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The Role of Artificial Intelligence in the Development of Knowledge in the Field of Law and Islamic Law

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ABSTRACT

This study aims to conceptually and critically examine how artificial intelligence (AI) plays a role in the development of legal knowledge, including in the realm of Islamic law (fiqh, ushul fiqh, ijtihad). Through library research methods, including literature searches from academic journals, books, and articles with DOI, this study identifies several AI functions: legal research assistant, istinbat (legal-reasoning) support system, fatwa chatbot, and jurisprudential trend prediction tool. The results indicate that AI can accelerate access to legal literature, assist in the development of legal arguments, and support innovation in legal research methodology. However, the use of AI in the realm of Islamic law still requires validation from scholars, ethical considerations (including transparency, fairness, and accountability), and a clear regulatory framework. This study recommends that Islamic legal and educational institutions develop a human-in-the-loop collaboration framework to reap the benefits of AI while maintaining the authority of traditional scholarship.

1. Introduction

The rapid development of information and communication technology and the emergence of artificial intelligence (AI) have resulted in transformation in various fields, including the legal field. In the world of law, AI has begun to be used for legal research, prediction of court decisions, contract analysis, and automation of legal documents. In the context of Islamic law, the question arises of how AI can take part in the development of Islamic scientific disciplines - especially in the process of ijtihad, interpretation of texts, and absorption of contemporary social contexts.

Textually, the Qur'an emphasizes the importance of using reason, research and tawwil in understanding Allah's guidance. Example verse:

"Allah brought you out of the wombs of your mothers: you knew nothing, and He gave you hearing, sight and understanding so that you may be thankful." (QS. An-Nahl: 78) "And say: O my Lord, add to me knowledge (knowledge)." (QS. Thaha: 114)

This verse shows that Islam values scientific innovation and the development of knowledge as part of human worship. Based on this, the integration of AI into the legal and Islamic legal realm can be seen as an effort to utilize the potential of technology for the benefit of the people, as long as it remains within the corridor of sharia.

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The questions this research aims to answer are:

- 1. What are the roles and functions of AI in the development of general legal knowledge?
- 2. How can AI be adapted within the realm of Islamic law (figh, ijtihad, and fatwa)?
- 3. What are the challenges, obstacles, and limitations of using AI in the context of Islamic legal scholarship?

2. Literature Review

2.1 Artificial Intelligence in Legal Research

In modern legal literature, AI has been used as a research and writing tool. For example, Perlman, in his paper "Generative AI and the Future of Legal Scholarship," explains that generative AI can help legal researchers discover argumentation patterns, explore precedents, and uncover otherwise hidden jurisprudential trends. (M.Perlman Andrew, 2024). Nayar also highlighted that many law journals are now starting to allow the use of AI assistants in article writing, with transparent disclosure requirements. (Nayar Spencer, 2025)

Conceptual models such as Lance Eliot's "autonomous levels of AI legal reasoning" framework describe levels of automation in legal argumentation, ranging from minimal (AI as a passive aid) to high levels (AI capable of constructing autonomous legal arguments).

The applied literature also shows that the use of AI in legal applications (contract review, litigation analysis, decision prediction) has increased exponentially. Conklin notes a significant increase in the use of AI in empirical legal research. (Conklin & Houston, 2025)

2.2 AI and Islamic Law: Concepts, Fatwas, and Digital Ijtihad

In the realm of Islamic law, a number of literatures have begun to examine Al's potential as a supporter of legal ijtihad (digital ijtihad). The paper "Digital ijtihad: Utilizing Artificial Intelligence in Ijtihad" discusses how AI, through Natural Language Processing (NLP) techniques, can help process classical texts, explore analogies, and contextualize them. (Setiawan Agung, 2024)

The article "Utilization of Artificial Intelligence in the Field of Islamic Law" mentions that AI has been used in fatwa chatbots that offer simulated answers to religious questions, with the caveat that these answers do not replace the authority of human muftis. (Nurochman, 2025)

In the discourse on fatwa authority, the study "Religious Fatwa Authority in the Context of the Artificial Intelligence Era" demonstrates that fatwas generated by AI cannot be the sole source of decisions: AI functions more as a tool that provides answer options or references, which are then validated by human muftis.

The ethics of AI from an Islamic perspective have also been discussed, for example, in the article "The Ethics of Artificial Intelligence (AI): A Metaethical Exploration of AI Regulatory Policy in Indonesia and Internationally," which touches on the principles of transparency, justice, and accountability as essential requirements for AI to align with Islamic values. (Khasri Khair Rodinal Muhammad, 2024)

Other literature such as "Opportunities and Challenges of Islamic Law in the 5.0 Era" also highlights that although Al opens up opportunities in contemporary ijtihad methods, there must still be limits so that the authority of the ulama is not replaced. (Halim Abdul, 2024)

2.3 Ethical and Regulatory Framework of Al

In the realm of international regulation, global cooperation on AI (e.g. the draft "Framework Convention on Artificial Intelligence") emphasizes that AI must comply with the principles of human rights, transparency, non-discrimination and accountability. (Wikipedia, 2025)

Elika Al is also widely discussed in the realm of philosophy and public policy. The metaethical article above (Ref, Metaethical Al) presents how important the value basis is in determining fair and dignified Al policies. (Muhammad, 2025)

From an Islamic perspective, the ethical perspective of Islam is linked to the principles of the maqashid sharia, such as preserving human reason, wealth, life, and honor (hifzh al-'aql, hifzh al-mal, hifzh al-nafs). Islam must be designed and implemented so as not to violate human rights or create new injustices.

3. Methodology

This research employed library research and critical review methods. The methodological steps included:

- 1. Determining keywords: such as "artificial intelligence & law," "Al-Qur'an & Islamic law," "digital ijtihad," "chatbot fatwa," "Al-Qur'an legal reasoning."
- Searching scientific literature: searching academic databases (e.g., Google Scholar, JSTOR SSRN, university repositories) for articles with DOIs or peer-reviewed articles, as well as related academic books.
- Selecting and sorting relevant, recent (last 5-10 years), and high-quality articles and books.
- 4. Thematic analysis: identifying key themes (functions of Al, challenges, ethics, adaptation to Islam).
- 5. Synthesis and critique: formulating findings, critiquing claims, and constructing logical arguments based on the literature.
- 6. Writing and referencing: compiling the article in an academic format and including complete references (books and articles with DOIs) and referencing Quranic verses where relevant.

This method does not use primary empirical data (such as surveys or experiments) because the focus of the research is conceptual exploration. However, this approach is suitable for theoretical studies and the development of conceptual frameworks.

4. Results and Discussion

The results of the literature review and critical analysis can be organized into the following main subtopics:

4.1 Functions and Contributions of AI in General Law

4.1.1 Legal Research Accelerator

AI (especially NLP models and retrieval systems) can quickly search legal literature, precedents, journals, and court decisions, providing summaries and correlations between documents that would previously be difficult for humans to find in a short time.

4.1.2 Predictive Analytics

Some AI systems can predict the probability of litigation outcomes based on historical data. This helps lawyers or researchers understand court trends and prepare strategic arguments.

4.1.3 Drafting Legal Documents

Al can help draft contracts, pleadings, decision summaries, or legal memos, which are then edited by humans.

4.1.4 Jurisprudential Pattern Mapping

Al can detect court patterns in arguments, judicial consistency, or judicial bias that humans might miss.

4.1.5 Academic Writing Assistant

In legal research, generative AI can offer additional reference structure suggestions and even formulate initial drafts (with the researcher's continued verification). Perlman and articles written using AI are examples of direct application. (M.Perlman Andrew, 2024)

4.2 Al Adaptation in Islamic Law and Digital Ijtihad

Fatwa chatbots: On some platforms, AI has been used to answer religious questions (simulative fatwas). However, these answers should be considered initial suggestions or tools, not final decisions, as they require verification by a human mufti. (Nurochman, 2025)

4.2.1 Search and browse classical figh texts

Al can help search through classical texts such as al-Muwatta, al-Shafi'i, al-Hidayah, and compile relevant reference points for contemporary questions.

4.2.2 Reasoning engine

Using legal argumentation models (such as the CARE model - Crafting, Assessing, Refining, Engaging) adapted to the principles of ushul figh, Al can help formulate analogies (giyas), istihsan, or benefits in a modern context.

4.2.3 Digital interpretation of Qur'anic and hadith texts

Al can assist in thematic analysis, grouping of meanings, and correlation between verses/hadith in the context of modern Islamic law. For example, the article "The Qur'an and Artificial Intelligence (a study...)" discusses the thematic aspects of the relationship between Qur'anic verses and the concept of the Qur'an. (Abu Bakar & Ridha Arif, 2024)

4.2.4 Reconciliation between the meaning of the text and the contemporary context

Al can help simulate various interpretations based on contextual parameters (e.g. economic development, human rights, technology) so that scholars can consider alternative ijtihad solutions.

4.3 Challenges, Risks, and Limitations

4.3.1 Authority and legitimacy

Al does not have the authority of scholars; Al's output must be tested, monitored, and validated by competent scholars. Some researchers argue that Al is more appropriately considered a tool, not an independent "Islamic jurist. (ULUM A. KASYIFUL, 2025)

4.3.2 Model transparency and "black boxes"

Al models are highly complex, especially large generative models (LLMs). A lack of transparency in algorithms and parameter weights can raise doubts about the integrity and validity of arguments.

4.3.3 Data bias

If AI training data comes from a specific literature (sometimes dominated by one school of thought, one language, or one culture), the output can be biased and therefore less representative of the multicultural Muslim community.

4.3.4 Errors or "hallucinations"

Generative AI sometimes produces plausible but inaccurate answers (non-existent facts). In the context of Islamic law, this has the potential to undermine trust and lead to misinterpretation.

4.3.5 Ethics and responsibility

Who is responsible if a fatwa or decision proposed by AI causes harm (for example, errors in transactions)? A framework of accountability and responsibility is needed.

4.3.6 Regulation and law

Currently, regulations on the use of AI in the religious or Islamic legal sphere are still minimal. National regulations/institutions (in the Islamic world) are needed to govern the procedures, limitations, and quality standards for AI in the Islamic legal sphere.

4.3.7 Limitations of human creativity and intuition

Human ijtihad often requires intuition based on experience, local context, and moral values that are difficult for machines to capture. Al-Belun is capable of replacing these capacities.

4.4 Strategy of Integration of Al in Islamic Legal Science

Based on the literature synthesis, several integrative strategies are recommended:

- 1. Human-in-the-loop: Al acts as an assistant, not a replacement; each output must be reviewed by Islamic scholars or legal experts.
- 2. Development of local madhhab/school of thought datasets: Train AI models with local Islamic literature (Arabic, Malay, Indonesian, Sunni, Shia, etc.) to ensure more consistent output.
- 3. Model transparency and documentation: Include metadata, algorithm explanations, and reference sources in AI output for user verification.
- 4. Accreditation and certification standards: For AI systems used for fatwas or ijtihad, certification from Islamic institutions (e.g., Islamic scholar organizations, Islamic universities) is required to ensure they meet scientific standards.
- 5. Multidisciplinary collaborative research: Combine AI expertise (computing, NLP) and Islamic scholarship (usul fiqh, interpretation, morals) to create more robust and valid models.

6. Internal regulations of Islamic institutions and state regulations: Develop national legal guidelines on the use of Al in the religious sphere to prevent misuse.

5. Conclusion

Artificial intelligence (AI) holds significant potential for advancing knowledge in the legal field in general and within the realm of Islamic law. AI can accelerate research, explore literature, assist in argumentation, and offer new perspectives on legal interpretation. In the Islamic context, AI can be a tool for digital ijtihad, fatwa chatbots, and classical text data processing. However, to ensure that the application of AI in Islamic law does not undermine scientific authority, it is necessary to ensure:

- That the Quran serves as a tool (not a substitute for Islamic scholars),
- There is human validation (Mufti or Islamic legal expert),
- The Quran model meets the criteria of ethics, transparency, justice, and accountability,
- There are regulations from religious institutions and the state that govern the use of the Quran in fatwas/ijtihad.

With integrative strategies such as human-in-the-loop, local dataset training, multidisciplinary collaboration, and AI system certification, the potential for AI integration into Islamic legal science can be realized in a balanced way by combining Islamic scientific traditions with modern technological innovations.

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