

## Artificial Intelligence and Ethical Ijtihād in the Production of Islamic Knowledge

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### ABSTRACT

Artificial Intelligence challenges the authority of ethical ijtihād in Islam by introducing machines as a new subject of knowledge production, forcing Islamic scholarly traditions to re-examine the boundaries between reason, values, and moral responsibility. The purpose of this study is to identify the epistemological and ethical challenges posed by artificial intelligence, formulate relevant principles of ethical ijtihād, and offer an implementation model for academics, scholars, and technology developers to use as a reference. This study uses a qualitative approach with a conceptual-analytical study design enriched by a critical literature review and reflective-normative analysis. The results confirm that artificial intelligence has transformed from a mere technical device into an epistemic infrastructure that actively influences the way Islamic knowledge is produced, distributed, and interpreted, especially in the context of pluralistic and digitised Muslim societies in Asia. The analysis shows that algorithms, large language models, and digital platforms open essential opportunities to expand access and strengthen religious literacy, but at the same time raise ethical issues such as algorithmic bias, epistemic injustice, the commercialisation of religion, and a shift in spiritual authority. These findings confirm that ethical ijtihād needs to be reconstructed as a reflective framework capable of responding to technological dynamics while remaining grounded in *maqāṣid al-sharī'ah*, so that the relationship between humans, technology, and Islamic knowledge does not lose its orientation towards benefit and moral responsibility.

## INTRODUCTION

The development of artificial intelligence over the past two decades has brought about changes in the way humans produce, manage, and distribute knowledge (Jarrahi et al., 2023). This technology is no longer limited to the realm of technical computing but has entered the epistemological, cognitive, and even normative domains previously considered the exclusive domain of humans. In the context of contemporary Muslim societies, the penetration of artificial intelligence into the sphere of Islamic knowledge production has given rise to new and complex dynamics, mainly when this technology is used to provide excellent opportunities for efficiency, accessibility, and expansion of the reach of Islamic knowledge, but at the same time raises ethical, methodological, and theological issues that demand critical and reflective responses through the framework of *ijtihād* (Malik, 2023).

Historically, the Islamic scholarly tradition has been built on the foundation of *ijtihād* as an intellectual and ethical mechanism for responding to social, cultural, and technological changes. *Ijtihād* is not merely an effort at legal reasoning, but also an epistemic process that involves consideration of values, the objectives of sharia, and the moral responsibility of humans as subjects of knowledge (Tohari et al., 2022). As artificial intelligence begins to play a significant role in the production and mediation of knowledge, fundamental questions arise regarding the position of humans, scientific authority, and epistemological legitimacy in Islam (M. Q. Khan, 2025; Yurtseven, 2025). Can algorithms be positioned as neutral tools, or do they carry certain assumptions, biases, and values that have the potential to influence the results of religious knowledge? These questions become increasingly relevant given that artificial intelligence operates through statistical logic and machine learning, which are often opaque and difficult to account for normatively.

Various artificial intelligence-based digital platforms now provide services such as verse searches, *hadith* classification, *fatwā* simulations, and Islamic chatbots that can answer users' questions instantly (Morshidi et al., 2024; Polat et al., 2022). This phenomenon is shifting the pattern of relations between the *ummah* and traditional scientific authorities, as well as posing the risk of simplification, decontextualisation, and commodification of Islamic knowledge. On the other hand, the same technology also has the potential to enrich Islamic scholarship through big data analysis, mapping of exegetical traditions, and cross-disciplinary integration that was previously difficult to achieve (Fancy et al., 2023; M. Q. Khan, 2025). It is this tension between potential and risk that calls for an ethical *ijtihād* framework to guide the responsible use of artificial intelligence in line with Islamic values.

Recent studies on artificial intelligence and religion show an increase in academic attention to the implications of digital technology in religious practice (Ashraf, 2022; Papakostas, 2025). Studies in the field of religion and technology generally highlight how artificial intelligence affects religious authority, spiritual experience, and the transformation of religious institutions (Alkhouri, 2025; Düzbayır, 2025; He, 2024). In the context of Islam, several studies have discussed the use of artificial intelligence in managing *hadith* data, developing *fiqh* applications, and digitising Islamic education (Elihami et al., 2024; Rahman et al., 2024). These studies emphasise the functional and technical aspects of technology, such as search accuracy, data processing efficiency, and ease of user access. However, discussions of the ethical and epistemological dimensions remain primarily descriptive and are not yet deeply integrated into the Islamic *ijtihād* framework.

On the other hand, the literature on artificial intelligence ethics is growing rapidly, especially in the West, with a focus on issues such as algorithmic bias, accountability, transparency, and social impact (Karimullah, Sugitanata, et al., 2023; Radanliev, 2025; Roche

et al., 2023). Several Muslim scholars have begun to link Islamic ethical principles to the discourse on artificial intelligence ethics, for example, through concepts such as *maqāṣid al-sharī'ah*, justice, and public interest (Elmahjub, 2023; Kannike & Fahm, 2025). However, these studies tend to be normative and conceptual, and have not specifically discussed how ethical *ijtihād* can be operationalised in the context of AI-based Islamic knowledge production. In addition, some studies still position AI as an external object that is assessed from the outside, rather than as an integral part of the epistemic process that needs to be critically analysed (Alvarado, 2023; Russo et al., 2024).

The results of previous studies also show that research on Islamic epistemology and digital technology often runs in parallel, without adequate dialogue. Islamic epistemology studies emphasise the sources, methods, and authority of cognition, while technology studies tend to focus on innovation and practical impacts. This separation has resulted in a lack of analytical frameworks capable of bridging the principles of *ijtihād* with the technological reality of artificial intelligence. In fact, the production of Islamic knowledge in the digital age concerns not only religious content, but also the processes, actors, and power structures shaped by technology. Based on this mapping, a significant research gap can be identified in this study.

First, there are still a few studies that specifically examine artificial intelligence as an epistemic agent in the production of Islamic knowledge, rather than merely as a technical tool. Second, few studies develop a systematic and applicable ethical *ijtihād* framework to assess, guide, and regulate the use of artificial intelligence in the context of Islamic scholarship. Third, the integration between modern artificial intelligence ethics literature and the Islamic *ijtihād* tradition is still partial and has not produced a comprehensive conceptual model. These gaps indicate the need for studies that address them with a more holistic and contextual approach.

The novelty of this study lies in its attempt to formulate and articulate ethical *ijtihād* as an epistemological and normative framework in the production of artificial intelligence-based Islamic knowledge. This study not only offers a re-reading of the principles of classical *ijtihād* but also develops them in critical dialogue with contemporary theories of technology ethics and studies of artificial intelligence. On a theoretical level, this study enriches Islamic epistemology by incorporating technology as an essential variable in knowledge production. On a conceptual level, this study offers a model of ethical *ijtihād* that integrates *maqāṣid al-sharī'ah*, algorithmic accountability, and human moral responsibility.

The focus of this study is to analyse the relationship between artificial intelligence, ethical *ijtihād*, and Islamic knowledge production in a contemporary context. The scope of the study covers a conceptual understanding of artificial intelligence and its epistemic characteristics, the principles of ethical *ijtihād* in the Islamic tradition, and the practical implications of using artificial intelligence in various forms of religious knowledge production. This study does not focus on the technical aspects of programming, but rather on the epistemological and ethical dimensions surrounding this technology.

The objective of this study is to develop a comprehensive and contextual ethical *ijtihād* framework in dealing with the use of artificial intelligence in the production of Islamic knowledge. In particular, this study aims to identify the epistemological and ethical challenges posed by artificial intelligence, formulate relevant principles of ethical *ijtihād*, and offer an implementation model that can serve as a reference for academics, scholars, and technology developers. The significance of this study lies in its contribution to strengthening Islam's position as a scientific tradition that is responsive, critical, and oriented towards benefit amid the development of cutting-edge technology. By building a strong, integrative argumentative

basis, this introduction emphasises the study's urgency and its potential scientific contribution to the development of Islamic knowledge in the era of artificial intelligence.

## METHOD

This study uses a qualitative approach with a conceptual-analytical research design enriched by a critical literature review and reflective-normative analysis. This approach was chosen because the study's objectives are not oriented towards measuring causal relationships or statistical generalisations, but rather towards deepening meaning, conceptual construction, and formulating a framework for ethical *ijtihad* in responding to the presence of artificial intelligence in the production of Islamic knowledge. The focus includes three main conceptual variables: artificial intelligence as an epistemic-technological entity; ethical *ijtihad* as a normative and methodological framework in Islamic tradition; and Islamic knowledge production as an intellectual process involving sources, methods, and scientific authority. These three focuses are operationally defined as interrelated analytical categories and analysed through primary and secondary texts. The research population consists of recent scientific works relevant to the themes of artificial intelligence, technology ethics, Islamic epistemology, and contemporary *ijtihad*, with sampling conducted purposively based on criteria of thematic relevance, novelty of the study, and the academic authority of the sources. The study instrument is a conceptual analysis guide developed gradually through exploratory reading of literature, theme mapping, and formulation of analytical indicators that enable critical and integrative reading.

The validity of the data in this study is ensured through source and theory triangulation techniques, namely by comparing various interdisciplinary academic perspectives and testing the consistency of arguments between Islamic scientific traditions and contemporary artificial intelligence ethics discourse. The data collection procedure was carried out systematically through the stages of literature inventory, thematic classification, in-depth reading, and analytical recording, emphasising the relationship between concepts and the underlying epistemological assumptions (Naeem et al., 2023). Data analysis was conducted using qualitative content analysis and critical discourse analysis, enabling the identification of patterns of argument, conceptual tensions, and epistemic gaps in previous studies (Evans et al., 2022). These techniques were chosen because they are in line with the objectives of the study, which seeks to construct a theoretical synthesis and formulate a reflective, contextual, and argumentative ethical *ijtihad* model. Thus, this research method serves not only as a technical procedure but also as an epistemological framework that ensures that the research process and results have scientific coherence, depth of analysis, and normative relevance to the issues under study.

## RESULTS AND DISCUSSION

### Reconstructing the Concept of *Ijtihad* and Religious Authority in the Age of Artificial Intelligence

Reconstructing the concept of *ijtihad* and religious authority in the age of artificial intelligence requires a profound re-examination of the relationship between humans, knowledge, and technology in Islamic tradition (Malik, 2023). For centuries, *ijtihad* has been understood as a human intellectual activity that relies on the rational, spiritual, and moral capacities of a *mujtahid* in interpreting the primary sources of Islam and addressing ever-changing social issues (A. B. Khan & Khan, 2024). Religious authority has also been attached to individuals or institutions that have scientific legitimacy, moral integrity, and social recognition. However,

the presence of artificial intelligence, particularly algorithms, large language models, and digital platforms, has significantly changed the ecosystem of Islamic knowledge production, including in Asian Muslim communities characterised by diversity of traditions, increasing digital literacy, and increasingly massive technology penetration.

Algorithms are no longer merely neutral technical tools, but function as epistemic selection mechanisms that determine what knowledge is displayed, prioritised, or hidden from the digital public sphere (Solak, 2025). Search engines, social media, and Islamic applications based on artificial intelligence operate through the logic of ranking, personalisation, and user engagement optimisation. As a result, certain verses of the Qur'an, hadiths, fatwās, or religious views become more accessible and widespread than others, not solely because of their depth or scholarly authority, but because of their compatibility with algorithmic preferences. In Asian Muslim communities, this phenomenon is evident in the consumption of digital religious content, where short lectures, fragmented quotations, and instant chatbot responses are often more influential than classical scholarly works or complex institutional *fatwās*. Large language models reinforce this dynamic by producing religious texts that appear coherent, argumentative, and convincing.

These models are trained on large corpora of Islamic sources, ranging from classical interpretations to contemporary religious discourse. In practice, large language models can answer fiqh questions, explain theological concepts, or summarise the views of scholars with a speed and flexibility that surpass those of ordinary humans (Gümrukçüoğlu, 2025). However, the production of such knowledge is statistical and probabilistic in nature, rather than the result of normative reasoning accompanied by moral responsibility. This is where the epistemological problem arises, because machine-generated texts can resemble the results of *ijtihad*, even though they lack the intention, ethical awareness, and complete contextual understanding required in the Islamic scholarly tradition.

Digital platforms then become spaces where Islamic knowledge produced by humans and non-humans interact, compete, and influence each other. In Asia, especially in countries with large Muslim populations, platforms such as YouTube, TikTok, and instant messaging applications have become the primary medium for religious preaching and discourse. The algorithms of these platforms tend to promote content that is viral, emotional, and easy to digest, thereby shaping new epistemic preferences among the faithful. Religious authority is no longer determined solely by the depth of scholarly *sanad*, but also by the number of followers, audience engagement, and digital visibility (Siregar et al., 2025). As a result, traditional scholars and fatwā institutions face serious challenges in maintaining their authority amid a decentralised and technologically mediated flow of information.

The concept of *ijtihad* needs to be reconstructed to remain relevant without losing its normative foundation. *Ijtihad* cannot be reduced to mere computation or big data analysis. Still, it must be understood as a reflective activity that involves ethical awareness, Sharia objectives, and social responsibility. This reconstruction requires a clear distinction between the use of artificial intelligence as an epistemic tool and the delegation of normative authority to machines. Algorithms can help manage the complexity of Islamic data, identify patterns in fiqh literature, or expand access to knowledge. Still, normative decisions that impact the lives of the ummah must remain within the realm of human *ijtihad*.

The authority of scholars in this new knowledge ecosystem has not been completely eroded, but it has transformed. Scholars are no longer the sole source of knowledge, but rather act as critical interpreters, guardians of epistemic integrity, and mediators between tradition and technology (Harrison & Lockett, 2019). In Asian Muslim communities, some scholars have

begun to utilise digital platforms and artificial intelligence to expand the reach of da'wah and education, while also developing religious digital literacy (Akbar et al., 2025; Karimullah et al., 2022; Pertamawati et al., 2025). However, this adaptation also requires methodological and ethical preparedness so that scholars do not simply follow the platform's logic but can direct technology in accordance with Islamic values.

*Fatwā* institutions face similar challenges, particularly in maintaining legitimacy amid the rise of instant fatwās based on applications or chatbots. The collective, deliberative, and contextual processes that characterise *fatwā* institutions are often considered slow and less responsive than instant digital solutions. In the Asian context, where diversity in schools of thought, culture, and social conditions is very high, artificial intelligence risks producing overly generalised answers that ignore local specificities. Therefore, the reconstruction of the authority of *fatwā* institutions needs to emphasise their role as guarantors of quality and context, as well as institutions capable of integrating technology without sacrificing the principles of prudence and public interest.

In addition to human authority, the era of artificial intelligence has also given rise to a form of non-human authority that is implicit but influential. Recommendation algorithms, popularity metrics, and platform interface designs indirectly shape the faithful's religious understanding. This authority lacks normative legitimacy in Islam, but it wields power in shaping users' habits, preferences, and perceptions. This is where the renegotiation of authority becomes crucial, as believers often do not realise that what they consider to be relevant religious knowledge is actually the result of algorithmic construction.

The reconstruction of *ijtihād* in this era also requires expanding the subject of *ijtihād* from individual scholars to a broader, more collaborative epistemic community. The involvement of technology experts, social scientists, and digital practitioners is essential to understand the implications of artificial intelligence comprehensively (Graziani et al., 2023). In the Asian context, this collaborative approach is relevant given the social and technological complexities Muslims face. Ethical *ijtihād* on artificial intelligence concerns not only halal-haram laws but also epistemic justice, inclusivity, and the fair distribution of knowledge. The renegotiation of religious authority is also related to changes in the relationship between the faithful and knowledge.

Increasing access to digital Islamic resources has encouraged the emergence of individual authority, where the community feels it has the legitimacy to choose, interpret, and even produce its own religious knowledge. This phenomenon can be understood as a form of epistemic decentralisation with emancipatory potential, but also risks fragmentation and relativism. Within the framework of reconstructed *ijtihād*, this epistemic freedom needs to be balanced with ethical responsibility and an awareness of individual limitations. In a new knowledge ecosystem mediated by artificial intelligence, the question of who has the right to speak on behalf of Islam becomes increasingly complex. Authority is no longer singular and hierarchical, but layered and dynamic. *Ulamā*, *fatwā* institutions, technology developers, and even algorithms interact in shaping religious discourse. The reconstruction of the concepts of *ijtihād* and religious authority must be able to read this complexity without getting caught up in total rejection of technology or uncritical acceptance.

### **Epistemic Justice and Algorithmic Bias in the Production of Islamic Knowledge**

In Islamic tradition, justice is understood not only as a principle of law or social ethics, but also as an epistemological foundation that demands the fair distribution of knowledge, recognition of the diversity of sources, and protection of groups vulnerable to marginalisation. When the

production of Islamic knowledge is mediated by algorithms and computational systems built on global technocratic logic, fundamental questions arise about who is represented, who is silenced, and what values are implicitly institutionalised in the process. In this context, algorithmic bias cannot be viewed as a mere technical anomaly, but rather as an expression of broader epistemic inequalities intertwined with the history of knowledge colonialism, the dominance of specific languages, and the concentration of technological power in the hands of a handful of global actors.

The composition of training data is a crucial starting point for understanding how epistemic bias is formed in artificial intelligence systems. Large language models and search algorithms are trained on massive data corpora, but these data are neither socially nor culturally neutral (Myers et al., 2024). In practice, the sources that are most easily accessible digitally, most widely produced, and most globally indexed tend to dominate the training data. In the context of Islamic knowledge, this means that texts in standard Arabic, English, or other global languages are more widely represented than local Asian literature written in regional languages, non-Latin scripts, or formats that have not been digitised. As a result, rich Asian Islamic scholarly traditions, such as *Nusantara tafsir* (Fallah et al., 2025), South Asian local fiqh, or the religious practices of Muslim minority communities in East Asia, risk being systematically marginalised in algorithmic outputs.

This bias is not only quantitative but also qualitative. Texts that enter the training data often come from sources that have undergone a specific ideological and institutional selection process. Literature considered canonical or mainstream is more accessible and curated, while alternative views, minority schools of thought, or critical discourses are often less well documented or even excluded. In the production of AI-based Islamic knowledge, this condition has the potential to reinforce the dominance of the majority school of thought and normalise a particular form of orthodoxy as representative of Islam as a whole (Yurtseven, 2025). In fact, the intellectual history of Islam is characterised by a plurality of views, methodological differences, and productive debates.

The choice of language in artificial intelligence systems also plays a central role in shaping epistemic justice. Language is not merely a medium of communication, but also a carrier of certain concepts, values, and perspectives. The dominance of global languages such as English and formal Arabic in digital systems makes religious experiences and understandings of Islam expressed in local Asian languages less visible and less recognised. When Asian Muslims interact with Islamic chatbots or search engines, the answers they receive are often framed in a language and logic that are not entirely in tune with their socio-cultural context. This can create an epistemic gap between the knowledge generated by algorithms and the lived religion experienced by local communities.

This language issue is also closely related to the representation of gender and vulnerable groups. Many digitised Islamic texts used as training data originate from patriarchal traditions that place male experiences as the norm (Karimullah, 2023). Women's voices, both as subjects of knowledge and as interpreters, are relatively rare in the dominant data corpus (Karimullah et al., 2024; Wiranti et al., 2025). As a result, artificial intelligence tends to reproduce gender-biased religious views, for example, on issues such as family, leadership, and social roles. In Asia, where Muslim women often face the double challenge of local norms and conservative religious interpretations, this algorithmic bias has the potential to reinforce structural injustices and limit the space for articulating women's experiences.

Beyond language and data, the ownership structure of global technological infrastructure is another determining factor in the production of epistemic inequality. Most artificial

intelligence platforms, data centres, and core algorithms are controlled by multinational technology companies operating according to specific economic and geopolitical interests. This control creates significant power asymmetries between technology producers and user communities, including Muslims in Asia. Islamic knowledge produced and disseminated through these global platforms is not only subject to technical logic but also to corporate policies, attention-based business models, and the regulations of technology-centric countries. In this situation, local Muslim communities often become passive consumers of a knowledge system that they did not design and do not fully understand. This power asymmetry has profound implications for epistemic justice.

When access to technology and the ability to influence algorithm design are concentrated outside Asian Muslim communities, opportunities to represent local traditions and minority perspectives become increasingly limited. Furthermore, standards of validity and authority of knowledge are determined by global metrics that are not always aligned with Islamic scholarly principles, such as *sanad*, context, and intention. Under these conditions, algorithmic bias not only marginalises certain voices but also alters the criteria for what is considered valid and relevant Islamic knowledge.

Epistemic injustice in the production of artificial intelligence-based Islamic knowledge is systemic and multidimensional; it cannot be overcome simply by adding data or improving technical accuracy, but requires deep ethical and epistemological reflection. This is where the role of ethical *ijtihād* becomes crucial as a normative framework for correcting existing imbalances and asymmetries of power. Ethical *ijtihād* in this context must be understood as a collective, reflective effort to assess technology not only in terms of functionality but also in terms of its impact on justice, inclusivity, and the welfare of the *ummah*.

The development of an ethical *ijtihād* framework to address algorithmic bias requires expanding *maqāṣid al-sharī'ah* into the epistemic realm. Epistemic justice can be positioned as an integral part of the objectives of *sharia*, because fair and inclusive knowledge is a prerequisite for the realisation of public interest. Within this framework, the marginalisation of local traditions, minority schools of thought, and the voices of vulnerable groups is seen as a form of epistemic *mafsadah* that must be prevented. Ethical *ijtihād* then serves to identify points of inequality in the technological system and formulate corrective principles that can be applied in the design, use, and regulation of artificial intelligence.

The framework of ethical *ijtihād* also demands recognition of human moral responsibility in every stage of technology-based knowledge production. Developers, scholars, academics, and users cannot absolve themselves of the ethical consequences of algorithms under the pretext of technological neutrality. In the Asian context, collaboration between Islamic scholars and technology experts is essential to ensure that artificial intelligence systems used in the production of Islamic knowledge are sensitive to diversity in schools of thought, languages, and social experiences. These efforts include enriching training data with local sources, developing multilingual interfaces, and establishing ethical audit mechanisms to identify and reduce bias.

Ethical *ijtihād* needs to encourage epistemic decentralisation as a strategy to counter the dominance of global infrastructure. Community-based, open-source, and locally controlled technology initiatives can serve as alternatives to strengthen the sovereignty of Asian Muslim knowledge. Within this framework, technology is not positioned as a hegemonic tool, but as a means of empowerment that allows communities to represent themselves. Ethical *ijtihād* serves as a normative guide to ensure that these decentralisation efforts remain aligned with Islamic scholarly values and do not fall into irresponsible fragmentation or relativism. It is

also essential to place the experiences of women and vulnerable Muslim groups at the centre of the reconstruction of epistemic justice.

Ethical *ijtihad* must open space for the epistemology of experience, the recognition that lived experience is a legitimate source of knowledge in Islam. Thus, the correction of algorithmic bias is not only technical but also transformational, as it challenges the patriarchal and exclusive structures that have long been entrenched in the production of knowledge. In this context, artificial intelligence can be directed to become a tool for amplifying marginalised voices, rather than the other way around.

### **Ethical Implications of Artificial Intelligence Utilisation in Religious Practice**

The ethical implications of utilising artificial intelligence in the daily religious practices of Asian Muslims need to be understood as part of a broader socio-technological transformation, in which religious experience no longer takes place solely in physical spaces, face-to-face relationships, and traditional knowledge transmission, but is increasingly mediated by digital systems that operate through algorithms, automation, and platform logic. In Asia, home to the majority of the world's Muslim population with its cultural diversity, schools of thought, and high levels of religiosity, the penetration of artificial intelligence into daily religious practices presents complex and ambivalent ethical dynamics. Automated *fatwā* applications, religious chatbots, and da'wah content recommendation systems are not only changing how people seek answers to religious questions but also shaping patterns of spirituality, religious authority, and people's relationships with Islamic teachings (Putra, 2025).

The use of automated *fatwā* applications is one of the most tangible manifestations of artificial intelligence in Asian Muslim religious practices. Such applications offer instant answers to fiqh questions that previously required consultation with scholars or reference to authoritative books. On the one hand, this convenience can increase religious literacy, especially for people living in remote areas, those with limited access to formal religious institutions, or those facing practical problems that require quick answers.

In the context of fast-paced modern life, automated *fatwās* can help believers integrate Islamic values into their daily decisions, encompassing worship, *mu'āmalah* (transactions), and social ethics. However, from an ethical perspective, the automation of *fatwās* raises fundamental questions about the reduction of Islamic law's complexity (Al Hamid et al., 2025; Hibbatulloh et al., 2025). *Fatwās* in Islamic tradition are not merely normative answers, but the result of a process of *ijtihad* that considers the social context, individual intentions, differences in madhhab, and the potential legal impact on public interest. When *fatwās* are reduced to algorithmic outputs based on questions and answers, there is a risk of oversimplification that ignores contextual dimensions and normative wisdom. In the highly pluralistic context of Asia, the answers generated by automated *fatwā* applications have the potential to generalise religious practices and to dispense with local wisdom and the diversity of Islamic traditions in society. Religious chatbots amplify this phenomenon by presenting a dialogical interaction that resembles communication with religious authorities.

Chatbots can answer theological questions, provide spiritual advice, and even simulate the language style of certain scholars (Cole-Turner, 2025). From a spiritual transformation perspective, the presence of chatbots can create a sense of closeness and accessibility that was previously difficult to obtain, especially for young Asian Muslims who grew up in a digital culture. Chatbots can serve as an initial gateway to learning about religion, deepen basic understanding, and foster interest in Islamic teachings (Kaya, 2025). However, spiritual relationships mediated by chatbots also have significant ethical implications.

When people begin to rely on non-human systems for spiritual guidance and meaning, there is a risk of delegating moral responsibility and inner reflection to technology. Islamic spirituality traditionally emphasises self-awareness, *muhasabah*, and a personal relationship with God that cannot be reduced to automated textual interactions. Chatbots, which operate based on data patterns and probabilities, lack the capacity for empathy, intention, or ethical responsibility, so the advice they provide can be superficial or even misleading if accepted without a critical attitude (Kooli, 2023).

The content recommendation system for religious preaching on digital platforms is another aspect that has a broad impact on Asian Muslims' daily spiritual practices. Recommendation algorithms determine which sermons, videos, or religious articles appear on users' timelines, often based on previous preferences and engagement levels. On the one hand, these systems can strengthen religious literacy by presenting content that is relevant and interesting to individuals, as well as broadening exposure to various Islamic themes. For many believers, especially the younger generation, digital *da'wah* content has become the primary source of practical and contextual religious learning (Karimullah, Rahman, et al., 2023). However, from a public ethics perspective, recommendation systems also pose serious risks. Algorithms tend to prioritise content that provokes strong emotions, controversy, or polarisation because it is more economically profitable for the platform.

In a religious context, this logic can encourage the spread of extreme, exclusive, or even radical interpretations, as such content is often more viral (Prianto et al., 2024). In Asia, where identity tensions and religion-based social conflicts remain sensitive issues, platform-based radicalisation is a real risk that cannot be ignored. Beyond radicalisation, the commercialisation of religion is another prominent ethical implication of the use of artificial intelligence. Many religious applications and *da'wah* platforms operate within a digital economy ecosystem that relies on advertising, paid subscriptions, or the monetisation of user data (Karimullah, Said, et al., 2023; Raya, 2025). Under these conditions, Islamic teachings risk being reduced to digital products measured by clicks, viewing duration, and financial gain. This kind of commercialisation can shift the orientation of preaching from moral and spiritual guidance to image, popularity, and market interests.

The reduction of Islamic teachings to digital commodities also has an impact on how people interpret religion (Raya, 2025). When religious experiences are packaged in an instant, visual, and fragmented format, there is a risk of losing depth of reflection and spiritual discipline. Islamic worship practices and ethical values can be narrowed down to slogans, short motivational messages, or religious entertainment content that is easy to consume but lacking in substance. In the long term, this condition can erode the community's critical capacity and turn religion into nothing more than a digital lifestyle. Amid this ambivalence, it is essential to weigh the potential for positive transformation offered by artificial intelligence. With proper governance, technology can strengthen religious literacy, inclusivity, and epistemic justice.

Artificial intelligence-based religious applications can be designed to showcase the diversity of schools of thought, local Asian contexts, and moderate perspectives in line with the values of *rahmatan lil 'alamin*. Chatbots can serve as educational companions that encourage users to consult scholars and authoritative sources, rather than as substitutes for religious authority. To achieve this goal, it is necessary to formulate principles of technology governance that are in line with *maqāṣid al-sharī'ah* and the public ethics of Asian Muslims. *Maqāṣid al-sharī'ah*, which emphasises the protection of religion, life, intellect, lineage, and property, can be extended to the digital realm by including spiritual integrity, critical thinking,

and epistemic justice (Ibrahim et al., 2025; Mahamood et al., 2023). In this context, the use of artificial intelligence must be assessed based on its contribution to people's benefit and the prevention of harm, not merely on efficiency or economic gain.

The first principle of ethical governance is human accountability. Every artificial intelligence system in religious practice must be under the moral responsibility of humans, whether developers, scholars, or religious institutions. There should be no delegation of normative authority to algorithms without oversight and correction mechanisms. The second principle is transparency, which requires clarity about data sources, recommendation logic, and system limitations, so that people are not trapped in the illusion of machine authority. The third principle is inclusivity and epistemic justice. Technology governance must ensure the representation of local Asian traditions, minority schools of thought, and the voices of women and vulnerable groups in content and training data. The fourth principle is hazard prevention, which includes mitigating the risks of radicalisation, misinformation, and economic exploitation through content regulation and algorithm design oriented towards the public interest (Nurizka, Islami, et al., 2025; Rembulan et al., 2025). The fifth principle is strengthening religious digital literacy so that people can use technology critically and reflectively, rather than passively and consumptively.

Asian Muslim public ethics also demand a collective and contextual approach to technology governance. States, religious institutions, civil communities, and the technology sector need to collaborate to formulate ethical standards that are sensitive to Asian cultural and social diversity (Nurizka, Jamil, et al., 2025). This approach is in line with the spirit of collective *ijtihad*, which places the welfare of the community as the primary goal, while avoiding the domination of market interests or narrow ideologies in the digital religious space. Thus, the ethical implications of using artificial intelligence in the daily religious practices of Asian Muslims cannot be understood in black and white terms. This technology opens up opportunities for spiritual transformation and strengthening religious literacy, but it also carries risks of commercialisation, radicalisation, and a reduction in religious meaning. Within the framework of *maqāṣid al-sharī'ah* and reflective public ethics, Muslims in Asia have a normative basis for directing technology toward being a means of benefit, rather than a source of inequality and spiritual degradation.

## CONCLUSION

Artificial intelligence has become an epistemic actor that has tangibly reshaped the processes, structures, and authorities in the production of Islamic knowledge, thereby demanding a conceptual reconstruction of *ijtihad* that is no longer solely oriented towards texts and human subjects, but also towards the technological systems that mediate that knowledge. Through a critical analysis of algorithms, large language models, and digital platforms in the context of Asian Muslims, this study shows that the use of artificial intelligence offers significant opportunities to expand access, strengthen religious literacy, and transform spiritual practices. But it also carries serious risks in including algorithmic bias, epistemic injustice, the commercialisation of religion, and the renegotiation of religious authority that is not always in the public interest. These findings confirm that the study's objective of formulating an ethical *ijtihad* framework has been achieved through the development of an integrative approach that links *maqāṣid al-sharī'ah*, technology ethics, and epistemic power analysis, while filling the gap in previous studies that tended to separate the discourse on artificial intelligence ethics from the Islamic *ijtihad* tradition.

The main scientific contribution of this study lies in the articulation of ethical *ijtihad* as a normative-epistemological framework capable of correcting power asymmetries, representational biases, and the reduction of religious meaning in the digital ecosystem, as well as in the affirmation of epistemic justice as an integral part of the objectives of sharia in the era of artificial intelligence. Practically and in terms of policy, the findings of this study imply the need for accountable, transparent, and inclusive religious technology governance that involves scholars, developers, and Asian Muslim communities collaboratively. The limitations of this study lie in its conceptual nature and its lack of empirical field research. Further studies are recommended to test this ethical *ijtihad* framework through concrete case studies, the evaluation of religious applications, and the analysis of community responses.

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