

Evaluating AI-Generated Fatwas: A Quality Assessment of ChatGPT and Google Bard Against Authoritative Islamic Rulings

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Abstract: The use of Artificial Intelligence (AI) in Islamic law has become a global phenomenon, including in Muslim countries such as the United Arab Emirates and Egypt. AI technology began to go viral when ChatGPT and Google Bard were released, claiming to be able to reason like humans. The development of Natural Language Processing (NLP) technologies like ChatGPT and Google Bard has raised a new question: Can AI replace the role of muftis in issuing fatwas? This qualitative study analyzes the capacity of AI as a fatwa issuer by testing ChatGPT and Google Bard with specific prompts related to Islamic law. The results are compared with official fatwas from Nahdlatul Ulama (NU) and Muhammadiyah, which serve as authoritative fatwa standards in Indonesia. Based on the discussion, this article finds that to date, AI NLP technology is unable to reason Islamic law as a mufti would. Therefore, AI technology cannot yet replace the role of a mufti in issuing fatwas. The main reason is that the credibility and authority of fatwas generated by AI technology cannot be guaranteed. Therefore, the use of AI technology as a fatwa issuer is not recommended.

Keywords: fatwa; mufti; technology; artificial intelligence; GPT Chat; Google Bard

Abstrak: Pemanfaatan Artificial Intelligence (AI) dalam bidang hukum Islam telah menjadi fenomena global, termasuk di negara-negara Muslim seperti Uni Emirat Arab dan Mesir. Teknologi AI mulai sangat viral ketika Chat GPT hingga Google Bard dirilis yang diklaim mampu berpikir layaknya bahasa manusia. Fenomena perkembangan Natural Language Processing (NLP) seperti ChatGPT dan Google Bard memicu pertanyaan baru: Dapatkah AI menggantikan peran mufti dalam berfatwa? Penelitian kualitatif ini menganalisis kapasitas AI sebagai pemberi fatwa melalui uji coba terhadap ChatGPT dan Google Bard dengan prompt spesifik terkait hukum Islam. Hasilnya dibandingkan dengan fatwa resmi Nahdlatul Ulama (NU) dan Muhammadiyah sebagai standar fatwa yang otoritatif di Indonesia. Berdasarkan hasil pembahasan, artikel ini menemukan bahwa hingga saat ini, teknologi AI NLP tidak mampu melakukan nalar hukum Islam sebagaimana seorang nalar seorang mufti. Dengan begitu, teknologi AI belum mampu menggantikan peran seorang mufti untuk berfatwa. Alasan utamanya adalah bahwa hasil fatwa yang digenerate oleh

teknologi AI tidak dapat dipertanggungjawabkan kredibilitas dan otoritasnya. Sehingga penggunaan teknologi AI sebagai pemberi fatwa tidak direkomendasikan.

Kata Kunci: fatwa; mufti; teknologi; kecerdasan buatan; Chat GPT; Google Bard

Introduction

Artificial intelligence technology has been utilized in the religious domain “to seek religious answers or fatwas,” which were previously the domain and role of religious scholars.¹ The use of artificial intelligence in issuing fatwas has begun since 2019 by the fatwa institutions of Dubai and Egypt.² One of the approaches they use is case-based reasoning, which enables an application to provide solutions to new questions by comparing them to similar cases from the past.³ This tool is not capable of creating new fatwas, it only reusing or analogizing⁴ old fatwa by imitating the way of thinking of an imam.⁵ The phenomenon of using artificial intelligent for fatwa is caused by the high demand for Muslim fatwas, while there are very few muftis who are qualified to answer religious questions.⁶ Although this phenomenon is still debated, artificial intelligence still has the potential to fill the position of mufti to answer legal questions in Islam.

¹ Randall Reed, “AI in Religion, AI for Religion, AI and Religion: Towards a Theory of Religious Studies and Artificial Intelligence,” *Religions* 12, no. 6 (2021): 401.

² Sofia Tsourlaki, “Artificial Intelligence on Sunni Islam’s Fatwa Issuance in Dubai and Egypt,” *Islamic Inquiries* 1, no. 2 (2022): 107–25.

³ Islam Elhalwany et al., “Using Textual Case-Based Reasoning in Intelligent Fatawa QA System,” *Int. Arab J. Inf. Technol.* 12, no. 5 (2015): 503–9.

⁴ Nabila Nouaouria et al., “A Cased Based Tool as Intelligent Assistance to Mufti,” *Arabian Journal for Science and Engineering* 31, no. 1 (2006): 75–90.

⁵ Hamid Amari et al., “Intelligent Tool for Mufti Assistance,” *International Journal on Islamic Applications in Computer Science And Technology* 3, no. 2 (2015): 1–9.

⁶ Amr Abdullah Munshi et al., “Automated Islamic Jurisprudential Legal Opinions Generation Using Artificial Intelligence,” *Pertanika Journal of Science and Technology* 30, no. 2 (2022): 1135–56.

The use of artificial intelligence in Islamic religious matters, especially fatwas, has given rise to debate.⁷ According to a study, millennial clerics in Indonesia intensively seek knowledge about Islam and utilize it in formulating daily fatwas using social media.⁸⁹ This phenomenon has the potential to become a threat to religious scholars who have had special authority to interpret the meanings of the values contained in religious texts.¹⁰ On the other hand, the potential of AI technology to read and interpret religious texts is faster than humans,¹¹ it giving the opportunities where people do not have to wait to get a mufti's fatwa because artificial intelligence can provide answers more quickly.

Some scientists predict that there is potential for AI to surpass human intelligence capabilities in the future.¹² The development of robots and AI can be seen as a threat to the existence of human jobs (and the potential role of muftis is not ruled out). This is evident in the increasingly massive influence of machines on human life.¹³ The trend of using AI technology as a reference source in learning is a

⁷ Bashir Ahmed, "The Status of the Use of Artificial Intelligence in Ijtihad," *Karachi Islamicus* 1, no. 1 (2021): 1–14.

⁸ Rusli Rusli, Muhammad Syarif Hasyim, and Nurdin Nurdin, "A New Islamic Knowledge Production and Fatwa Rulings: How Indonesia's Young Muslim Scholars Interact with Online Sources," *Journal of Indonesian Islam* 14, no. 2 (2020): 499.

⁹ Rusli Rusli and Nurdin Nurdin, "Understanding Indonesia Millennia Ulama Online Knowledge Acquisition and Use in Daily Fatwa Making Habits," *Education and Information Technologies* 27, no. 3 (2022): 4117–40.

¹⁰ Abubakar Abid and Mehmet Efe Akengin, "Using AI for Fatwas," Youtube, 2020, <https://youtu.be/Wf5IWJk7ON8?si=mu2-I70H84vahdQN>. accessed October 2, 2020.

¹¹ Sehat Ihsan Shadiqin, Tuti Marjan Fuadi, and Siti Ikramatoun, "AI Dan Agama: Tantangan Dan Peluang Dalam Era Digital," *Jurnal Ilmu Sosial Dan Ilmu Politik Malikussaleh (JSPM)* 4, no. 2 (2023): 319–33.

¹² Yunhe Pan, "Heading toward Artificial Intelligence 2.0," *Engineering* 2, no. 4 (2016): 409–13.

¹³ Pauline Hope Cheong, "Bounded Religious Automation at Work: Communicating Human Authority in Artificial Intelligence Networks," *Journal of Communication Inquiry* 45, no. 1 (2021): 5–23.

consequence of technological developments.¹⁴ So, can artificial intelligence, in the future, also be used as a reference for issuing fatwas?

In 2023, Nahdlatul Ulama responded to the widespread use of AI technology, particularly in Islamic law. At its 2023 national conference (MUNAS NU), it issued three distinct laws regarding AI technology. *First*, the use of AI NLP such as Chat GPT, Google Bard and LiaMA is haram because its truth is not guaranteed, contains elements of hallucination, is produced by a non-Muslim company, is biased, and its fatwa cannot be scientifically justified. *Second*, using deterministic AI technology such as inheritance calculators, zakat calculators, prayer time indicators is permissible on the condition that it has been validated by experts, data input comes from authoritative religious experts, and is guaranteed to be safe from errors. *Third*, the development of AI technology by Muslims is fardhu kifayah because in it there is an obligation to spread religious knowledge, as long as it refers to the opinion of credible scholars.¹⁵ Based on this fatwa, it is highly possible that a contest for fatwa authority will arise between human muftis and AI muftis. This article examines the extent to which AI can act as a mufti, or even replace one.

Research on the legal status of fatwas on artificial intelligence is important. Since 1988 research on the relationship between AI technology and religion has been done. Based on data from scopus, from 1988 to 2022 there are 287 documents that discuss AI technology and religion.¹⁶ Purwaningsih stated that AI could potentially become an inventor in legal studies, but its substance would still be controlled by humans. According to her, Islam is a religion that accepts technological innovation, so the use of AI is permissible, provided the benefits and harms are considered. If the harms outweigh the harms, Islam will

¹⁴ Fabio Urbina et al., "Dual Use of Artificial-Intelligence-Powered Drug Discovery," *Nature Machine Intelligence* 4, no. 3 (2022): 189–91.

¹⁵ Nuonline_id, "Putusan Munas NU 2023 Tentang Artificial Intelligence (AI)," Instagram, 2023, <https://www.instagram.com/p/CxdMzTJJIAx/?igshid=NjIwNzIyMDk2Mg%3D%3D>.

¹⁶ Yuli Andriansyah, "The Current Rise of Artificial Intelligence and Religious Studies: Some Reflections Based on ChatGPT," *Millab: Journal of Religious Studies*, 2023, ix–xviii.

respond with the concept of sadd az-zari'ah.¹⁷ Khoirunnisa and colleagues stated that if AI technology is properly developed, it can help meet the needs of Muslims. Otherwise, AI will pose a real threat because it can be used for apostasy, radicalism, and even terrorism.¹⁸ Munshi et.al, in 2021 attempted to present an automated fatwa system by utilizing artificial intelligence NLP.¹⁹ The literature review above indicates that research on the potential of AI as a mufti will continue. However, to date, no research has focused on how Islamic law views the phenomenon of requesting fatwas from AI technology.

AI as Mufti: How it Works, the Use of AI in the Field of Fatwas, and the Consequences of AI Religion

Simply put, AI can be described as a technology used to perform human tasks that require human intelligence. Researchers have successfully applied AI technology to perform several complex activities, such as playing chess, driving a vehicle, and even translating languages. This technology is more complex than the way conventional robotic automation works because when AI technology performs these tasks, it uses several high-level cognitive processes comparable to human intelligence.²⁰ This means that AI technology is designed to work in the same way as the human brain works.

AI technology is formulated from various complex algorithms that are continuously updated with the aim of enabling this technology to assist with tasks that even humans cannot complete. AI technology

¹⁷ Endang Purwaningsih and Irfan Islami, "Analisis Artificial Intelligence (AI) Sebagai Inventor Berdasarkan Hukum Paten Dan Hukum Islam," *Jurnal Ilmiah Galuh Justisi* 11, no. 1 (2023): 1–15.

¹⁸ Fathur Rohman et al., "Islam In The Middle Of Ai (Artificial Intelligence) Struggle: Between Opportunities And Threats," *At-Tubfah: Jurnal Studi Keislaman* 12, no. 1 (2023): 19–27.

¹⁹ Munshi et al., "Automated Islamic Jurisprudential Legal Opinions Generation Using Artificial Intelligence."

²⁰ Harry Surden, "Artificial Intelligence and Law: An Overview," *Ga. St. UL Rev.* 35 (2018): 1305.

is able to keep up with the speed of the thought process,²¹ because from the start, the AI creation process was designed to extract natural intelligence.²² In this way, AI technology will indirectly inherit the workings of the human brain. This technology will be able to perform activities similar to those of the human brain, and may even be able to complete tasks that humans are incapable of. In fact, some human jobs could potentially be replaced by AI technology. This would be a humanitarian disaster if the use of AI is not supported by strict ethical values.²³ This means that the more AI is used to support a job, the greater the potential for humans to be replaced by AI technology itself.

To illustrate the similarities between human and artificial intelligence, consider some common everyday examples. In chess, for example, humans use cognitive intelligence to think, strategize, plan, and make decisions.²⁴ Then in doing language translation into another language, humans activate intelligence to be able to process symbols, context, language to the meaning of one language to another language.²⁵ Even when driving a vehicle, humans utilize various types of brain intelligence performance, including the ability to see, situational awareness, movement, and even judgment of decisions in driving.²⁶ The workings of human intelligence are then extracted and embedded into technology, giving the technology the same intelligence

²¹ Wouter Bulten et al., "Artificial Intelligence for Diagnosis and Gleason Grading of Prostate Cancer: The PANDA Challenge," *Nature Medicine* 28, no. 1 (2022): 154–63.

²² Eneng Humaeroh, "Islamic Religious Education Learning and Trends in the Use of Artificial Intelligence: Pembelajaran Pendidikan Agama Islam Dan Tren Penggunaan Artificial Intelligence," *ASIAN: Indonesian Journal of Learning Development and Innovation* 1, no. 1 (2023): 31–35.

²³ Siti Masrichah, "Ancaman Dan Peluang Artificial Intelligence (AI)," *Khatulistiwa: Jurnal Pendidikan Dan Sosial Humaniora* 3, no. 3 (2023): 83–101.

²⁴ Josef M Unterrainer et al., "Planning Abilities and Chess: A Comparison of Chess and Non-chess Players on the Tower of London Task," *British Journal of Psychology* 97, no. 3 (2006): 299–311.

²⁵ Stuart Jonathan Russell and Peter Norvig, *Artificial Intelligence: A Modern Approach; [the Intelligent Agent Book]* (Prentice hall, 1995).

²⁶ D O I Shunichi, "Technological Development of Driving Support Systems Based on Human Behavioral Characteristics," *LATSS Research* 30, no. 2 (2006): 19–28.

as humans. This intelligence may even surpass the capacity of ordinary humans. It could be said that ordinary humans would find it extremely difficult to defeat technological intelligence at chess on some levels.

If traced, the idea of utilizing AI in law can be seen from the concepts and innovations made by Gottfried Leibniz in 1600.²⁷ The innovations developed involved utilizing computers and mathematical techniques to make law more understandable, manageable, useful, accessible, and predictable. These ideas and innovations were further developed in the 20th century, when researchers began applying computers and AI to law. This history can be compared with the history of the development of AI technology in general. At that time, the use of AI technology focused on knowledge representation and rule-based legal systems. From the 1970s to the 1990s, legal technology and AI projects focused on formally modeling legal arguments in the form of computer processes and computational modeling of legal rules.²⁸

In general, AI technology has various branches according to the characteristics of the intelligence created. There are at least 12 branches of AI technology families, such as: expert systems; natural language processing; speech recognition; robotics and sensor systems; computer vision; intelligent computer-aided instruction; artificial neural networks; game playing; language translation; fuzzy logic; genetic algorithms; and intelligent agents.²⁹ All branches of AI technology have different characteristics and ways of working according to the purpose for which they were created.

Based on the various capabilities AI possesses, it's not impossible that artificial intelligence (AI) will enable humans to learn anything easily. With AI advancing so rapidly, it's only a matter of time

²⁷ Enrico Pattaro, "A Treatise of Legal Philosophy and General Jurisprudence," *Ratio Juris* 19, no. 4 (2006): 489–500.

²⁸ Trevor Bench-Capon et al., "A History of AI and Law in 50 Papers: 25 Years of the International Conference on AI and Law," *Artificial Intelligence and Law* 20, no. 3 (2012): 215–319.

²⁹ Ririen Kusumawati, "Kecerdasan Buatan Manusia (Artificial Intelligence); Teknologi Impian Masa Depan," *ULUL ALBAB Jurnal Studi Islam* 9, no. 2 (2008): 257–74.

before learners, and even practitioners, utilize AI in their work.³⁰ The use of artificial intelligence in complex sharia decision-making can be done by translating the capabilities of sharia experts into a format that can be calculated in a computer process.³¹ To realize AI fatwas, case-based reasoning can be utilized to issue a fatwa by representing past problems stored in a database, then finding a match with a new problem to apply the solution to the old problem to the new problem.³²

The use of AI in the religious domain presents both potential opportunities and challenges. AI technology has also begun to be used in the form of fatwa-issuing websites. The AI technology used on some fatwa websites is designed as a chatbot for Q&A questions and answers.³³ Dubai is one of the first countries to utilize AI technology in the field of Islamic law. On October 29, 2019, the CEO of the Fubai Future Foundation released a virtual ifta (Islamic prayer) system that utilizes AI technology and is able to answer (issue fatwas) regarding Islamic law and religious issues. This technology is able to answer 200 questions about prayer. Meanwhile, further development will add several answers regarding fasting, taharah, ablution, and Islamic financial issues. To anticipate errors in the fatwas that will be answered, this technology is designed to verify questions asked by users by displaying the sentence "do you mean this or do you mean that." In addition, this technology will also display human authorization to prevent errors in fatwa issuance with the sentence "please contact us in the event of any error."³⁴

³⁰ Reed, "AI in Religion, AI for Religion, AI and Religion: Towards a Theory of Religious Studies and Artificial Intelligence."

³¹ Othman Abdullah et al., "The Potentials and Challenges of Decision Support System for Islamic Banking and Finance," *European Journal of Islamic Finance* 9, no. 3 (2022): 21–29.

³² Yasushi Suzuki and Mohammad Dulal Miah, "Digital Transformation in Islamic Finance: A Critique of Perfectionist's Views on Islamic Fintech," in *Digital Transformation in Islamic Finance* (Routledge, 2022), 15–43.

³³ Munshi et al., "Automated Islamic Jurisprudential Legal Opinions Generation Using Artificial Intelligence."

³⁴ Faisal Masudi, "Dubai Launches 'World's First' Artificial Intelligence Fatwa Service 'Virtual Ifta' Launched by IACAD Can Currently Answer over 200

A similar application utilizing AI technology, specifically an expert system, has also been designed to interpret religious texts based on Arabic interpretation. This application is named Al-Usoly, after one of the Islamic legal studies, Usul al-fiqh. This system was created to understand the terminology contained in Islamic law and provide considerations regarding the intended meaning of the text using a question-and-answer method. The expert system then applies the principles of ushul al-fiqh to draw conclusions or provide suggestions for the correct interpretation of the verses of the Quran. When compared with human opinion on the same case, this system demonstrated a 96% accuracy rate, indicating that this expert system is close to being able to apply expertise equivalent to that of humans.³⁵

The use of AI technology can even mimic the workings of legal *istinbat* using the *qiyas* method. The *qiyas* method is used to find similarities between new legal reasons and existing legal reasons in the text, resulting in new legal conclusions based on the text's law. One application developed using this intelligent legal reasoning method is the El Bayanie System, which uses case-based reasoning (CBR). This application can assist a mufti in generating fatwas by comparing new laws with the conditions of previously issued fatwas (using the *ilhaqi* method).³⁶ This application appears to issue new fatwas, but it simply reuses old fatwas by imitating the way a mufti draws logical conclusions.

Another use of AI technology in Islamic law can easily be found in several modern applications, one of which is an application for calculating Islamic inheritance. Typically, these applications utilize a branch of AI technology, namely expert systems. An expert system itself is a computer system adapted from the knowledge of an expert,³⁷

Questions on Muslim Prayer,” Gulf News, 2023, <https://gulfnews.com/uae/dubai-launches-worlds-first-artificial-intelligence-fatwa-service-1.67466584>.

³⁵ A M Mutawa and SUHA MOHAMMAD Al-Terkait, “Al Usouly: An Expert System in the Origins of Islamic Jurisprudence Domain,” *Kuwait Journal of Science and Engineering* 38 (2011): 143–66.

³⁶ Nouaouria et al., “A Cased Based Tool as Intelligent Assistance to Mufti.”

³⁷ Mu'tashim Billah, “Complete and Incomplete Calculation: Expert Systems Apps on the Special Cases of Islamic Inheritance Law,” *Al-Ahwal: Jurnal Hukum Keluarga Islam* 16 (2023): 180–210.

enabling it to find solutions to problems typically handled by an expert.³⁸ An expert's skills are applied to computer-based rules, allowing the expert system to be built on a predetermined basis (rules). Expert systems also commonly use backward chaining algorithms by converting Islamic inheritance laws into if-then-else language.³⁹ This means that the stricter the rules applied in an expert system, the more accurate the inheritance distribution an expert system can perform.

AI technology has also been used in Islamic criminal law. Using expert system technology, Yasser Ahmad Nada and Sultan Aljahdali designed a website that can be used to determine criminal law based on Islamic law. This system was built based on several motivations: to distribute human expertise widely to avoid injustice, to apply Islamic law, and to ensure that Islamic legal treasures are not forgotten or lost.⁴⁰ Because this application uses an expert system, a member of the AI technology family, the Islamic law represented by it is limited to the expert knowledge embedded within the system. In other words, this system is incapable of innovating in determining law and only adheres to predetermined rules of intelligence.

AI technology is widely used in Islamic financial institutions, offering potential for risk management within Islamic finance. AI technology in Islamic finance can prevent fraud, money laundering, and even conduct in-depth audits of large amounts.⁴¹ AI technology in Islamic finance can also be utilized in the form of chatbots designed to interact with customers. These chatbots are configured to provide

³⁸ Ilyas Ilyas and Anwardi Anwardi, "Sistem Pakar Pembagian Harta Waris Menurut Hukum Islam Dengan Metode Forward Chaining Berbasis Web," in *Seminar Nasional Teknologi Informasi Komunikasi Dan Industri*, 2016.

³⁹ Nur Aksin, Rahmat Robi Waliyansyah, and Nugroho Dwi Saputro, "Sistem Pakar Pembagian Harta Waris Menurut Hukum Islam," *Walisongo Journal of Information Technology* 2, no. 2 (2020): 115–24, <https://doi.org/10.21580/wjit.2020.2.2.5984>.

⁴⁰ Yasser A Nada and Sultan Aljahdali, "Expert System for Islamic Punishment (ESIP)," in *The International Arab Conference on Information Technology (ACIT 2011)*, 2012, 286–93.

⁴¹ Adel Sarea et al., "Artificial Intelligence (AI) Applications in Islamic Finance and Banking Sector," in *Artificial Intelligence and Islamic Finance* (Routledge, 2021), 108–21.

financial advice based on Sharia principles.⁴² AI technology can even be used as a data center for the distribution of zakat and qardh al-hasan.⁴³ That way, the zakat payers or aid givers (qardh al-hasan) can consider to whom they will give zakat or give a loan, based on the data that is already available.

A study has been conducted on the use of AI technology in Islamic law, specifically transactions (contracts). In this study, Rahmat Hidayat illustrates the role of AI technology in conducting transactions between customers and service providers. AI technology can be positioned as a transaction object, meaning it is a commodity that is bought and sold or rented. Second, AI technology can be positioned as a transaction tool or medium, not representing the service provider or customer, such as voice authentication, which is a means of distinguishing between real and fake voices. Third, AI technology is used as a limited representative, such as using AI as customer service, meaning this technology represents the company entity in serving customers. Fourth, high-level AI technology with human-level intelligence will be positioned as an independent actor (both service providers and customers).⁴⁴ This research merely illustrates what it would be like if AI technology with human-level intelligence replaced humans in transactions or as legal subjects. However, fundamentally, AI technology with human-level intelligence is currently only in the theoretical stage and has yet to be implemented practically.

If AI development continues, and more people use it to seek religious edicts, it's possible that an AI religion phenomenon similar to cyber religion will emerge. Cyber religion is a phenomenon where people use Google (a search engine) as a reference for religious

⁴² Shahnawaz Khan and Mustafa Raza Rabbani, "Artificial Intelligence and NLP-Based Chatbot for Islamic Banking and Finance," *International Journal of Information Retrieval Research (IJIRR)* 11, no. 3 (2021): 65–77.

⁴³ Mohammad Haider Syed et al., "An Artificial Intelligence and NLP Based Islamic FinTech Model Combining Zakat and Qardh-Al-Hasan for Countering the Adverse Impact of COVID 19 on SMEs and Individuals," 2020.

⁴⁴ Rahmat Hidayat, "Analisis Fikih Aktual Dan Hipotesis Atas Eksposisi Eksistensi Artificial Intelligence Dalam Transaksi," *Jurnal Justisia Ekonomika: Magister Hukum Ekonomi Syariah* 5, no. 2 (2021).

learning. Ahmad calls it the phenomenon of learning from "Ustadz Google."⁴⁵ Learning from Google is a common and misguided practice. This is because Google, used as a reference source for learning, lacks scientific authority. Google is merely a search engine, not a reference source for knowledge, nor is it a religious scholar. Cyber religionists are vulnerable to misunderstandings because they lack the ability to filter the information they seek.⁴⁶

There are several potential risks that will arise when people start using Google as a reference for religious learning, such as the influx of radical ideologies and the spread of hoaxes about religious understanding. While the phenomenon of cyber religion can be considered beneficial, it also has the potential to be harmful or *mafsadat*. The risks are not insignificant. There are several ways to address the harm that arises from learning from internet sources, such as maximizing social media ethics, improving digital literacy skills, and conducting further verification with experts to avoid misunderstandings regarding religious interpretations.⁴⁷ On the other hand, AI technology also opens up great opportunities for people to gain religious understanding without having to meet with religious experts.

It is undeniable that AI has the potential to influence and disrupt socio-religious life. This is because society and religion have an intrinsic bond. This means that changes in society will also have implications for religion. AI also has the potential to give rise to new and contemporary religious movements.⁴⁸ For example, GPT Chat (AI technology) is considered to reduce the values of Christian religious

⁴⁵ Ahmad Sarwat, "Mengaji Kepada Ustadz Google" (Uin Raden Fatah Palembang, 2018).

⁴⁶ Putri Nur Hidayatul Ilmiyah, "Cyber Religion Dan Dampaknya Dalam Buku 'Mengaji Kepada Ustadz Google' Karya Ahmad Sarwat (Berdasar Analisis Hermeneutika Gadamer)" (UIN Sunan Ampel Surabaya, 2021).

⁴⁷ Evie Miftalia Zulfah, Yayan Suryana, and Eva Latipah, "Pandangan Mahasiswa Psikologi UIN Sunan Kalijaga Terhadap Cyber Religion," *Jurnal Ilmiah Profesi Pendidikan* 8, no. 3 (2023): 1568–76.

⁴⁸ Beth Singler, "An Introduction to Artificial Intelligence and Religion For the Religious Studies Scholar," *Implicit Religion* 20, no. 3 (2017).

education.⁴⁹ Although other studies state that the use of AI technology can facilitate teachers in the learning process effectively and efficiently.⁵⁰

Evaluating AI-Generated Fatwas: How ChatGPT and Google Bard Respond the Prompt of Fatwa Issuance

The use of AI technology as a tool to address religious issues is inevitable in the face of technological developments. Using manual methods, a mufti can employ a direct online Q&A system, which allows the questioner to answer questions directly, and the mufti will then provide an answer. However, when a large number of similar questions are received, a mufti will be overwhelmed by the repetitive nature of the questions. By utilizing AI technology, an automated Q&A system can be created. This reduces the burden on the mufti, as AI technology can train them to provide answers based on their question-and-answer history and has a database to assess the similarity between questions.⁵¹

Even more sophisticated, there is AI technology that has a reasoning similar to the practice of Islamic legal *istinbat* reasoning, namely *qiyas*. AI technology that uses this reasoning method is commonly called Case-based Reasoning. How it works, CBR is trained to be able to understand and find solutions or answers to new cases based on the similarity of solutions that have been solved in previous cases. CBR can be a process of modifying previous solutions to suit new needs, using previous cases to explain unprecedented situations, evaluating new solutions using existing cases, or using previous experience as a basis for understanding new situations (as done by

⁴⁹ Frans Pantan, "Chatgpt Dan Artificial Intelligence: Kekacauan Atau Kebangunan Bagi Pendidikan Agama Kristen Di Era Postmodern," *Diegesis: Jurnal Teologi* 8, no. 1 (2023): 111–24.

⁵⁰ Humaeroh, "Islamic Religious Education Learning and Trends in the Use of Artificial Intelligence: Pembelajaran Pendidikan Agama Islam Dan Tren Penggunaan Artificial Intelligence."

⁵¹ Nurochman, "Pemanfaatan Kecerdasan Artifisial (Artificial Intelligence) Dalam Bidang Hukum Islam," *Ilmusyariah* doktoral, 2023, <https://ilmusyariahdoktoral.uin-suka.ac.id/id/kolom/detail/558/pemanfaatan-kecerdasan-artifisial-dalam-bidang-hukum-islam>.

lawyers) or creating fair solutions to new problems (as done by mediators in labor dispute resolution).⁵²

There are four stages of reasoning in AI CBR technology: retrieve, which means searching for similarities in cases in the database; reuse, which means reusing old cases to solve new cases; revise, which provides a more appropriate solution; and retain, which means storing reasoning experience in the database for future use.⁵³ However, Watson stated that case-based reasoning is not a technology like rule-based reasoning, neural networks, or genetic algorithms. CBR is more accurately described as a methodology that can utilize any technology, as long as it adheres to its principles.⁵⁴ By utilizing technology and reasoning methodologies such as qiyas, a system that is built may be able to be on par with a mufti.

In Islamic legal terminology, a mufti is a person Muslims refer to in Islamic law. A mufti has specific authority to issue fatwas (religious edicts) regarding Islamic legal issues facing the Muslim community.⁵⁵ Fatwas themselves hold a strategic position in the context of explaining and implementing Islamic law. Therefore, not everyone is authorized to issue a fatwa, nor does everyone have the authority to become a mufti.

Regarding the authority of muftis as religious scholars and experts in other fields, integration and interconnection between the two branches of knowledge (religion and science) are essential. This ensures that a mufti's fatwa is not scientifically biased, containing only religious elements. Therefore, several efforts to combine religious and scientific aspects have been made. For example, in the 1980s, there was a collective discussion on Islam and biomedical ethics. Initially, biomedical ethics scholars would provide input on the scientific aspects

⁵² Janet L Kolodner, "An Introduction to Case-Based Reasoning," *Artificial Intelligence Review* 6, no. 1 (1992): 3–34.

⁵³ Nurochman, "Pemanfaatan Kecerdasan Artifisial (Artificial Intelligence) Dalam Bidang Hukum Islam."

⁵⁴ Ian Watson, "Case-Based Reasoning Is a Methodology Not a Technology," *Knowledge-Based Systems* 12, no. 5–6 (1999): 303–8.

⁵⁵ Wan Mohd Khairul Firdaus Wan Khairuldin et al., "Ethics of Mufti in the Declaration of Fatwa According to Islam," *J. Legal Ethical & Regul. Issues* 22 (2019): 1.

of biomedicine to a mufti. The scholars would then begin their normative role by interpreting the findings based on religious knowledge.⁵⁶ This form of collaboration will produce a holistic fatwa from a scientific and religious perspective. Scientists who provide input to the mufti can then be referred to as co-muftis, namely those who assist the mufti in determining a law.

Google's Bard and Chat GPT chatbots are examples of the use of AI technology in the form of Natural Language Processing (NLP). This technology is used for natural language processing, enabling it to understand and mimic human speech patterns. However, Google Bard's database is considered more real-time than Chat GPT's. This is because Google Bard is trained to access unlimited data, while Chat GPT's data is limited to 2021. This means that Google Bard provides more up-to-date data than Chat GPT, which cannot provide information beyond 2021.⁵⁷

To test how the two AI technologies respond when asked for a fatwa, we used the prompt "I am a student of Islamic law in Indonesia; I am currently studying the legal status of bank interest from an Islamic perspective; provide me with a fatwa regarding the law of bank interest. The fatwa must have a legal basis (Quran, Hadith, Ijma' and Qiyas); the fatwa must use the method of ijtiḥad and the principles of uṣḥul fiqh; and finally, strengthen the fatwa using the opinions of both salaf and khalaf scholars."

When a user types in a request for a fatwa, both Chat GPT and Google Bard are capable of fulfilling the request. The difference is that Chat GPT begins its "fatwa" with a disclaimer that, as AI, it has no authority to issue fatwas. What Chat GPT describes is simply general, widely known information.

⁵⁶ Mohammed Ghaly, "Biomedical Scientists as Co-Muftis: Their Contribution to Contemporary Islamic Bioethics," *Die Welt Des Islams* 55, no. 3–4 (2015): 286–311.

⁵⁷ "Perbandingan Google Bard vs ChatGPT, Mana Yang Lebih Unggul?," eraspace, 2023, <https://eraspace.com/artikel/post/perbandingan-google-bard-vs-chatgpt-mana-yang-lebih-unggul>.

"I must remind you that issuing a fatwa is a very serious task and should only be performed by scholars with a deep understanding of Islamic law and who take into account specific social and economic contexts. As an Islamic scholar, I do not have the authority to issue a fatwa. However, I can provide general information regarding the Islamic legal perspective on bank interest and provide some references that may be helpful in your studies."

"The Islamic legal perspective on bank interest is complex and has been a topic of discussion among Islamic scholars for decades. Some scholars view bank interest (riba) as haram (forbidden) based on the evidence in the Quran and Hadith prohibiting usury. They also use the method of ijtihad and the principles of ushul fiqh (Islamic jurisprudence) to support this view."

In terms of the evidence used, Chat GPT only lists the names of surahs and verses, without writing the text of the quoted verses, namely al-Baqarah verses 275-279; the hadith regarding the prohibition of usury which is claimed to be a hadith narrated by Bukhari and Muslim without including the wording of the hadith; ijma whose source and who the ijma are; and qiyas by only listing the relationship between the contemporary situation and the concept of usury in classical texts without writing how the qiyas concept operates, especially the determination of legal illat.

"Some frequently cited arguments include:

- 1. Al-Quran: There are several verses in the Al-Quran that explicitly prohibit usury, such as in Surah Al-Baqarah (2:275-279) and Surah Al-Baqarah (2:275-279).*
- 2. Al-Hadith: The hadiths of the Prophet Muhammad (peace be upon him) also warn against the prohibition of usury. One frequently quoted hadith is from Sahih Bukhari and Sahih Muslim.*
- 3. Ijma' (Consensus of the Ummah): Many scholars agree that usury is haram based on ijma' or the consensus of the Muslim community.*
- 4. Qiyas (Analogy): Some scholars use qiyas to connect contemporary situations with the concept of usury found in classical Islamic texts."*

Meanwhile, Google Bard does not convey the authority of the fatwa issued. In this prompt, there are three aspects asked: evidence (Quran, al-Hadith, ijma', and qiyas), the method of ijtihad or the

principles of ushul fiqh, and the arguments of the salaf and khalaf scholars. Google Bard lists evidence from Surah al-Baqarah 275 whose wording and translation are unclear (not a verse of the Quran); hadiths regarding various types of usury narrated by Abu Daud; mentions the consensus of scholars without explaining which scholars; and qiyas by stating the legal justification for the prohibition of bank interest is (ziyadah).

Legal Fatwa on Bank Interest

Legal Foundation

Al-Quran---Allah SWT says in Surat Al-Baqarah verse 275:

But if you lend someone wealth, the term is for a specified term, so do not take from him injury while you know.

Meaning: "If you lend something to someone in difficulty, do not oppress him by demanding more than the agreed repayment. Know that Allah is All-Hearing, All-Knowing."

Al-Hadith---The Prophet SAW said:

"There are thirty-seven types of riba, the lightest of which is like someone who has sex with his mother." (HR. Abu Dawud)

Ijma'---The scholars have agreed that bank interest is usury, and usury is forbidden.

Qiyas---Bank interest has the same illat (cause) as usury, namely the addition (ziyadah) which has nothing to do with the use of assets.

In terms of the istinbat method or principles used, Chat GPT appears unable to comprehensively answer this prompt, thus not displaying a single answer regarding the ijthad method for prohibiting bank interest. Meanwhile, Google Bard answers this prompt using the basic principle of muamalah (Islamic transactions), namely Al-asl fi al-mu'amalah al-ibahah (the principle of mutual consent), and the incongruent principle of ushul fiqh (Islamic jurisprudence), namely Al-yaqin la yuzalu bi al-syak (the principle of certainty based on the ...

"The Method of Ijthad

This fatwa uses the ijthad method using the principles of ushul fiqh:

Al-asl fi al-mu'amalah al-ibahah, namely the original law in muamalah is permissible, unless there is evidence that shows it is forbidden.

Al-yaqin la yuzalu bi al-syak, namely belief cannot be removed by doubt.

Scholar's opinion

This fatwa is reinforced by the opinions of the Salaf and Khalaf scholars, among them:

Salaf scholars: Imam Malik said that bank interest is usury, and usury is haram; Imam Syafi'i said that bank interest is usury, and usury is haram; Imam Ahmad said that bank interest is usury, and usury is haram.

Khalaf scholars: Yusuf Qardhawi said that bank interest is usury, and usury is forbidden; Muhammad Al-Ghazali said that bank interest is usury, and usury is forbidden.

The Indonesian Ulema Council (MUI) has also issued a fatwa that bank interest is usury, and usury is haram.

In terms of the scholars' arguments, the GPT chat appears hesitant to name one or two scholars who have an opinion on the law of bank interest. The GPT chat only mentions that the salaf and khalaf scholars consistently forbade usury, while others consider the issue more complex.

"The opinions of the Salaf (early generations of Islam) and the Khalaf (later generations) also reflect varying views on this issue. Some Salaf and Khalaf scholars consistently affirmed the punishment for usury, while others viewed it as a more complex issue in the context of the modern economy."

"As a student of Islamic law, it is crucial to approach this topic with respect for the differing opinions of scholars and to understand the differing arguments. Furthermore, consult with lecturers or scholars who are competent in Islamic law to gain a deeper understanding and broader context of this issue."

Meanwhile, Google Bard confidently cites several salaf scholars, such as Imam Malik, Shafi'i, and Ahmad, as well as several later scholars, such as Yusuf Al-Qaradawi, Muhammad Al-Ghazali, and the Indonesian Ulema Council (MUI). Curiously, all of these scholars' opinions are quoted in a copy-pasted manner, stating that all scholars believe "that bank interest is usury, and usury is forbidden."

"Conclusion: Based on the legal basis and ijtihad method mentioned above, it can be concluded that bank interest is haram. Bank interest has the same illat as riba, namely an additional cost (ziyadah) that is unrelated to the use of the asset. Therefore, bank interest is haram and prohibited in Islam."

Explanation: The law on bank interest is a matter of disagreement among Islamic scholars. Some scholars believe that bank interest is haram because it constitutes usury (riba). Riba is an addition charged to a loan without any connection to the use of the asset. This is explained in the Quran and Hadith.

Some other scholars believe that bank interest is permissible. They argue that bank interest is not the same as usury due to the difference in illat (cause). Bank interest is charged for a service provided by the bank, while usury is charged without any service being provided.

However, the stronger opinion is that bank interest is haram. This is because bank interest has the same illat as riba, namely an additional interest (ẓiyadah) that has no connection to the use of the asset. Therefore, bank interest is haram and prohibited in Islam.

"That's the legal edict on bank interest that I can provide. I hope it's helpful."

If we refer to the two fatwas on bank interest issued by two authoritative organizations, namely Nahdlatul Ulama (NU) and Muhammadiyah, the difference in quality between the fatwas issued by NU and Muhammadiyah is clearly much more authoritative than the fatwas generated by the two NLP-based AI technologies. Using the Ilhaqi legal istinbat method, NU at its second Congress in 1927 in Surabaya established three laws related to bank interest: Haram (forbidden) referring to the book *Ashbah wa al-Nazair* (the Prophet's Book), Halal (permissible) referring to the book *Fath Mu'in* (the Prophet's Book) and *I'anah al-Thalibin* (the Prophet's Book), and *Syubhat* (doubtful) because its halal and haram status are uncertain. At the National Conference in Lampung in 1992, there were three opinions regarding bank interest according to the deliberations: Haram because bank interest is equated with usury, permissible because bank interest is not the same as usury, and *syubhat* because bank interest is not identical to usury.⁵⁸

The NU legal istinbat model is characterized by referring to authoritative texts. Therefore, if a legal opinion is found in that text,

⁵⁸ PBNU, "Keputusan Mukhtamar Nahdlatul Ulama Ke-1," PBNU, 1926, <https://ia800605.us.archive.org/24/items/SOLUSIPROBLEMATIKA AKTUALHUKUMISLAM/SOLUSI PROBLEMATIKA - AKTUAL- HUKUM ISLAM.pdf>.

that law will be accepted, from the basis of the evidence, the method of *ijtihad*, to the legal argument. The advantage of NU fatwas over AI technology is that they are scientifically accountable because they have clear references, thus ensuring a clear chain of evidence. AI technology, on the other hand, is unable to cite the referenced texts used. Therefore, the accuracy of the opinions of scholars cited must be questioned.

The fatwa generated by AI technology, when compared with the Muhammadiyah fatwa, is certainly far inferior. If the AI technology only quotes one verse from the Quran regarding usury, even then the wording is wrong, while the Muhammadiyah fatwa is able to present six verses at once as evidence, namely An-Nisa 160-161, Ali Imran 130, Al-Baqarah 275, 278 and 279. In terms of hadith evidence, Muhammadiyah presents five hadith related to usury, complete with sanad, matan, narrators, and translations. Muhammadiyah also explains three fiqh principles used in *ijtihad*. Supported by several fatwas from the Islamic world that have forbidden interest. At the end of the fatwa, Muhammadiyah also strengthens its fatwa based on the opinions of scholars, from al-jassas, to al-Qaradawi.⁵⁹

In issuing fatwas, Muhammadiyah employs several *ijtihad* methods, such as Bayani, Qiyasi, and Istislahi. Regarding bank interest, Muhammadiyah uses Bayani *ijtihad* to explain the legal basis for the prohibition of usury. Furthermore, in Qiyasi *ijtihad*, Muhammadiyah establishes that there is a similar legal basis between bank interest and usury, namely injustice or persecution.⁶⁰ Due to the similarity of legal grounds between the two, Muhammadiyah finally determined that bank interest is haram.

Some reasons AI technology does not have authority over fatwas, is unable to replace the mufti's role in issuing fatwas, and the fatwa cannot be used as a reference:

⁵⁹ MTT Muhammadiyah, "Fatwa Majelis Tarjih Dan Tajdid Pimpinan Pusat Muhammadiyah Nomor: 08 Tahun 2006," MTT Muhammadiyah, 2006.

⁶⁰ Abdul Salam, "Bunga Bank Dalam Perspektif Islam (Studi Pendapat Nahdlatul Ulama Dan Muhammadiyah)," *JESI (Jurnal Ekonomi Syariah Indonesia)* 3, no. 1 (2016): 77–108.

1. Unable to present complete and comprehensive legal arguments
2. There is a risk of errors in the editorial citation of the evidence, sanad, matan, narrators, and translations.
3. From a traditional perspective, AI technology is not capable of displaying scientific sanad.
4. AI NLP technology is not capable of selecting and selecting the appropriate fiqh rules for the case submitted.
5. AI technology is unable to accurately and in detail state the legal opinions of Islamic legal figures, whether among the Salaf or Khalaf.

Based on these considerations, we believe that Islam is fundamentally not anti-science or anti-technological development. The use of AI technology in any context is permissible, but currently, using it as a reference for issuing fatwas or seeking knowledge is strongly discouraged. However, if it is used solely as a means, a tool, or a medium to assist in seeking information, this is certainly permissible. Furthermore, if AI technology is intentionally designed with the integration of scientific and religious expertise, so that the database used as the material processed by the AI consists of authoritative Islamic legal references. This way, AI technology can be taught to process authoritative and credible data.

Essentially, there's a fundamental difference between using media (Google) as a learning resource and using Google as a learning tool. Several Islamic boarding schools in East Java have even used social media as a tool for Islamic learning. This means students can learn through social media, where a religious teacher (ustadz) or kyai (Islamic cleric) disseminates his knowledge through social media broadcasts.⁶¹ This phenomenon indicates that Islamic boarding schools, as institutions where religious knowledge is taught, have adapted to innovation and technological advancements. Current

⁶¹ Nur Faizin, Abdul Basid, and Ahmad Munjin Nasih, "Transformation of Santri (Pious Individuals) Perception about Learning via Online Media," in *International Seminar on Language, Education, and Culture (ISoLEC 2021)* (Atlantis Press, 2021), 232–35.

technological advancements have reached the stage of developing artificial intelligence, which is believed to possess human-like intelligence. This technology can be utilized to simplify human tasks, including religious matters.

In reality, the fatwas issued by AI technology merely recycle a previously collected database of related writings. The AI reasoning process is limited to searching for lexical similarities between what the user asks and what is already stored in the database. In her research, Sofia Tsourlaki stated that the AI fatwa technology issued by Dubai and Egypt merely imitates the workings of internet search engines.⁶² Thus, it is clear that AI technology lacks creativity and innovation in addressing religious issues (fatwas). AI can only answer what it already has data on. Therefore, for truly novel issues, AI technology will not be able to answer them as a mufti would perform *ijtihad*.

The competition between AI technology in fatwa formulation is merely a competition between fatwa institutions over a political struggle for religious authority. With the wider dissemination of fatwa technology, those behind the AI technology's control can control the standardization of religious opinion. Thus, pluralism in Islamic jurisprudence will no longer be found. Worse still, the presence of AI technology could drastically impact the capabilities of muftis. A mufti, who was initially a creative scholar conducting *ijtihad* using various approaches, will become a mufti who merely repeats the opinions of previous muftis.

Conclusion

Some human fears that AI technology will replace humans in jobs in several industrial sectors may have come true. However, to date, no AI technology has been able to replace the role of humans in thinking, particularly in issuing fatwas of Islamic law. Experiments in requesting fatwas from AI NLP technologies such as Chat GPT and Google Bard in this study prove that currently developed AI

⁶² Tsourlaki, "Artificial Intelligence on Sunni Islam's Fatwa Issuance in Dubai and Egypt."

technologies are not yet capable of replacing the position of muftis as fatwa issuers. There are several reasons why AI is not recommended for use as a fatwa-issuing machine, the essence of which is that what AI generates cannot be scientifically justified. The use of AI technology is not prohibited if it is only used as a tool, a means, or a supporting medium in searching for fatwa information. However, this technology is not recommended as a sole fatwa-issuing machine. This paper also proves that machines are still machines, and are not yet capable of independent thinking. Machines only follow the work methods set by (the person behind the machine).

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