, no. 1 (1994): 29-65 DI-10.1163/156851994X00147.

———. "Was the Gate of Ijtihad Closed?" *International Journal of Middle East Studies* 16, no. 1 (1984): 3-41 DI-10.1017/S0020743800027598.

Ibn Ashur, Muhammad al-Tahir. *Treatise on Maqasid al-Shariah*. International Institute of Islamic Thought, 2006.

Jobin, Anna, dan Marcello Ienca. "The Global Landscape of AI Ethics Guidelines." *Nature Machine Intelligence* 1, no. 9 (2019): 389–99. https://doi.org/10.1038/s42256-019-0088-2.

Kamali, Mohammad Hashim. "Fiqh and Adaptation to Social Reality." *The Muslim World* 86, no. 1 (1996): 62-84 DI-10.1111/j.1478-1913.1996.tb03632.x.

———. *Principles of Islamic Jurisprudence*. The Islamic Texts Society, 2003. https://www.google.co.id/books/edition/Principles_of_Islamic_Jurisprudence/3Wf9DwAAQBAJ.

Karimullah, Suud Sarim. "The Application of Artificial Intelligence in Islamic Law Discovery." *Mutawasith: Jurnal Hukum Islam* 6, no. 2 (2023): 109-121 DI-10.47971/mjhi.v6i2.748.

Mada, Universitas Gadjah. "Gen Z Leads AI Adoption, UGM Expert Shares Tips for Using Artificial Intelligence Wisely." Universitas Gadjah Mada, 2025. https://ugm.ac.id/en/news/gen-z-leads-ai-adoption-ugm-expert-shares-tips-for-using-artificial-intelligence-wisely/.

Makdisi, George. "The Juridical Theology of Shafi'i: Origins and Significance of Usul al-Fiqh." *Studia Islamica* 59 (1984): 5-47 DI-10.2307/1595294.

Miles, Matthew B, A Michael Huberman, dan Johnny Saldaña. *Qualitative Data Analysis: A Methods Sourcebook*. 3 ed. SAGE Publications, 2014.

Mittelstadt, Brent D, Patrick Allo, Mariarosaria Taddeo, Sandra Wachter, dan Luciano Floridi. "The Ethics of Algorithms: Mapping the Debate." *Big Data & Society* 3, no. 2 (2016): 1-21 DI-10.1177/2053951716679679.

Opwis, Felicitas. "Maslaha in Contemporary Islamic Legal Theory." *Islamic Law and Society* 12, no. 2 (2005): 182-223 DI-10.1163/1568519054093699.

Priantina, Anita, Mimma Maripatul Uula, Aufa Aufa, dan Evania Herindar. "AI in Fatwa Formulation: Transforming Sharia-Compliant Finance." *Journal of Central Banking Law and Institutions* 4, no. 3 (2025): 595-634 DI-10.21098/jcli.v4i3.446.

Rahman, Muhammad Edo, Fadilla Syahriani, dan Wilibaldus Jampa. "Islamic Law in Tthe Digital Era: Artificial Intelligence as A Revolutionary Legal Tool in The 21st Century." *Al-Hurriyah: Jurnal Hukum Islam*, 2024. https://doi.org/10.30983/al-hurriyah.v9i2.8545.

Rahwan, Iyad. "Society-in-the-Loop: Programming the Algorithmic Social Contract." *Ethics and Information Technology* 20, no. 1 (2018): 5–8.

Teknologi, Badan Pengkajian dan Penerapan. "Strategi Nasional Kecerdasan

Artifisial Indonesia 2020-2045." Jakarta: BPPT, 2020. https://korika.id/document/strategi-nasional-kecerdasan-artifisial-indonesia-2020-2045/.