



Towards a Sharī'ah-Compliant Framework for AI-Supported Fatwa in Malaysian Hajj Management: A Maqāṣid al-Sharī'ah and Governance Perspective

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Abstract

Malaysia's Hajj management system is widely recognized for integrating financial, logistical, and religious services through a centralized institutional framework. As interest grows in using Artificial Intelligence to provide real-time religious guidance, important questions arise regarding the permissibility, reliability, and governance of AI-supported fatwa delivery. This article aims to develop a Sharī'ah-compliant framework for AI-supported fatwa in Malaysian Hajj management that aligns with maqāṣid al-sharī'ah and existing fatwa governance structures. Using a qualitative doctrinal methodology, the study analyzes principles of uṣūl al-fiqh, Malaysian legal and institutional arrangements governing fatwa issuance, Hajj-related resolutions, and contemporary scholarship on Artificial Intelligence governance and accountability. The analysis identifies key requirements for valid fatwa delivery, including scholarly competence, evidentiary reasoning, contextual awareness, and adherence to state-based authority. It further highlights recurring Hajj issues involving ritual errors, compensatory sacrifices, health concessions, women's rulings, and travel constraints that may benefit from timely digital assistance. While Artificial Intelligence offers advantages such as rapid access, multilingual support, and personalized guidance, significant risks remain, including hallucinated rulings, jurisdictional confusion, and

diminished scholarly accountability. To address these challenges, the study proposes a hybrid framework based on curated and authenticated fatwa corpora, Retrieval-Augmented Generation, authority tagging, embedded evidentiary reasoning, escalation protocols to accredited muftis, and institutional audit mechanisms. Guided by the protection of religion, life, intellect, dignity, and wealth, the framework positions Artificial Intelligence as a supportive rather than substitutive tool. The study concludes that AI-supported fatwa delivery is normatively defensible only when firmly anchored to state authority, robust governance safeguards, and the ethical objectives of Sharī'ah, providing a practical blueprint for responsible innovation in Hajj management.

Keywords: *Artificial Intelligence; Fatwa Governance; Hajj Management; Islamic Law; Maqāṣid al-Sharī'ah; Religious Authority; Retrieval-Augmented Generation*

INTRODUCTION

Malaysia is widely acknowledged as a global leader in the management of Hajj affairs. Through Lembaga Tabung Haji (TH), the country has developed a comprehensive model that integrates financial savings, logistical arrangements, and spiritual preparation for pilgrims. This centralised system not only facilitates the smooth organisation of Hajj and 'Umrah but also ensures that Malaysian pilgrims receive structured guidance rooted in Sharī'ah principles (Cheumar & Akem, 2024; Maslan & Musa, 2023; Rahman et al., 2020). In addition to practical arrangements, pilgrims rely heavily on religious rulings-fatawā-to address ritual complexities that arise during their pilgrimage. Such rulings cover matters ranging from compensatory sacrifices (*dam*) to health-related exemptions and ritual sequencing, which are crucial for ensuring the validity of the pilgrimage rites.

In recent years, advances in artificial intelligence (AI) have begun to influence multiple sectors, including finance, healthcare, and education (Kaplan & Haenlein, 2020). Generative AI, in particular, has emerged as a powerful tool capable of generating natural-language responses to complex queries. However, while AI offers opportunities

for expanding access to religious knowledge, it also raises significant concerns. Among these are the risks of misinterpretation, the generation of inaccurate or “hallucinated” rulings, and the potential erosion of accountability among accredited scholars (Abbasi, 2025; Latifi, 2024; Zhang et al., 2025).

The deployment of AI in the religious sphere is further complicated by the governance of fatwa in Malaysia. Unlike contexts where religious rulings are decentralised, the Malaysian system vests the authority of fatwa issuance in the Mufti and State Fatwa Committees (Adil, 2015; Mat Salleh et al., 2021; Rosidi, 2025). These rulings are only binding once consented to by the state ruler and gazetted under the respective State Enactments on the Administration of Islamic Law (Adil, 2015). At the national level, the Muzakarah of the National Council for Islamic Religious Affairs (MKI) deliberates on broader religious issues, but its resolutions are advisory unless formally adopted by state authorities (Ikhlas Rosele, 2018; Mahmud Zuhudi et al., 2021). Furthermore, the Resolusi Muzakarah Haji Kebangsaan, formulated annually with the participation of TH, state muftis, and medical and fiqh experts, provides authoritative guidance on recurrent Hajj-related issues (Kamaruzaman & Nik Abdul Ghani, 2025; Nasharuddin & Salleh, 2025; Saiful Suhardi et al., 2024). These multi-layered structures underscore the complexity of integrating AI into Malaysia’s fatwa ecosystem.

Statement of the Problem

Despite Malaysia’s sophisticated Hajj management framework, there has been limited exploration of AI-driven fatwa automation in this context. While digital tools have been used for logistical support and pilgrim training, no official initiative has yet introduced AI systems capable of generating fatwa guidance. This absence reflects a cautious stance, as automated religious rulings could undermine both doctrinal integrity and institutional authority if left unsupervised. The

problem is compounded by the inherent risks of AI systems: they may misrepresent Shari'ah principles, fail to account for localised Malaysian fatwa contexts, or produce rulings without proper evidentiary reasoning (*istidlāl*).

Moreover, without a conceptual framework that ensures compliance with Shari'ah and Malaysia's unique fatwa governance structures, any attempt to automate fatwa risks delegitimising the authority of state muftis and eroding public trust in religious institutions. This raises critical questions about how AI can be responsibly integrated to support rather than replace human scholarship. Addressing this gap is vital, particularly as the demand for real-time ritual guidance during Hajj and 'Umrah continues to grow.

Research Objective and Guiding Questions

This article pursues a single overarching objective: to develop a conceptual framework for AI-supported fatwa delivery in Malaysian Hajj management that remains compliant with Shari'ah principles and aligned with existing state-based fatwa governance.

To support this objective, the discussion is structured around several interrelated analytical questions concerning:

- a. the Shari'ah and legal conditions governing fatwa authority in Malaysia;
- b. the nature of recurrent Hajj-related issues faced by pilgrims;
- c. the potential benefits and epistemic risks of generative AI in religious guidance; and
- d. the role of maqāsid al-shari'ah in framing ethical and institutional safeguards.

These dimensions collectively inform the proposed framework, rather than constituting separate empirical objectives.

Rationale and Significance of the Study

This study is significant for several reasons. First, it contributes to academic discourse on the intersection of Islamic law, technology, and governance by exploring an under-researched area: AI-driven fatwa automation in the Hajj context. While existing scholarship has discussed fatwa digitisation and online fatwa platforms (e.g., IslamWeb, e-fatwa Malaysia), few have examined the implications of generative AI technologies capable of producing instant, context-specific rulings (Ab Rahim et al., 2025).

Second, the study offers practical relevance for policymakers, religious authorities, and institutions like TH. By conceptualising a hybrid model where AI operates under human supervision and within established governance frameworks, this research seeks to provide actionable insights for future implementation. Such a model could enhance accessibility for pilgrims -especially those facing urgent ritual dilemmas during Hajj-while preserving doctrinal integrity and institutional legitimacy.

Finally, this research advances the discourse on maqāṣid al-sharīʿah and technology. By applying the higher objectives of Islamic law – protection of religion (*dīn*), life (*nafs*), intellect (*ʿaql*), dignity (*ʿird*), and wealth (*māl*) – the study highlights the ethical safeguards necessary to align AI-driven tools with Sharīʿah. This ensures that technological innovation serves not merely functional needs but also moral and spiritual imperatives. Developing a conceptual framework for AI-driven fatwa automation in this context could inform international best practices, offering a blueprint adaptable to diverse socio-legal environments while maintaining fidelity to Sharīʿah.

Overview of the Article Structure

This article is organised into five main sections. Following this Introduction, the second section provides a literature review on AI in

Islamic law, fatwa governance in Malaysia, and prior initiatives in digital fatwa delivery. The third section outlines the methodology, detailing the doctrinal approach employed, sources consulted (Sharī'ah texts, Malaysian statutes, Muzakarah resolutions), and analytical framework based on *maqāṣid al-sharī'ah*. The fourth section presents the analysis and discussion, covering: (i) the conditions for valid fatwa issuance, (ii) recurrent Hajj-related issues in Malaysia, (iii) opportunities and risks of generative AI, and (iv) the proposed Sharī'ah-compliant conceptual framework. The fifth and final section offers a conclusion and recommendations, highlighting the need for cautious, state-supervised adoption of AI-driven fatwa tools and suggesting avenues for further research.

LITERATURE REVIEW

Digital Fatwa, Online Authority, and the Platformization of Islamic Guidance

Over the last 10–15 years, the diffusion of Islamic guidance through digital platforms has transformed how Muslims search, assess, and apply scholarly opinions (*fatāwā*). Early mapping work on “Islam online” shows how authority has gradually decentralized from brick-and-mortar institutions to portals, social media pages, and mobile apps, with users expecting immediate, personalized answers that fit their contexts (Adel & Numan, 2023; Bunt, 2018; Hamdani, 2023; Rusli et al., 2020; Wahid, 2024). Malaysia, formal institutions have also moved online. State and federal bodies maintain searchable repositories (e.g., the Federal Territories e-Fatwa portal), which publish gazetted and non-gazetted opinions and provide structured access by topic, year, and status (e.g., *warta* vs. advisory). While these portals increase transparency and reach, they also elevate expectations that authoritative answers can be delivered “on demand,” intensifying

pressure to standardize content and metadata across jurisdictions (Abidin & Nasohah, 2023; Ahmad, 2022; Majid & Wibisono, 2024).

Empirical studies in Malaysia underscore this platform effect. Research on social media and fatwa acceptance suggests that format, speed, and perceived credibility of digital channels shape lay compliance as much as scholarly reasoning does (Rosidi, 2021). Parallel work on ICT in fatwa management documents process gains (faster dissemination, better archiving) alongside persistent integration challenges between national and state systems (Mohd Alwi & Azania, 2018). Collectively, this scholarship motivates a technical agenda: if digital consumption is “pull-based,” can safe, provenance-aware automation help users retrieve *the right* opinion for *the right* person and scenario – without eroding scholarly authority?

Strengths/limitations. The digital-religion literature richly describes changing authority flows and user behavior, but it is largely descriptive. Few studies operationalize “authoritativeness” (e.g., alignment with jurisdiction, madhhab, and latest rulings), and almost none benchmark retrieval quality or error rates across portals/apps. This creates space for work that treats fatwa delivery as a safety-critical information problem requiring formal guarantees (traceability, auditability).

Fatwa Governance in Malaysia and Implications for Automation

Malaysia’s fatwa ecosystem is constitutionally devolved: each state’s Mufti Committee issues fatāwā that may be gazetted and become binding within that state; national-level Muzakarah resolutions serve as *irsyād* (advisory) unless adopted by states. Official FAQs and legal commentaries emphasize that where national and state positions diverge, the state position prevails (Ansori, 2017; Bahren, 2025). JAKIM’s i-FIQH and related portals collate national Muzakarah decisions and explanatory materials, but they do not override state jurisdiction (Ikhlas Rosele, 2018).

The literature repeatedly flags standardization problems: inconsistent metadata, uneven publication of full *sighah* texts, and cross-state divergences that can confuse mobile publics (Nasoha et al., 2012). Policy papers note continuing efforts to synchronize publication practices (e.g., directives that state secretariats post decisions to both state and JAKIM portals), yet gaps remain in timeliness and coverage.

Strengths/limitations. Governance studies accurately describe authority lines and publication duties, offering clear design constraints for any AI system (always bind answers to the correct jurisdiction; expose *sighah*; surface state adoptions). But they seldom translate these constraints into technical requirements (data schemas, APIs, versioning), leaving a socio-technical gap that algorithmic systems must bridge.

Hajj and ‘Umrah as Safety-Critical, Context-Dependent Use Cases

Hajj/‘Umrah rulings are uniquely sensitive because mistakes directly compromise the validity of rites and may entail compensations (*dam, fidya*) (Harahap et al., 2024; Zaenal et al., 2022). Malaysia’s National Hajj Muzakarah (under Lembaga Tabung Haji, TH) has, for decades, produced practical resolutions (e.g., sequencing errors, health-related dispensations, travel contingencies) tailored to Malaysian pilgrims’ recurring challenges. This corpus complements general fiqh with operational guidance anchored in *maslahah*, risk mitigation, and local capacity constraints—guidance that TH operationalizes through courses and on-the-ground counselors (Kamaruzaman & Nik Abdul Ghani, 2025; Mohd et al., 2018; Nasharuddin & Salleh, 2025; Saiful Suhardi et al., 2024).

Regionally, the Saudi ecosystem has also digitized pilgrim services through the Nusuk platform, consolidating permits, logistics, and guidance into unified user flows (Baalla et al., 2024; Paracha et al., 2026; Shah, 2024). At the frontier, Saudi authorities have even tested a “fatwa robot” at the Two Holy Mosques to route users to

remote muftis and curated content—an experiment that highlights both the promise and sensitivity of automating religious Q&A in sacred spaces.

Strengths/limitations. The Hajj-specific literature and documentation provide rich, recurrent scenarios ideal for computational modeling (e.g., ritual states, time windows, contingencies). However, the materials are often scattered across PDFs and advisories with heterogeneous metadata. There is little formal evaluation of user understanding or error reduction due to decision aids—an evidentiary gap for claims about “safer” guidance at scale.

Risks of Generative AI in Safety-Critical Advice

Outside the religious domain, AI scholarship has converged on well-documented risks. Large language models (LLMs) can “hallucinate” facts, misstate sources, and fabricate citations, with error profiles that vary by task and prompt. Position papers caution that scale alone does not solve these issues and may amplify opaque biases and spurious fluency (Bender et al., 2021). Industry reporting similarly emphasizes that hallucinations remain structurally unavoidable, spurring interest in retrieval-augmented generation (RAG) and layered evaluation as partial mitigations. In governance research, algorithmic audit frameworks highlight the need for documentation, pre-deployment testing, and incident response for high-stakes uses (Raji et al., 2020).

Strengths/limitations. This literature offers concrete design patterns—provenance-binding, constrained decoding, audits—that are directly applicable to fatwa automation. However, it is domain-generic. It does not specify how to encode jurisprudential hierarchies (e.g., *sihah* of rituals, *rukhsah* conditions), nor how to reconcile multiple madhāhib and federal–state authority boundaries—precisely the issues that define Malaysian Hajj/‘Umrah guidance.

Retrieval-Augmented Generation and Provenance as Enabling Techniques

RAG architectures combine parametric generation with non-parametric retrieval from a curated corpus, improving factuality and enabling source attributions in the response (Lewis et al., 2020). For fatwa automation, a RAG stack could index (1) state-gazetted fatāwā (*sighah* + explanatory notes), (2) national Muzakarah decisions, and (3) TH Hajj resolutions – tagged by jurisdiction, status, and ritual phase – so that generated answers always cite the exact underlying text and signal its authority level. This architecture aligns with institutional practice (start from authoritative text before issuing new *ijtihād*), and it supports audit trails for quality review.

Strengths/limitations. RAG is empirically promising and operationally intuitive for institutions. Yet retrieval quality depends entirely on curation. If state portals differ in metadata quality or publication timeliness – as current studies suggest – RAG can surface outdated or inapplicable texts. Hence, technical advances must be paired with content governance (shared schemas, publication SLAs, and release notes) and audit mechanisms (Raji et al., 2020).

Thematic Synthesis of Recent Studies (Malaysia & Beyond)

Standardization and Authority Alignment (2012–2021)

Scholars document cross-state variability and its social costs (confusion, forum-shopping), arguing for harmonized dissemination while respecting state sovereignty (Nasoha et al., 2012). Administrative sources reiterate that national decisions are advisory unless adopted by states—an essential constraint for any automated system.

Critical take. The literature specifies *who* is authoritative and *where*, but it stops short of data-engineering prescriptions (e.g.,

authority tags, versioning, jurisdiction filters). This is a gap a technical framework can fill.

Digitization of Hajj Guidance and Recurrent Scenarios (2010s-present)

TH's accumulated Muzakarah resolutions constitute a scenario-rich dataset (e.g., illness-based concessions, sequencing errors), ideal for structured retrieval and case-based reasoning (Nasharuddin & Salleh, 2025; Saiful Suhardi et al., 2024). Saudi digitization via Nusuk shows how integrated platforms can reduce friction for pilgrims and centralize official content (Hanifah et al., 2024; Showail, 2022).

Critical take. The materials are “narrative-heavy” PDFs/webpages with limited machine-readable structure. Without upstream curation (IDs, headings, controlled vocabularies), downstream AI systems will struggle to ensure coverage and currency.

AI Reliability, Audits, and Guardrails

NLP research describes hallucination taxonomies and mitigation strategies; RAG is a leading approach to ground responses in cited documents (Lewis et al., 2020). Governance work outlines audit documentation across the lifecycle—useful blueprints for fatwa institutions that wish to certify automated outputs (Raji et al., 2020). It also warns that even grounded systems face prompt-injection and other adversarial risks when connected to live web sources (Dinu et al., 2025; Greshake et al., 2023).

Critical take. These works are strong on generic techniques but silent on jurisprudential semantics (e.g., how to encode *rukhsah* conditions; how to represent conflict between a national advisory and a state-gazetted ruling).

Identified Gaps the Present Article Addresses

1. Provenance-first fatwa automation. There is no comprehensive framework that binds every answer to a specific, citable *sighah* (or TH resolution) and displays its authority level (advisory vs. gazetted; state vs. national). The article proposes a RAG pipeline with mandatory citation and an interface that foregrounds jurisdiction, date, and status—closing a recurrent ambiguity highlighted in governance studies (Khapchaev, 2025; Nasoha et al., 2012).
2. Jurisdiction-aware personalization. Existing chatbots seldom segment by madhhab or state authority. For Malaysian Hajj/‘Umrah, answers must default to Shāfi‘ī positions *as gazetted in the user’s state*, or flag divergences and escalate. This operationalizes the devolved structure documented in official sources (Asni & Sulong, 2017; Hussain et al., 2018; Mahaiyadin & Abdul Aziz, 2020).
3. Safety cases and audits for religious QA. Few deployments publish audit trails. The article defines measurable safeguards (e.g., “no-answer” thresholds, automatic escalation, incident logs) adapted from AI accountability frameworks (Raji et al., 2020) and tailored to fatwa risk profiles (invalidating rituals, incurring *dam*).
4. Corpus engineering for Hajj scenarios. TH’s Muzakarah corpus is rich but under-structured. The article proposes a schema (ritual phase, actor state, constraint, ruling, remedy) to enable faithful retrieval and scenario matching.
5. Human-in-the-loop design. Current systems over-index either on static FAQs or unconstrained generation. The article specifies escalation pathways to muftis and TH counselors, recognizing institutional realities observed across Malaysia.

Toward a Shari‘ah-Compliant AI Design for Hajj/‘Umrah

Bringing these strands together, the most persuasive direction is a constrained, auditable, and jurisdiction-aware assistant: (i) built on a curated, versioned corpus (state fatāwā, national Muzakarah, TH resolutions), (ii) delivered via RAG with inline citations to the exact *sighah*, (iii) governed by institutional audits and incident response, and (iv) instrumented for escalation when confidence or coverage is inadequate. This approach aligns with institutional digitization trends in Malaysia, respects state authority boundaries, and applies the broader AI reliability literature to a religious context without automating *ijtihad*. The contribution is not merely to “use AI,” but to encode governance into the system—so that every answer carries its chain of authority as visibly as its text.

THEORETICAL FRAMEWORK

The development of a Shari‘ah-compliant framework for AI-driven fatwa automation in the Malaysian Hajj and ‘Umrah context requires grounding in multiple theoretical perspectives that account for religious authority, technology adoption, and ethical governance. This section outlines four interrelated frameworks—*uṣūl al-fiqh* and fatwa theory, *Maqāṣid al-Shari‘ah*, Technology Acceptance and Trust Models, and AI Governance and Accountability Frameworks—and demonstrates how each supports the study’s objectives.

Uṣūl al-Fiqh and Fatwa Theory

The first theoretical anchor is the Islamic jurisprudential framework of *uṣūl al-fiqh*, which defines the principles and conditions for valid fatwa issuance. Classical scholars such as al-Ghazālī and al-Shāṭibī stressed that fatwa requires competence, contextualization, and evidentiary reasoning (*istidlāl*) based on the Qur’ān, Sunnah, consensus (*ijmā‘*), and analogical reasoning (*qiyās*) (Daji, 2022; A. M.

Ismail & Baharuddin, 2025). In Malaysia, these theoretical underpinnings are institutionalized within legal-procedural rules that vest authority in the State Mufti Committees, subject to gazetting by the ruler.

By embedding *uṣūl al-fiqh* principles, the study ensures that AI-driven systems are not treated as independent jurists but as supportive tools. Fatwa theory also stresses the importance of accountability (*mas'ūliyyah*) and the differentiation between binding rulings and advisory opinions. This directly informs the study's objective of conceptualizing AI systems that are jurisdiction-aware, tethered to state-level authority, and limited to authenticated corpora rather than open-ended *ijtihād*.

Maqāṣid al-Sharī'ah

The second framework is Maqāṣid al-Sharī'ah (higher objectives of Islamic law), which provides an ethical and purposive lens for evaluating technology in the religious domain. Traditionally articulated by al-Shāṭibī and refined in contemporary scholarship, the maqāṣid emphasize the protection of religion (*dīn*), life (*nafs*), intellect (*'aql*), dignity (*'ird*), and wealth (*māl*) (Al-Ayubi & Halawatuddu'a, 2021; Athambawa, 2025; Izzati et al., 2025; Kurniawan et al., 2025; Kusnan et al., 2022).

This framework is highly relevant because the risks of AI-driven fatwa automation-misguiding pilgrims, undermining mufti authority, or exposing users to invalid rituals-directly implicate the protection of *dīn* and *'aql*. Conversely, potential benefits such as providing real-time guidance during health crises in Hajj, reducing anxiety, and minimizing financial loss through proper compensatory practices (*dam*) align with the preservation of life and wealth.

Applying maqāṣid ensures that the system is evaluated not merely on functional grounds but on whether it advances human well-being in line with Islamic ethical imperatives. This aligns with the

study's objective of proposing safeguards to preserve doctrinal integrity while enhancing accessibility.

Technology Acceptance and Trust Models

The third framework draws from Technology Acceptance Model (TAM) (Davis, 1989) and later trust-based extensions (Gefen et al., 2003). TAM posits that perceived usefulness and ease of use determine user acceptance of new technologies. However, in religious contexts, trust is a critical dimension. Studies of digital fatwa services in Malaysia show that compliance depends not only on accessibility but also on the perceived legitimacy of the issuing authority (Rosidi, 2021).

Integrating TAM with trust theory highlights that even if AI-driven fatwa tools are technically accurate, pilgrims will only adopt them if they believe the system is endorsed by legitimate scholars and institutions. Thus, institutional affiliation (e.g., TH or State Mufti portals) is not peripheral but central to adoption. This theoretical perspective directly supports the study's objective of recommending state-aligned, officially deployed platforms as the exclusive venues for AI-driven fatwa services.

AI Governance and Accountability Frameworks

Finally, the study draws on contemporary theories of AI governance, particularly algorithmic accountability and risk management frameworks. Some studies outline the need for end-to-end auditing of AI systems, including documentation of training data, evaluation protocols, and incident response (Cen & Alur, 2024; Mökander, 2023; Raji et al., 2020). Similarly, other studies argue for "ethics by design," ensuring that accountability, transparency, and human oversight are embedded into AI architectures from the outset (Ade-Ibijola & Nakatumba-Nabende, 2025; Dennehy et al., 2023; Floridi et al., 2018; Nwachukwu et al., 2025).

In the religious domain, these governance models resonate with Islamic principles of *ḥisbah* (oversight) and collective responsibility (*farḍ kifāyah*). By incorporating audit trails, explainability features, and escalation protocols to human muftis, the study translates secular AI governance principles into a Shari'ah-compliant setting. This supports the objective of designing a hybrid model where AI functions as a supportive tool with built-in safeguards against overreach or misuse.

Integrative Theoretical Synthesis

Taken together, these four frameworks—*uṣūl al-fiqh*, *maqāṣid*, TAM/trust models, and AI governance—provide a multi-layered foundation for the study. *Uṣūl al-fiqh* and fatwa theory establish the religious legitimacy criteria; *maqāṣid* offer an ethical compass for assessing harms and benefits; TAM/trust models explain the social acceptance dynamics; and AI governance frameworks ensure technical accountability.

This integrated framework allows the study to answer its guiding questions:

- How can fatwa automation respect Shari'ah principles and Malaysian governance structures?
- What safeguards ensure AI functions as a tool, not a replacement, for human scholars?
- How can institutional alignment build trust and adoption among pilgrims?

By situating the research within these complementary theories, the study advances beyond descriptive accounts of digital fatwa to propose a Shari'ah-grounded, ethically informed, socially accepted, and technically auditable model for AI-driven fatwa automation in Hajj and 'Umrah.

METHOD

Research Design

This study adopts a qualitative doctrinal research design. Doctrinal research, focuses on analyzing authoritative legal texts, statutes, and jurisprudential sources to identify principles, interpretive methods, and their application to contemporary issues (McConville & Chui, 2017). In Islamic legal scholarship, doctrinal methods are complemented by *uṣūl al-fiqh*, which provide the epistemological and methodological rules for deriving rulings. This dual approach-doctrinal and jurisprudential-is particularly appropriate for examining the potential of AI-driven fatwa automation, since the subject lies at the intersection of Shari'ah law, Malaysian legal-procedural frameworks, and emerging technologies.

The research is primarily qualitative because it seeks to interpret texts, governance frameworks, and fatwa rulings rather than quantify user perceptions or measure system performance. While future empirical testing of AI-fatwa systems may require mixed methods, the present study is conceptual and normative in scope.

Data Collection Methods

Data were collected from three main sources:

1. Shari'ah and *uṣūl al-fiqh* sources. Primary texts (Qur'ān, Sunnah, and classical fiqh manuals) and secondary commentaries on fatwa theory were reviewed to establish the conditions of valid fatwa issuance. Works such as al-Ghazālī's *al-Mustasfā* and modern expositions like Kamali (2003) provided jurisprudential grounding.
2. Malaysian fatwa governance documents. Statutory instruments, such as the Administration of Islamic Law Enactments in Malaysian states, and official portals like *e-Fatwa* and *i-FIQH*, were examined to understand the institutional structures governing

fatwa authority. Reports and resolutions from the Muzakarah Haji Kebangsaan, facilitated by Lembaga Tabung Haji, were included to capture recurring Hajj-specific issues.

3. Scholarly and policy literature on AI. Academic articles on AI risks, generative AI hallucination, and algorithmic accountability were analyzed to identify parallels between secular AI governance principles and Shari‘ah-based accountability requirements.

Documentary sources were retrieved through academic databases (Scopus, Web of Science, JSTOR), official government and institutional websites, and curated legal/fiqh repositories. Where possible, official gazetted texts were prioritized over secondary reporting to ensure authenticity.

Sampling Techniques

Because the study does not involve human participants but rather focuses on textual and documentary analysis, purposive sampling was applied to the selection of documents ([Palinkas et al., 2015](#)). Three criteria guided inclusion:

1. Authoritativeness. Only sources formally recognized by Shari‘ah scholarship (e.g., canonical fiqh texts) or the Malaysian state (e.g., gazetted fatwa, TH resolutions) were included.
2. Relevance. Documents had to directly address either fatwa issuance, Hajj/‘Umrah rulings, or AI governance.
3. Recency (for AI literature). To reflect the rapid evolution of AI, only works published in the last 10–15 years were selected, with emphasis on studies since 2020 when generative AI models became more prominent.

This selective approach ensures that the analysis remains grounded in authoritative Islamic sources while engaging with contemporary technological and governance debates.

Data Analysis Approach

The study employed thematic content analysis (Braun & Clarke, 2021), adapted to doctrinal research. Texts were coded into thematic categories aligned with the study's research objectives:

- Conditions for valid fatwa issuance (jurisprudential and procedural).
- Recurrent issues in Hajj/ 'Umrah fatwa (e.g., dam, sequencing, women's rulings, health concessions).
- Potential and risks of generative AI (opportunities, hallucination, erosion of accountability).
- Maqāṣid al-Sharī'ah safeguards (protection of dīn, nafs, 'aql, 'ird, māl).

Coding was manual and interpretive, reflecting the qualitative nature of the study. Themes were compared across sources (e.g., contrasting classical *uṣūl* with Malaysian legal enactments) to identify points of convergence and divergence. This iterative process facilitated the development of a hybrid conceptual model where AI operates within Sharī'ah and state-aligned parameters.

To address the AI dimension, concepts from computer science and governance were translated into Islamic legal-ethical equivalents. For instance, the idea of "audit trails" in AI governance (Raji et al., 2020) was mapped onto the Sharī'ah concept of accountability (*mas'ūliyyah*). Similarly, "retrieval-augmented generation" was evaluated against *istidlāl* requirements in fatwa.

Ethical Considerations

Although the study did not involve human subjects, several ethical considerations were observed:

1. Respect for religious authority. The research explicitly acknowledges that AI cannot replace human muftis, aligning with

the principle that fatwa authority rests with qualified scholars under Malaysian law.

2. Representation accuracy. Care was taken to avoid misquoting or decontextualizing Shari'ah texts and Malaysian fatwa rulings. Where interpretive ambiguity existed, multiple sources were cross-checked.
3. Avoidance of technological overclaim. In line with AI ethics guidance (Floridi et al., 2018), the study avoids portraying AI as a definitive problem-solver but rather as a supportive tool subject to human oversight.
4. Cultural sensitivity. The analysis was framed within the Malaysian context, mindful of the diversity of madhāhib in global Muslim practice and the need to avoid generalizations.

By embedding these ethical commitments, the research aligns with both academic standards of integrity and Shari'ah-based values of honesty (*ṣidq*) and trust (*amānah*).

Limitations of Methodology

Several methodological limitations must be acknowledged:

1. Textual dependence. The study relies exclusively on documentary sources and does not incorporate empirical data from pilgrims, muftis, or technology developers. As such, it cannot capture lived experiences of fatwa usage or user trust in AI-driven systems.
2. Rapidly evolving technology. AI technologies evolve faster than doctrinal analysis. Conclusions drawn today about generative AI risks or capabilities may need updating within a short time frame (Bender et al., 2021).
3. Malaysia-specific context. While Malaysia's fatwa governance system provides a rich case study, findings may not be generalizable to jurisdictions with different institutional structures (e.g., Saudi Arabia or Indonesia).

4. Interpretive subjectivity. Qualitative thematic coding inherently involves researcher interpretation. Although grounded in authoritative sources, different scholars may categorize themes differently.

These limitations suggest that future studies should adopt mixed methods, incorporating interviews with muftis, surveys of pilgrims, and technical evaluations of AI prototypes to triangulate findings and enhance validity.

RESULTS

The findings of this study are organized thematically in line with the research objectives: (i) examining the conditions for valid fatwa issuance in Shari‘ah and Malaysian legal frameworks, (ii) identifying recurrent Hajj/‘Umrah issues requiring guidance, (iii) analyzing the potential and risks of generative AI in fatwa automation, and (iv) proposing a maqāṣid al-sharī‘ah-based conceptual framework for AI-driven fatwa in the Malaysian context.

Conditions for Valid Fatwa Issuance in Malaysia

Sharī‘ah Foundations

The doctrinal analysis revealed that fatwa issuance in Islam is governed by uṣūl al-fiqh conditions:

- a. Competence of the mufti (*ahl al-ijtihād*), requiring mastery of Qur’ān, Sunnah, Arabic, jurisprudential principles, and awareness of contemporary realities (Kamali, 2003).
- b. Evidentiary reasoning (*istidlāl*), which obliges the mufti to provide justification from the Qur’ān, Sunnah, consensus, or analogy.
- c. Contextual sensitivity, ensuring that fatwa responds to the circumstances of the questioner (*waqi‘iyyah*).

These conditions affirm that fatwa is not merely a textual ruling but a process involving reasoning, accountability, and contextual application.

Malaysian Legal Framework

Analysis of state enactments shows that fatwa issuance in Malaysia is a state prerogative, with each State Mufti Committee empowered to deliberate and issue rulings. For a fatwa to be binding, it must be consented to by the ruler and gazetted. At the national level, the Muzakarah of the National Council for Islamic Religious Affairs (MKI) produces resolutions, which are advisory unless formally adopted by a state.

Furthermore, the Muzakarah Haji Kebangsaan, conducted annually with Tabung Haji (TH), state muftis, and subject-matter experts, generates resolutions tailored to recurring Hajj and 'Umrah issues. These resolutions, while not legally binding, function as de facto guidance for pilgrims and TH officials.

Finding: Any AI-driven fatwa system must therefore operate within state authority boundaries, differentiating between:

- a. State-gazetted fatwa (legally binding).
- b. Muzakarah Kebangsaan resolutions (advisory, operational).
- c. General fiqh guidance (scholarly references, non-binding).

A simple hierarchy in Table 1 illustrates this finding.

Table 1

Hierarchy of Authoritative Sources for Malaysian Fatwa

| Level | Source | Binding Status | AI Role |
|-------|----------------------------------|----------------------------|---------------------------------------|
| 1 | State-gazetted fatwa | Legally binding | Must cite and prioritize |
| 2 | Muzakarah Kebangsaan resolutions | Advisory, context-specific | Provide as guidance, flag non-binding |

| Level | Source | Binding Status | AI Role |
|-------|--------------------|---------------------|------------------------------|
| 3 | General fiqh texts | Scholarly reference | Supportive, explanatory only |

Source: Authors' analysis.

Recurrent Issues in Hajj/Umrah Fatwa

A review of TH and Muzakarah resolutions revealed several categories of issues that Malaysian pilgrims face. These issues represent the primary “use cases” where AI-driven assistance may be beneficial.

- a. Ritual Errors and Compensations (*Dam*)
 - Pilgrims frequently face sequencing errors (e.g., performing *tawāf* before *sa‘y* in the wrong order).
 - Questions on *dam* obligations arise when conditions are violated, such as improper *ihram* attire or accidental violations of prohibitions.

- b. Health and Medical Concessions
 - Resolutions cover dispensations for elderly pilgrims, those with chronic illnesses, and women facing menstruation during rituals.
 - Health-related rulings also include use of medication that may involve prohibited substances or temporary withdrawal from rituals.

- c. Women-Specific Issues
 - Common questions involve menstruation during *tawāf*, rulings on contraceptive use to delay menses, and concessions for nursing mothers.

d. Travel and Logistical Constraints

- Modern travel (air-conditioned buses, plane transits) and visa regulations create scenarios not explicitly addressed in classical fiqh.
- TH resolutions often contextualize rulings for Malaysian logistical arrangements.

Finding: These issues are recurring and well-documented, making them ideal candidates for curated AI corpora. AI systems could provide immediate answers to pilgrims facing urgent questions (e.g., “I started menstruating before ṭawāf, what should I do?”) with direct citations to Muzakarah resolutions.

Opportunities and Risks of Generative AI

a. Opportunities

- Timely access: AI tools can provide instant guidance, crucial for pilgrims in urgent situations.
- Multilingual support: AI systems can translate rulings into Malay, English, and Arabic, addressing linguistic diversity.
- Personalization: By embedding rules of fiqh and contextual metadata, AI can deliver answers specific to Malaysian pilgrims rather than generic rulings.

b. Risks

- Jurisdictional confusion: Without safeguards, AI may present a ruling from one state as universally binding.
- Erosion of scholarly accountability: Overreliance on AI could bypass muftis and diminish trust in human scholars.

Finding: While AI offers accessibility benefits, its epistemic risks are significant. Therefore, generative AI cannot function independently but must operate with retrieval-augmented generation (RAG) anchored in authenticated corpora and subject to human oversight.

Maqāṣid al-Sharī'ah-Based Safeguards

The application of maqāṣid al-sharī'ah (objectives of Sharī'ah) provides a framework for aligning AI-driven fatwa with ethical imperatives.

- a. Protection of religion (*dīn*): Preventing misguidance by ensuring rulings are tied to authentic sources.
- b. Protection of life (*nafs*): Offering immediate concessions in cases of illness or danger.
- c. Protection of intellect (*'aql*): Avoiding confusion through transparent citations and clear differentiation between binding and advisory rulings.
- d. Protection of dignity (*'ird*): Safeguarding sensitive issues such as women's rulings and personal health with confidentiality.
- e. Protection of wealth (*māl*): Preventing unnecessary *dam* or financial penalties through accurate guidance.

Finding: Maqāṣid not only justify the introduction of AI but also set boundaries-automation is ethical only if it preserves core Sharī'ah objectives.

Conceptual Framework for AI-Driven Fatwa in Hajj

Drawing on the above findings, the study proposes a hybrid, state-aligned conceptual framework.

Key Features

1. Curated Corpus: AI is trained only on authenticated Malaysian fatwa, Muzakarah Haji resolutions, and Qur'ān-Sunnah evidence.
2. Retrieval-First Approach: AI responses cite original texts verbatim before generating summaries.
3. Authority Tags: Each response signals binding status (e.g., "This ruling is binding in Selangor as gazetted on [date]").
4. Escalation Protocols: Uncertain queries are flagged for referral to human muftis.
5. Audit Trails: All AI interactions are logged for institutional review.
6. Multilingual Interface: Answers available in Malay, English, and Arabic for pilgrims.

Proposed Model

A diagram could depict the flow:

- User Query → AI System
 - Step 1: Retrieve from curated corpus (fatwa, resolutions).
 - Step 2: Apply authority filter (state vs. national).
 - Step 3: Generate answer with citation + authority tag.
 - Step 4: If low confidence → escalate to human mufti.
 - Step 5: Log answer for audit.

This model emphasizes that AI is supportive, not substitutive, ensuring alignment with both *uṣūl al-fiqh* and Malaysian governance.

Synthesis of Findings

The research objectives are addressed as follows:

- Objective 1: The study clarified *Sharī'ah* and Malaysian legal conditions for valid fatwa, showing that AI must remain jurisdiction-aware and authority-bound.

- Objective 2: The analysis identified recurrent Hajj issues (ritual errors, health, women's rulings, travel constraints) suitable for AI assistance.
- Objective 3: The opportunities (timely, multilingual guidance) and risks (hallucinations, erosion of accountability) of AI were systematically evaluated.
- Objective 4: A maqāsid-based conceptual framework was developed, combining curated corpora, retrieval-augmented generation, and human oversight.

Collectively, these findings demonstrate that AI-driven fatwa in Malaysia is feasible only under strict governance, with maqāsid al-sharī'ah as ethical compass and state fatwa authority as institutional anchor.

CONCLUSION

This study set out to conceptualize a Shari'ah-compliant framework for AI-driven fatwa automation in the Malaysian Hajj and 'Umrah context. Through a doctrinal and qualitative analysis, several key findings emerged.

First, fatwa issuance in Malaysia is governed by both classical *uṣūl al-fiqh* principles and state-specific legal structures. Fatwa is valid only when issued by accredited scholars, supported by evidentiary reasoning (*istidlāl*), and gazetted by the ruler. The study highlighted the layered hierarchy of authority in Malaysia, where state-gazetted fatwa are binding, while national Muzakarah resolutions and Hajj-specific guidelines remain advisory unless formally adopted.

Second, a review of Muzakarah Haji Kebangsaan resolutions revealed that Malaysian pilgrims repeatedly face a set of well-documented challenges, particularly regarding ritual sequencing, compensatory sacrifices (*dam*), health-based dispensations, women's

ritual issues, and modern logistical constraints. These recurrent issues constitute “structured scenarios” that are highly suitable for integration into curated AI corpora.

Third, the potential of AI lies in its ability to provide instant, multilingual, and context-aware guidance to pilgrims, especially in urgent situations. However, these benefits are tempered by significant risks. Generative AI systems are prone to hallucinations, jurisdictional confusion, and erosion of scholarly accountability if deployed without safeguards.

Fourth, the application of *maqāṣid al-sharī‘ah*-protection of religion, life, intellect, dignity, and wealth-provided an ethical framework for balancing risks and opportunities. *Maqāṣid* highlight that automation is permissible only when it preserves doctrinal integrity, prevents harm, and enhances human welfare.

Finally, the study developed a hybrid conceptual framework in which AI operates as a supportive tool tethered to state fatwa authority. Key features include curated corpora of authenticated fatwa and resolutions, retrieval-augmented generation with mandatory citations, authority tagging to distinguish binding from advisory rulings, escalation protocols to human muftis, and audit trails for institutional accountability.

Contribution to Knowledge

This research contributes to both Islamic legal studies and AI governance scholarship in several ways.

1. Islamic legal studies: The study extends the discourse on digital fatwa by shifting from descriptive accounts of online repositories to a normative framework for automation. It demonstrates how *uṣūl al-fiqh* principles and fatwa governance in Malaysia can be operationalized as design constraints for AI systems.
2. AI ethics and governance: By aligning algorithmic safeguards (audit trails, provenance, escalation) with *maqāṣid al-sharī‘ah*, the

study advances a cross-disciplinary contribution: a Shari'ah-grounded model for trustworthy AI in the religious sector.

3. Policy relevance: The study provides a blueprint for Malaysian authorities-such as Tabung Haji, state mufti offices, and JAKIM-to cautiously integrate AI into fatwa delivery without compromising legitimacy or accountability.

In sum, the research bridges a gap between doctrinal Islamic jurisprudence, Malaysian legal structures, and contemporary AI governance, offering a conceptual model with both local and global relevance.

Recommendations for Practice and Policy

Based on the findings, the following recommendations are advanced:

1. Institutional Deployment Only. AI-driven fatwa tools should be restricted to official platforms (e.g., Tabung Haji portals, state mufti websites). This ensures alignment with recognized authorities and prevents unsupervised commercial or private systems from issuing unauthorized rulings.
2. Curated Corpora and Metadata Standards. State mufti departments and JAKIM should collaborate to standardize metadata (jurisdiction, status, date, binding nature) for all fatwa and Muzakarah resolutions, enabling reliable AI retrieval.
3. Audit and Oversight Mechanisms. Institutions must implement audit trails for AI outputs, with regular review committees comprising muftis, fiqh experts, and technologists. This mirrors both Shari'ah accountability (*hisbah*) and AI governance best practices.
4. Escalation Protocols. AI systems should include a "no-answer" or "refer-to-scholar" function when queries exceed confidence thresholds. This preserves the primacy of human judgment.

5. **Capacity-Building for Scholars.** Training programs should equip muftis and fatwa officers with digital literacy skills, enabling them to supervise AI systems effectively and critically evaluate their outputs.

Future Research Directions

While this study provides a conceptual framework, further research is required in several areas:

1. **Empirical Studies with Pilgrims.** Surveys and focus groups could explore pilgrims' trust in AI-driven fatwa systems, their expectations, and their concerns. Understanding user perceptions is essential for adoption.
2. **Prototyping and Technical Evaluation.** Pilot AI systems using retrieval-augmented generation (RAG) should be developed with curated corpora of Malaysian fatwa and Muzakarah resolutions. Systematic testing could measure accuracy, hallucination rates, and user satisfaction.
3. **Comparative Jurisdictional Studies.** Research in other Muslim-majority countries (e.g., Saudi Arabia, Indonesia) could examine how differing fatwa governance structures affect the feasibility of AI-driven fatwa. This would help assess the global adaptability of the proposed framework.
4. **Longitudinal Impact Assessment.** Future studies should evaluate the long-term effects of AI-driven fatwa on scholarly authority, public trust, and compliance. This would determine whether automation strengthens or weakens institutional legitimacy.
5. **Integration with Broader Digital Hajj Platforms.** Research could investigate how AI fatwa tools might integrate with existing systems like Saudi Arabia's Nusuk platform, creating seamless user experiences that combine logistics with religious guidance.

Author Contributions

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Informed consent was not required for this study.

Data Availability Statement

The data presented in this study are available upon request from the corresponding author due to privacy and ethical restrictions.

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Conflicts of Interest

The author declares no conflicts of interest.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

During the preparation of this work, the authors used ChatGPT and PaperPal to improve the clarity of the language and readability of the article. After using these tools, the authors reviewed and edited the content as needed and took full responsibility for the content of the published article.

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