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The Application of Artificial Intelligence in Islamic Law Discovery

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Abstract

This study comprehensively explores using artificial intelligence (AI) to discover Islamic law. This study relies on literature study with literature analysis conducted in an integrative and comprehensive manner. The results of this study indicate that the use of artificial intelligence in the discovery of Islamic law provides deep and efficient analytical capabilities, enabling the identification of Islamic legal trends, agreements, and differences between schools. However, challenges arise regarding transparency, bias, and the role of humans in the decision-making process. To combat this, solid ethical guidelines and strict regulations are needed. Artificial intelligence also influences the development of Islamic law by assisting in adaptation to the modern context, bridging the gap between Islamic law and technology, and facilitating a more inclusive and global understanding of Islamic law. In this context, collaboration between Islamic jurists, computer scientists, and religious communities is critical to harnessing artificial intelligence's full potential in supporting relevant and responsive Islamic law in changing times.

Keywords: Artificial Intelligence, Islamic Law, Technology

A. INTRODUCTION

The discovery of Islamic law is a complex process. It requires a deep understanding of the sources of law, such as the Quran, Hadith, *ijtihad* (drafting regulations based on analogies and legal principles), and consultation with scholars.¹ Traditionally, this process is carried out by Islamic jurists who have undergone an extended education and deeply understand Islamic

¹ Rizal Al Hamid, Arif Sugitanata, and Suud Sarim Karimullah, "Sinkronisasi Pendekatan Sosiologis Dengan Penemuan Hukum Islam Sui Generis Kum Empiris," *Bertuah Jurnal Syariah Dan Ekonomi Islam* 4, no. 1 (2023): 48–60, <https://doi.org/https://doi.org/10.56633/jsie.v4i1.553>; Arif Sugitanata, Suud Sarim Karimullah, and Rizal Al Hamid, "Hukum Positif Dan Hukum Islam: Analisis Tata Cara Menemukan Hukum Dalam Kacamata Hukum Positif Dan Hukum Islam," *JURISY: Jurnal Ilmiah Syariah* 3, no. 1 (2023): 1–22, <https://doi.org/10.37348/jurisy.v3i1.242>.

law. However, the development of artificial intelligence technologies (Artificial Intelligence or AI) opens up the opportunity to partially automate this process.

One of the main applications of AI in the discovery of Islamic law is in the analysis of texts. Natural Language Processing (NLP) algorithms can be used to identify and analyze classical texts in Islamic literature. For example, AI can help find relevance between Quranic verses and Hadith to a specific legal situation, thus facilitating the understanding and application of Islamic law. In addition, AI can also be used to analyze fatwas issued by Islamic scholars.² This will help in understanding the trends and changes in the view of Islamic law over time. In this case, AI will require extensive and diverse datasets and sophisticated NLP models for analyzing Arabic texts with high accuracy.

However, using AI to discover Islamic law raises several ethical and legal questions. For example, how to deal with a situation where AI gives different results to the views of human scholars? Can AI be used as a legitimate source of law in Islam? These questions need to be considered in depth in this study. In addition, the main challenge faced is the legal validity generated by AI systems. Islamic law relies on careful interpretation and interpretation by scholars who deeply understand the context and traditions of Islam.

The use of AI to discover Islamic law should answer critical questions about how AI systems make decisions, whether those decisions can be ethically and legally accountable, and whether AI can understand the nuances of language and context that are often critical in Islamic law. In this regard, developing trustworthy and transparent algorithms is of great importance. On the other hand, there are also great opportunities that can be gained through AI in discovering Islamic law. AI can help overcome the time and human resource constraints typically required for in-depth legal research. By analyzing significant texts quickly and efficiently, AI can help scholars and researchers of Islamic law to identify relevant sources of law and understand how those laws are applied in a modern context.

AI in discovering Islamic law can also improve access to knowledge of Islamic law. It can help the general public, including individuals who do not have a legal education background, to understand Islamic law better and make decisions based on religious principles. Artificial intelligence influenced how the discovery of Islamic law was carried out and changed the legal landscape. The integration of AI in the discovery of Islamic law can help solve complex problems that may be difficult or even impossible to solve quickly by humans. It includes understanding Islamic Economic Laws, business ethics, and legal considerations related to contemporary issues such as Islamic banking, marriage, divorce, etc.

The use of AI can also help in compiling a complete and structured database on Islamic law. This will make it easier for researchers and legal practitioners to access information more efficiently and develop a deeper understanding of Islamic law. However, it is essential to remember that the use of AI in discovering Islamic law is not only related to technological developments alone but also involves severe ethical and legal considerations. There is the potential for AI to provide results that are biased or inconsistent with the principles of Islamic law, which could lead to controversy. Therefore, in the context of this study, the importance of developing clear ethical guidelines for using AI in Islamic law to maintain the integrity and authority of the law should be emphasized.

² Julia Singer, "Fatwas from Islamweb. Net on Robotics and Artificial Intelligence," *Artificial Intelligence in the Gulf: Challenges and Opportunities*, 2021, 279–301, https://doi.org/10.1007/978-981-16-0771-4_12; Ali Polat, Shoaib Khan, and Usman Bashir, "An Inquiry into the Application of Artificial Intelligence on Fatwa," in *Digital Transformation in Islamic Finance* (Routledge, 2022), 273–87, <https://doi.org/10.4324/9781003262169-18>.

The use of artificial intelligence in discovering Islamic law has become an increasingly exciting and relevant topic. To lay a solid foundation for this study, literature review results from relevant previous studies play an essential role. Previous studies have revealed various aspects pertinent to using AI in this context. For example, some studies note how AI technologies, especially natural language processing (NLP), are used to analyze Islamic legal texts such as the Quran and Hadith.³ These findings show the potential of automating the process of Islamic legal research, making it faster and more efficient. In addition, several studies have tried to develop an AI-based Islamic law recommendation system to help scholars and practitioners of Islamic law decision-making.⁴ Nonetheless, ethical challenges have been identified, such as the legal validity generated by AI and its impact on the role of scholars.⁵ In addition, a cross-disciplinary collaboration between jurists, technologists and linguists is also emphasized as an essential factor in developing AI technologies relevant to Islamic law. Overall, the previous literature provides valuable insight into the potential and challenges of using artificial intelligence to discover Islamic law and motivates further investigation in this field.

To complement the foundation of this study, researchers should also consider the implications of using artificial intelligence in the discovery of Islamic law. Previous studies have underlined that the use of AI in this context is not only a technical issue but also a social, cultural and ethical one. Several studies have identified social and cultural impacts, such as how Muslim communities respond to these technologies, changes in Islamic legal education, and potential shifts in the roles of scholars and legal practitioners. Meanwhile, ethical challenges are a significant concern, especially related to the legal validity generated by AI. Questions arise about how Islamic law can be applied appropriately and by Islamic values if algorithms make legal decisions. This thought of legal legitimacy became an essential element in using AI to discover Islamic law.

Furthermore, researchers need to combine the results of this literature review with an understanding of the context of Islamic law, which is rich with traditions and unique values. Thoughtful integration of modern technology and Islamic principles is one of the keys to success in this study. Therefore, this study will seek to understand the cultural and religious context underlying the use of AI in the discovery of Islamic law. Thus, through the results of an

³ Aqil M Azmi, Abdulaziz O Al-Qabbany, and Amir Hussain, "Computational and Natural Language Processing Based Studies of Hadith Literature: A Survey," *Artificial Intelligence Review* 52 (2019): 1369–1414, <https://doi.org/10.1007/s10462-019-09692-w>; Peter Wignell et al., "Natural Language Understanding and Multimodal Discourse Analysis for Interpreting Extremist Communications and the Re-Use of These Materials Online," *Terrorism and Political Violence* 33, no. 1 (2021): 71–95, <https://doi.org/10.1080/09546553.2018.1520703>; Muhammad Huzaifa Bashir et al., "Arabic Natural Language Processing for Qur'anic Research: A Systematic Review," *Artificial Intelligence Review* 56, no. 7 (2023): 6801–54, <https://doi.org/10.1007/s10462-022-10313-2>.

⁴ K Jamal et al., "Text Classification on Islamic Jurisprudence Using Machine Learning Techniques," in *Journal of Physics: Conference Series*, vol. 1566 (IOP Publishing, 2020), 12066, <https://doi.org/10.1088/1742-6596/1566/1/012066>; Bashir Ahmed, "The Status of the Use of Artificial Intelligence in Ijtihad," *Karachi Islamicus* 1, no. 1 (2021): 1–14, <https://doi.org/10.58575/ki.v1i1.5>; Ahmad Daoud Mohammad Shahrouri, "The Cultural and Social Impact of Artificial Intelligence on Islamic Law Standard: A Fundamental Purposeful Study," in *Conference on Sustainability and Cutting-Edge Business Technologies* (Springer, 2023), 194–201, https://doi.org/10.1007/978-3-031-42455-7_18.

⁵ Sara Gerke, Timo Minssen, and Glenn Cohen, "Ethical and Legal Challenges of Artificial Intelligence-Driven Healthcare," in *Artificial Intelligence in Healthcare* (Elsevier, 2020), 295–336, <https://doi.org/10.1016/B978-0-12-818438-7.00012-5>; Kashif Ahmad et al., "Developing Future Human-Centered Smart Cities: Critical Analysis of Smart City Security, Data Management, and Ethical Challenges," *Computer Science Review* 43 (2022): 100452, <https://doi.org/10.1016/j.cosrev.2021.100452>.

in-depth literature review, this study aims to provide a holistic view of the use of artificial intelligence in the discovery of Islamic law. It includes understanding the potential challenges, social impacts, and ethical considerations related to integrating AI technologies within the scope of Islamic law. With this solid foundation, the study can help guide further developments in this critical field while preserving the integrity of Islamic legal values.

B. METHODOLOGY

This study relies on literature study with literature analysis conducted in an integrative and comprehensive manner. The researcher carefully searched, evaluated, and summarized relevant literature sources on using artificial intelligence to discover Islamic law. Researchers can integrate findings from multiple literary sources to better understand the topic by reviewing relevant academic publications, scientific journals, articles, and books. Through this comprehensive literature study approach, the researcher builds a solid research Foundation, which forms the basis for the design of research methodologies and a deeper understanding of critical issues related to the use of AI in the discovery of Islamic law.

C. RESEARCH AND DISCUSSION RESULTS

1. Artificial Intelligence in the Context of Islamic Law

Artificial intelligence is a technology that enables computers and computing systems to perform tasks that would typically require human intelligence, such as natural language processing, decision-making, and data-driven learning.⁶ In Islamic law, the application of artificial intelligence can have significant implications. Artificial intelligence in Islamic law can increase efficiency and accuracy in finding laws based on complex sources of Islamic law, such as the Quran, Hadith, and other Islamic legal literature. This technology can help analyze classical texts, perform more sophisticated text-based searches, and identify patterns that may be difficult to see with the human eye.⁷ Thus, this can facilitate the *ijtihad* (interpretation of the law) faster and more precisely.

While the potential benefits of using artificial intelligence in Islamic law are enormous, some ethical challenges and considerations must be addressed.⁸ One of them is ensuring that the algorithms used in artificial intelligence systems do not contain bias or misinterpretation of law that can result in unfair legal decisions or contrary to Islamic law principles. Privacy protection and data security are essential in collecting and using sensitive legal data. In addition, integrating aspects of values and morals in artificial intelligence used in Islamic law must be considered. For example, how this technology can be directed to ensure that the

⁶ Mohammad Hossein Jarrahi, "Artificial Intelligence and the Future of Work: Human-AI Symbiosis in Organizational Decision Making," *Business Horizons* 61, no. 4 (2018): 577–86, <https://doi.org/10.1016/j.bushor.2018.03.007>; James M Tien, "Internet of Things, Real-Time Decision Making, and Artificial Intelligence," *Annals of Data Science* 4 (2017): 149–78, <https://doi.org/10.1007/s40745-017-0112-5>.

⁷ Rebekah George Benjamin, "Reconstructing Readability: Recent Developments and Recommendations in the Analysis of Text Difficulty," *Educational Psychology Review* 24 (2012): 63–88, <https://doi.org/10.1007/s10648-011-9181-8>; Teodoro Martín Noguero et al., "Strengths, Weaknesses, Opportunities, and Threats Analysis of Artificial Intelligence and Machine Learning Applications in Radiology," *Journal of the American College of Radiology* 16, no. 9 (2019): 1239–47, <https://doi.org/10.1016/j.jacr.2019.05.047>.

⁸ Manoj Kumar Kamila and Sahil Singh Jasrotia, "Ethical Issues in the Development of Artificial Intelligence: Recognizing the Risks," *International Journal of Ethics and Systems*, 2023, <https://doi.org/10.1108/IJOES-05-2023-0107>.

resulting legal decisions comply with Islamic law and are based on the principles of Justice, Humanity, and social good.

One crucial aspect is the development of legal technology (legal tech) that uses artificial intelligence to provide legal services that are more affordable and accessible to the general public. This could include creating legal documents, automated legal advice, or even online court systems that use artificial intelligence for mediation or dispute resolution. Within the framework of Islamic law, this can be a beneficial means of enabling more comprehensive access to Islamic legal knowledge and equitable legal services. However, it is essential to consider how legal regulation can keep up with these technological developments.

Is existing Islamic law flexible enough to deal with the problems of using artificial intelligence in any direction? How can the Islamic judiciary assess evidence or decisions generated by algorithms? All this requires careful thought and adaptation of the law. In addition, training and legal literacy are also necessary. Artificial intelligence in Islamic law is a powerful tool. Still, it should be used by individuals who understand the context of Islamic law and the limits and possibilities of such technology. Therefore, the training of Jurists and Islamic legal experts in using artificial intelligence will be an essential component in optimizing the benefits of this technology. Thus, the development of artificial intelligence in Islamic law must be carried out with an awareness of The Associated challenges and a commitment to ensure that the values of Islamic law and the principles of justice are maintained.

An exciting example of implementation is using artificial intelligence in the ijthihad process. Islamic scholars and scholars can use artificial intelligence tools to conduct a more in-depth textual analysis of Islamic classical texts. This can help understand historical context, language analysis, and better text interpretation. This case study can clarify how this technology can improve human capacity in formulating Islamic law. In addition, it can also explore the use of artificial intelligence in Islamic law enforcement issues. How can this technology be used to monitor and detect violations of Islamic law, including financial fraud, breaches of business ethics, or social problems related to Islamic law?

Case studies on the use of technology for law enforcement can provide insight into the possible role that artificial intelligence can play in maintaining compliance with Islamic law. In addition, it is essential to consider the global implications of using artificial intelligence in Islamic law. How can this technology be used in the context of Islamic law in different countries and different cultures? Are there any unique challenges that arise in the adoption of this technology in various Islamic legal environments? Comparative case studies can help understand variations in the application of artificial intelligence in Islamic law worldwide.

There is debate about the extent to which artificial intelligence can replace the role of humans in the discovery process of Islamic law.⁹ Is there a risk that reliance on this technology may reduce the role and involvement of Islamic scholars and scholars in the process of ijthihad? This is a complex question and demands a balance between technological efficiency and the sustainability of intellectual traditions in Islamic law. Furthermore, issues related to ethics and accountability are also the center of attention. How can we ensure that artificial intelligence algorithms in Islamic law do not result in discriminatory or unfair decisions? How can we put

⁹ Tim Wu, "Will Artificial Intelligence Eat the Law? The Rise of Hybrid Social-Ordering Systems," *Columbia Law Review* 119, no. 7 (2019): 2001–28, <https://www.jstor.org/stable/26810857>; Amr A Munshi et al., "Towards an Automated Islamic Fatwa System: Survey, Dataset and Benchmarks," *International Journal of Computer Science and Mobile Computing* 10, no. 4 (2021): 118–31, <https://doi.org/10.47760/ijcsmc.2021.v10i04.017>; Sofia Tsourlaki, "Artificial Intelligence on Sunni Islam's Fatwa Issuance in Dubai and Egypt," *Islamic Inquiries* 1, no. 2 (2022): 107–25, <https://doi.org/10.22034/IS.2022.339182.1082>.

together a regulatory framework that aligns with Islamic legal values to ensure that these technologies are used correctly and by the principles of Islamic law?

In addition, data privacy and security issues also need to be considered. Sensitive Islamic legal Data and personal information may be involved in using artificial intelligence, and the protection of this data should be taken seriously. Another challenge is education and training. Artificial intelligence in Islamic law requires human resources skilled in technology and understanding Islamic law. How can we prepare a generation of Islamic jurists competent in incorporating these technologies within Islamic law?

One of the main opportunities is the development of decision-making support tools for Islamic jurists. Using artificial intelligence technology, jurists can have faster and more accurate access to relevant Islamic legal information, thus enabling them to make legal decisions better and more efficiently. This can speed up the *ijtihad* process and help solve more complex legal issues. Furthermore, there are opportunities to expand access to Islamic legal services through digital platforms. With the help of technology, Islamic legal information can be disseminated more widely and more accessible to the public. For example, apps or websites that use artificial intelligence can provide Islamic legal advice tailored to an individual's question or regarding a specific situation, thereby assisting the individual in understanding and complying with Islamic law.

Artificial intelligence can also increase transparency and accountability in Islamic law. The legal decision-making process supported by technology can be tracked and audited more efficiently, thus minimizing the risk of corruption or abuse in the Islamic legal system. Furthermore, using artificial intelligence in Islamic law could also allow for more in-depth data analysis on Islamic legal trends and changes in legal interpretation over time. It can help us understand how Islamic law adapts to social, cultural, and economic changes and how it can be more relevant in a changing society.

Artificial intelligence in Islamic law can open doors for international collaboration and knowledge exchange between Islamic legal communities in different countries. Technology can connect scholars, scholars, and practitioners of Islamic law from other parts of the world, thus enabling a greater exchange of ideas and experiences in developing an understanding of Islamic law. Therefore, using artificial intelligence in the context of Islamic law is a challenge and an excellent opportunity to increase the efficiency, accessibility and relevance of Islamic law in a changing world. With a thoughtful and responsible approach, this technology can be a valuable tool in supporting the development and application of Islamic law in the digital age.

2. Challenges and Ethics in the Application of Artificial Intelligence for Islamic Law Discovery

The use of artificial intelligence (AI) in discovering Islamic law is an exciting development in the study of law and technology. However, as is the case in various other AI applications, the use of AI in this context also faces several ethical challenges and considerations that must be taken seriously. One of the significant challenges in using AI to discover Islamic law is the issue of accuracy. Although AI can process and analyze data quickly, its success depends heavily on the data used for training.¹⁰ Poor data quality or bias can result in inaccurate conclusions, which can negatively impact the determination of Islamic law. Therefore, ensuring that the data used to train the AI system is representative and free from bias is essential.

¹⁰ Wencke Walter et al., "How Artificial Intelligence Might Disrupt Diagnostics in Hematology in the near Future," *Oncogene* 40, no. 25 (2021): 4271–80, <https://doi.org/10.1038/s41388-021-01861-y>.

There are ethical issues related to the use of AI in the discovery of Islamic law. For example, how can AI be used with ethics to determine Islamic laws that conform to moral and religious principles? Should AI replace the role of the jurist or serve only as an auxiliary tool? These questions pose complex ethical dilemmas that need to be answered with caution. Furthermore, there are also concerns about data privacy. The use of AI in discovering Islamic law may involve collecting and analyzing sensitive individual personal data. Therefore, there needs to be strict measures in place to protect data privacy and ensure that personal data is not misused or misused in the legal discovery process.

Transparency and accountability are also issues. How can we understand and explain the results produced by AI systems in the context of the discovery of Islamic law? Is there a process that can be used to audit and verify the decisions taken by AI? These questions need to be answered to ensure that the use of AI in the discovery of Islamic law can be accounted for. In addition, the problem of social change that may arise due to the use of AI in the discovery of Islamic law should also be noted. How Will Islamic societies and legal systems evolve with the introduction of this technology? Will there be a change in the paradigm of Islamic law or the public's view of Islamic law due to the use of AI?

AI can analyze big data in record time, but this can lead to inequalities in access to law enforcement.¹¹ Institutions or individuals with more significant resources may be able to access this technology more efficiently, while the less fortunate may be left behind. This could create a more robust legal gap in society. Next, it is worth noting the issue of liability. Who is responsible if the AI system makes wrong or unfair legal decisions? Are AI device manufacturers, end users, or even the system to be held accountable? These complex questions must be answered in a more precise legal and ethical setting for using AI to discover Islamic law.

No less critical is control and regulation. Artificial intelligence used in the context of Islamic law must be strictly regulated to avoid abuse and manipulation. Legal and ethical safeguards must be enforced to ensure that AI is not used to create discriminatory rules, violate human rights, or cause injustice. In addition, it is essential to involve academic, religious, and community communities in discussions regarding the use of AI in the discovery of Islamic law. This will help ensure that different points of view and understandings of other cultures are considered in technology development and legal decision-making. Furthermore, it should be noted that the use of AI in the invention of Islamic law should not wholly replace humans' role. Jurists, religious scholars, and legal practitioners should remain integral to this process. AI should be considered an auxiliary tool to assist them in legal analysis and discovery.

Related to using artificial intelligence (AI) in discovering Islamic law, it is also necessary to consider its economic and social impact. AI technologies can reshape the employment landscape in the legal sector. Work previously done by humans, such as legal research and case analysis, could be replaced by AI. This could impact the jobs and livelihoods of legal professionals, requiring adaptation and a new understanding of their role in the AI era. In addition, there are challenges in terms of cybersecurity. The use of AI in the discovery of Islamic law involves the processing of sensitive data. Therefore, there needs to be strong cybersecurity measures in place to protect such data from security threats, such as hacking or data theft. Security and privacy must take precedence in developing and using AI systems.

¹¹ Sarah Brayne, "Big Data Surveillance: The Case of Policing," *American Sociological Review* 82, no. 5 (2017): 977–1008, <https://doi.org/10.1177/0003122417725865>; Mingchen Feng et al., "Big Data Analytics and Mining for Effective Visualization and Trends Forecasting of Crime Data," *IEEE Access* 7 (2019): 106111–23, <https://doi.org/10.1109/ACCESS.2019.2930410>.

Social and cultural aspects should also be taken into account. Introducing AI in discovering Islamic law could face resistance from communities or groups that feel this technology does not fit their values or traditions. Therefore, there needs to be an effort to educate and communicate the benefits and positive goals of using AI in the context of Islamic law to the community. It is also important to note that artificial intelligence is not an entity with its own understanding and policies. AI operates based on given data and algorithms that humans have programmed. Therefore, human ethics and values should be reflected in the use of this AI. The ethical question arises: who is responsible for ethics and morality in using AI to discover Islamic law, and how can this technology be used by the ethical principles prevailing in society and religion?

The introduction of AI in the context of Islamic law requires sufficient understanding and technical skills to use it effectively. Therefore, education and training should be available to legal professionals, academics, and students interested in using this technology. This will help reduce knowledge gaps that may arise and ensure that AI is used competently. Furthermore, there needs to be a clear regulatory framework to govern the use of AI in discovering Islamic law. These regulations should cover transparency, accountability, data privacy, cybersecurity and responsibility. Regulators should work closely with legal, ethical and technology experts to develop appropriate and relevant guidelines. In addition, it is essential to consider the technical capabilities and available resources. Not all institutions or individuals may have the access or ability to develop and use AI technologies independently. Therefore, a collaborative effort and financial support must enable more parties to adopt this technology.

No less important is the consideration of trade and business aspects. The development of AI in the discovery of Islamic law can be a significant industry. However, there needs to be policies that support innovation, healthy competition, and the use of technology that benefits society as a whole, not just a handful of large companies. In addition, it should be noted that the development of AI technologies in the context of Islamic law is about adopting existing technologies and thinking creatively to create solutions that align with people's values and needs. This could involve more in-depth research and development in AI-specific applications to Islamic law and closer collaboration between communities of legal, theological, and technology scholars. It can also help improve the efficiency, accessibility, and understanding of Islamic law in an increasingly digitized world. However, it is essential to ensure that these technologies are aligned with the ethical values and principles of Islamic law and that the entire Islamic legal community can feel the benefits fairly and inclusively.

3. The Impact of Artificial Intelligence Usage on the Development of Islamic Law

The use of artificial intelligence (AI) has had a significant impact on the development of Islamic law in several relevant aspects. AI has accelerated the process of Islamic legal research and the discovery of scholars' views. With its ability to process and analyze data quickly, AI can rapidly examine thousands of legal documents, fatwas, and scholarly writings. This allows Islamic jurists to access more information in less time, broaden their understanding of the various opinions in Islamic law, and detail the views of scholars. This is a positive step in developing diverse experiences and interpretations of Islamic law.

AI can also facilitate the comparison of Islamic law with other laws and the development of modern law. AI can help compare and analyze the differences and similarities between Islamic law and other legal systems. This is important in an era of globalization where Muslim communities often interact with various legal systems. AI can also help understand how Islamic law can adapt to the ongoing challenges and changes in modern society. However, with all the

positive progress brought by AI in the development of Islamic law, some challenges need to be addressed.

One of them is the problem of accuracy and bias in the data used for training AI systems.¹² If the data used is inaccurate or contains bias, then the conclusions drawn by the AI system can be invalid. This can lead to more significant differences in understanding the law and potential injustice in enforcing Islamic law. Furthermore, Ethics in the use of AI is also an important consideration. How this technology is used in Islamic legal research and providing fatwas or legal views should pay attention to Islamic ethical and moral values. Ensuring that AI does not violate religious and ethical principles is essential.¹³

In the development of Islamic law with the help of AI, the role of Jurists, religious scholars, and the community of Muslims remains essential. Although AI can provide recommendations and analysis based on data, the final decision on Islamic law should remain the responsibility of humans who deeply understand the context and values of Islam. Therefore, AI should be implemented as an auxiliary tool that helps improve performance and efficiency in the development of Islamic law, not as a substitute for humans in this vital role.

The use of artificial intelligence (AI) in the development of Islamic law also carries important implications in the context of law enforcement and Justice. One of the significant impacts is the increasing efficiency in the enforcement of Islamic law. AI can analyze evidence, detect potential law violations, and even predict possible illegal actions. This allows Islamic legal authorities to identify cases that require attention faster and more accurately, resulting in more efficient law enforcement. In addition, AI can also be used in monitoring and surveillance of violations of Islamic law. For example, in Islamic finance, AI can be used to track transactions that violate Islamic financial principles, such as usury or investments that are not Shariah compliant. This allows supervisory agencies to be more effective in maintaining compliance with Islamic law principles in various sectors.

However, it is essential to consider the challenges and ethical considerations associated with using AI in Islamic law enforcement. One of the primary considerations is individual privacy. In collecting and analyzing data for law enforcement purposes, robust measures need to be in place to protect the privacy of individuals and avoid misuse of personal data. Furthermore, there are questions about how decisions made by AI systems can be accounted for. If AI makes significant legal decisions, such as determining sanctions or penalties, who will be responsible if the AI system makes a mistake or makes an unfair decision? This complex issue requires further discussion and the development of a clear framework. In this regard, there needs to be strict regulations to regulate the use of AI in the enforcement of Islamic law.

Strong ethical guidelines should also be implemented to ensure these technologies are used correctly and not violate fundamental Islamic legal principles. In addition, transparency in the use of AI in Islamic law enforcement is also essential so that the public can understand how this technology is used and ensure accountability. AI in Islamic law enforcement should also be viewed as a tool for humans, not as a substitute for humans. Islamic jurists and legal authorities should remain the guide in making final legal decisions. AI technology can help in

¹² Susan Leavy, Barry O'Sullivan, and Eugenia Siapera, "Data, Power and Bias in Artificial Intelligence," *ArXiv Preprint ArXiv:2008.07341*, 2020, <https://doi.org/10.48550/arXiv.2008.07341>; Eirini Ntoutsi et al., "Bias in Data-driven Artificial Intelligence Systems—An Introductory Survey," *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery* 10, no. 3 (2020): e1356, <https://doi.org/https://doi.org/10.1002/widm.1356>.

¹³ Alexander Kriebitz and Christoph Lütge, "Artificial Intelligence and Human Rights: A Business Ethical Assessment," *Business and Human Rights Journal* 5, no. 1 (2020): 84–104, <https://doi.org/10.1017/bhj.2019.28>.

data collection and analysis. Still, final legal decisions must remain the responsibility of humans who deeply understand Islamic law's values and principles.

The influence of artificial intelligence (AI) on the development of Islamic law can also be seen from a social and educational perspective. In a social context, AI can help promote people's understanding and awareness of Islamic law. Using AI technology to develop interactive educational platforms, a wider audience can easily access information about Islamic legal principles, values, and underlying ethics. This allows Islamic law to remain relevant in people's daily lives. In addition, AI can also help in promoting interreligious dialogue and better understanding between different religious communities. With its ability to translate and understand the context of Islamic law in multiple languages, AI can facilitate cross-cultural and spiritual communication. It can help bridge understanding between Muslim and non-Muslim societies, reducing misunderstandings and stereotypes that often arise.

In the context of education, AI can change the way Islamic law learning is conducted. AI-based learning systems can provide students with an individually tailored experience, allowing them to learn at their own pace and explore topics that suit their interests and needs. This can improve the quality of Islamic legal education and enable the learners to gain a deeper understanding. However, some challenges must be addressed in using AI for Islamic lawful education.

One of them is to ensure that the content delivered by this technology remains accurate and by the values of Islamic law. The curriculum and learning materials should be developed carefully to ensure that the information provided is correct and by the principles of valid Islamic law. Furthermore, it is essential to ensure that AI technology in Islamic legal education does not replace the role of teachers and instructors. Teachers still have an irreplaceable role in guiding and providing deep context to students. AI should be sensibly integrated into the learning process as a support tool.

Artificial intelligence also impacts Islamic law's approach to complex contemporary issues, such as ethics in technology, digital finance, or modern medical problems. AI can assist in the comparative analysis of law and the discovery of scholarly views related to these issues, allowing Islamic law to remain relevant in offering ethical and moral beliefs in a modern context. However, in adopting AI technology in the interpretation of Islamic law, several challenges need to be overcome. One of them is ensuring that this technology is used with care and considering Islamic ethical values. The unwise use of AI can result in legal interpretations incompatible with legitimate Islamic law principles.

Another challenge is ensuring these AI technologies consider social, cultural, and historical contexts in interpreting Islamic law. Because Islamic law is often contextual, the use of AI must understand the complexity of the context in which the law is applied. To maximize the benefits of using AI in the view and interpretation of Islamic law, there must be close cooperation between Islamic jurists, computer scientists, and religious scholars. This collaboration can produce ethical guidelines, regulations, and guidelines that align with Islamic values and ensure that AI technology is used wisely to understand Islamic law. With an insightful approach, AI can help Islamic law remain relevant, inclusive, and responsive to complex developments in modern society.

D. CONCLUSION

The use of artificial intelligence in the discovery of Islamic law has deep and efficient analytical capabilities. It allows the identification of trends in Islamic law, consensus, and differences between different schools of thought. Despite this, challenges arise primarily

related to issues of transparency, potential bias, and the role of humans in the decision-making process. To overcome this problem, solid ethical guidelines and strict regulations are needed. Artificial intelligence has also positively impacted the development of Islamic law, as it helps adapt the law to the modern context, bridging the gap between Islamic law and technological advances and facilitating a more inclusive and global understanding of Islamic law. In this context, close cooperation between Islamic jurists, computer scientists, and religious communities is critical to maximizing the full potential of artificial intelligence in supporting the development of Islamic law that is relevant and responsive to changing times.

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