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# Legal Innovation in Religious Courts: The Potential Utilization of Artificial Intelligence (AI) in Resolving Contemporary Cases

Abstract: Religious courts face complex challenges in resolving contemporary cases, such as marital disputes, inheritance distribution, and conflicts in Sharia-based economic matters. In the digital era, Artificial Intelligence (AI) offers innovative solutions to enhance the efficiency and accuracy of legal processes. This study employs a qualitative method with a descriptive-analytical approach to explore the potential use of AI in religious courts. Data was collected through literature reviews and document analysis, focusing on AI applications in inheritance calculations based on Islamic faraidh law, virtual dispute mediation, and Sharia contract analysis. The analysis follows the Miles and Huberman framework, involving data reduction, display, and conclusion drawing. Data validation was carried out through source triangulation to ensure the accuracy and credibility of the findings. The research findings reveal that AI can support digitalizing legal processes in religious courts, such as managing electronic documents, predicting rulings based on legal precedents, and monitoring compliance with sharia principles. Additionally, AI can potentially improve the efficiency of dispute mediation through digital platforms and facilitate automated inheritance calculations in line with Islamic law. However, implementing AI presents challenges, including inadequate regulations, potential algorithmic bias, and compatibility with Islamic legal values. This study's academic contribution provides a new perspective on integrating modern technology with Islamic law, particularly within the religious court system. The findings are expected to serve as a foundation for developing strategic policies to support AI implementation in Islamic legal systems, addressing societal needs in the contemporary era.

**Keywords**: Legal Innovation, Religious Courts, Artificial Intelligence (AI), Contemporary Case.



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### INTRODUCTION

Religious courts have an important role in resolving various legal disputes related to family aspects, such as marriage, divorce, inheritance distribution, and sharia economic issues. Resolving such cases involves much paperwork, in-depth analysis, and a short time. With the development of technology, especially Artificial Intelligence (AI), there is an excellent opportunity to improve efficiency and accuracy in the judicial process. Religious courts in Indonesia face various challenges that require efficient, fast, and accurate solutions. One of the main problems is the large volume of cases that must be handled, both in divorce, inheritance, trust, and sharia economic disputes. The limitations of human resources and existing infrastructure often hamper the dispute-resolution process. Many religious courts, especially in remote areas, still use manual systems to record and manage documents. This leads to difficulties in storing, retrieving, and managing data relevant to legal cases.

In the field, managing physical documents in religious courts is a huge burden. Every case file needs well-organized storage to be easily accessible. However, with the ever-increasing volume of cases, religious courts often find it challenging to organize and access the necessary documents promptly. This impacts the slow resolution of cases and affects the quality of service to the community. If left without technological solutions, delays in resolving cases can increase, potentially harming the parties to the dispute. In addition, complex inheritance calculations, especially those based on *faraidh* law, are also a challenge in religious courts. Inheritance calculations involving various heirs and certain parts of the inheritance are often time-consuming and prone to errors. Errors in the calculation of inheritance can lead to prolonged disputes, create injustice, and affect family relationships.

<sup>&</sup>lt;sup>1</sup> Syarah Nursyamsiah, "Quality Of Public Services In The Religious Court Of Garut Regency In The Covid-19 Pandemic Era," *Jurnal Ilmu Sosial Politik Dan Humaniora* 6, no. 1 (13 Oktober 2023): 12–21, https://doi.org/10.36624/jisora.v6i1.92.

<sup>&</sup>lt;sup>2</sup> A.R. Pah dkk., "The Promise of AI in an Open Justice System," AI Magazine 43, no. 1 (2022): 69–74, https://doi.org/10.1002/aaai.12039.

<sup>&</sup>lt;sup>3</sup> Idri Idri, "Religious Court In Indonesia: History and Prospect," *Journal of Indonesian Islam* 3, no. 2 (1 Desember 2009): 297–313, https://doi.org/10.15642/JIIS.2009.3.2.297-313.



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The manual system used to calculate the inheritance share relies heavily on human precision, often leading to differences in interpretation and incorrect calculations.<sup>4</sup>

With this challenge, Artificial Intelligence (AI) is a much-needed solution in religious courts. AI can digitize the court administration system, including document management and data storage. Legal documents can be managed electronically using AI technology, allowing quick and accurate access to relevant information.<sup>5</sup> In addition, AI can also speed up the automatic calculation of inheritance, reduce the possibility of errors, and make it easier for judges and lawyers to assess inheritance cases.

Many studies on AI in law generally focus more on the judicial systems of countries with secular legal systems, such as research conducted by Disemadi Silk Day. This research explores the potential and challenges of integrating Artificial Intelligence (AI) into the Indonesian legal system. Although AI has great potential to help legal practitioners and protect personal data, its implementation still faces several obstacles. Current regulations limit the role of AI in criminal justice, as AI cannot replace judges in making decisions that require legal considerations and "judges' convictions." Meanwhile, Haris & Tantimin's research states that AI is considered more of an electronic system or agent rather than a legal subject, with the responsibility remaining in the hands of its creators and users.

The difference between my research and previous research lies in the focus of the study and the context of the application of AI in the legal system. Research by Hari Sutra Disemadi examines more of the potential and challenges of AI in the Indonesian legal system in general, especially in criminal justice, as well as obstacles in replacing the role of judges that require "judges' confidence." Meanwhile, my research focuses on the application of AI in Indonesian religious courts, which is based on sharia law, focusing on

<sup>&</sup>lt;sup>4</sup> Erie Hariyanto, "Public Trust in the Religious Court to Handle Dispute of Sharia Economy," *AHKAM*: *Jurnal Ilmu Syariah* 22, no. 1 (30 Juni 2022), https://journal.uinjkt.ac.id/index.php/ahkam/article/view/26216.

<sup>&</sup>lt;sup>5</sup> A.J. London dan H. Heidari, "Beneficent Intelligence: A Capability Approach to Modeling Benefit, Assistance, and Associated Moral Failures Through AI Systems," *Minds and Machines* 34, no. 4 (2024), https://doi.org/10.1007/s11023-024-09696-8.

<sup>&</sup>lt;sup>6</sup> Hari Sutra Disemadi, "Urgensi Regulasi Khusus dan Pemanfaatan Artificial Intelligence dalam Mewujudkan Perlindungan Data Pribadi di Indonesia," *Jurnal Wawasan Yuridika* 5, no. 2 (28 September 2021): 177–199, https://doi.org/10.25072/jwy.v5i2.460.

<sup>&</sup>lt;sup>7</sup> Muhammad Tan Abdul Rahman Haris dan Tantimin Tantimin, "Analisis Pertanggungjawaban Hukum Pidana Terhadap Pemanfaatan Artificial Intelligence Di Indonesia," *Jurnal Komunikasi Hukum (JKH)* 8, no. 1 (1 Februari 2022): 307–316, https://doi.org/10.23887/jkh.v8i1.44408.



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resolving contemporary cases such as marriage, inheritance, and sharia economic disputes. My research also examines the challenges in integrating AI with Islamic legal values and regulatory and ethical issues more relevant to religious courts. Thus, the main difference lies in the context of the application of AI, where my research emphasizes religious courts and Islamic law, while Disemadi Haris and Tantimin's research focuses on the secular legal system and criminal justice.

Meanwhile, this research tries to fill this gap by highlighting the challenges and opportunities of applying AI in religious courts, which must follow Sharia rules and principles. This research aims to explore the potential use of AI in religious courts in dealing with contemporary cases. The main object of this research is the use of AI in religious courts, especially in handling various cases that arise in family law and sharia economics. AI can be applied in several aspects, such as calculating the distribution of inheritance following the law of *faraidh*, mediating marriage disputes through digital platforms, and analyzing Sharia economic contracts. With AI, the legal process can become more efficient, reduce the possibility of human error, and provide better access for the public to get justice.

The uniqueness of this research lies in the combination of modern technology, such as AI, with the Islamic legal system that applies in religious courts. While many previous studies have addressed the use of AI in the general justice system, very few have discussed the application of this technology in the context of religious courts. This research offers a new perspective on how technology can play a role in accelerating and improving the quality of settlement of cases related to Islamic law. One of the gaps in this study is the lack of research examining how AI can be applied in religious courts, especially in Islamic law, which has distinctive principles and values.

The main goal of this research is to explore the potential of AI in improving efficiency, accuracy, and transparency in the settlement of contemporary cases in religious courts. In addition, this study also aims to identify challenges that may arise in the implementation of AI, such as inadequate regulations, ethics, and compatibility of this technology with Islamic legal principles. It is hoped that this research can provide recommendations related to policies related to the use of AI in religious courts to align technological advances with the growing community's needs.



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In this context, some of the research questions will be answered: What is the potential of AI utilization in resolving contemporary cases in religious courts? What challenges may be faced in applying AI in religious courts, especially those related to Sharia regulations and principles? Furthermore, how does AI contribute to speeding up the case settlement process and improving access to justice in religious courts? The study also seeks to see how AI can help improve the quality of court decisions, particularly in cases that require in-depth analysis or rely on legal precedents, such as inheritance and marriage disputes. With this technology, the decision-making process can be faster and more objective, making it easier for judges to access relevant data. By uniting Islamic technology and law, this research is expected to contribute to developing a more modern, efficient, and justice-based religious justice system. The findings of this study are also expected to be the basis for policymaking that supports the application of AI in religious courts so that it can answer legal challenges in the increasingly evolving digital era.

### **METHOD**

This study uses a qualitative and descriptive-analytical approach to explore the potential use of Artificial Intelligence (AI) in religious courts. This approach was chosen because it can provide an in-depth understanding of the application of AI in religious legal systems and explore the challenges and opportunities that may arise in its application. The qualitative method allows researchers to analyze the data holistically, focusing on understanding the phenomenon in a specific social and legal context, namely the religious court. The data in this study were collected through literature studies and analysis of relevant documents. Data sources include scientific articles, books, and policy documents that discuss the application of AI in the legal field, especially Islamic law and religious justice. The main focus of data collection is on the application of AI in three areas: *faraidh* law-based inheritance calculation, virtual dispute mediation, and Sharia contract analysis. These three areas were chosen because of their relevance to contemporary cases often encountered in religious courts and the potential of AI to improve efficiency and accuracy in the dispute resolution process.



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The analysis technique used is the Miles and Huberman analysis technique<sup>8</sup>, which consists of three stages: data reduction, data presentation, and conclusion. Data reduction is done by filtering relevant information and organizing it to facilitate further analysis. The presentation of data is carried out by compiling research findings in a structured form so they can be easily understood. In the last stage, conclusions are drawn to identify the main patterns and findings regarding the potential and challenges of AI utilization in religious courts. Data validation is carried out through source triangulation to ensure the accuracy and credibility of the research results.<sup>9</sup> This triangulation involves comparing information obtained from various sources, such as existing literature, policy documents, and interviews with experts or legal practitioners experienced in Islamic law. Thus, this research is expected to produce valid and accountable findings and make a meaningful contribution to the development of policies for the application of AI in the religious justice system in Indonesia.

### **RESULTS AND DISCUSSION**

# Digitization of Legal Processes in Religious Courts with the Utilization of Artificial Intelligence

Digitalization of the legal process in religious courts is now increasingly an urgent need along with the development of technology. Religious courts handle various important cases, such as marriage, inheritance, and sharia economic disputes, which often involve a lot of documents and data that need to be appropriately managed. Previously, the management of legal documents in religious courts was mostly done manually, which was often time-consuming and prone to errors. With Artificial Intelligence (AI), this digitization process

<sup>&</sup>lt;sup>8</sup> Matthew B Miles dan A. Michael Huberman, Analisis data kualitatif: buku sumber tentang metode-metode baru (Jakarta: Universitas Indonesia Press, 2014).

<sup>&</sup>lt;sup>9</sup> Helaluddin dan Hengki Wijaya, *Analisis Data Kualitatif: Sebuah Tinjauan Teori & Praktik* (Sekolah Tinggi Theologia Jaffray, 2019).

<sup>&</sup>lt;sup>10</sup> Yuyun Wulandari, "Persepsi Publik Tentang Digitalisasi Layanan Pusaka Kemenag," *Da'watuna: Journal of Communication and Islamic Broadcasting* 4, no. 5 (2 September 2024): 1858–1872, https://doi.org/10.47467/dawatuna.v4i5.3668.

<sup>&</sup>lt;sup>11</sup> Nova Amalia, "Efektifitas Digitalisasi Arsip Surat Melalui Pembuatan Aplikasi Document Management System (DMS) Pada Subbagian Tata Usaha Kantor Kementerian Agama Kota Lhokseumawe," *Jurnal Elektronika dan Teknologi Informasi* 3, no. 2 (30 September 2022): 29–36, https://doi.org/10.5201/jet.v3i2.292.



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can be carried out more efficiently and effectively, helping religious courts resolve cases faster and more accurately. 12

AI in electronic document management allows religious courts to store, organize, and search for legal documents more quickly. For example, if a court deals with an inheritance dispute, AI can make it easier to find documents related to *faraidh* law or previous decisions relevant to the case. This is very helpful because it reduces the dependence on physical documents, which have been time-consuming to find and manage. With AI, documents can be accessed quickly, speeding up the process of resolving cases. In addition, AI also plays a role in automatic data processing. Data related to the case, such as information on the disputing parties or mediation results, can be processed and processed quickly by AI systems. Religious courts no longer need to spend much time manually checking and entering data, which often leads to errors. Religious courts can ensure that the incoming data is correct and ready for decision-making with an AI-powered digital system.<sup>13</sup>

Automating administrative processes in religious courts can also help improve efficiency. For example, scheduling hearings or reminders of deadlines for parties involved in a case can be done with the help of AI. With this technology, administrative processes become more organized and timelier. This reduces the risk of delays and administrative errors that often affect the smooth running of the legal process. In addition, AI can free up time for judges and court officials to focus more on their core task: providing fair decisions based on Islamic law. One of the great benefits of AI in religious courts is its ability to predict legal decisions based on existing precedents. By utilizing data from previous decisions, AI can assist judges in analyzing possible decisions following sharia law and principles. For example, in the case of inheritance disputes, AI can provide advice based on relevant *faradith* law. While the final decision remains in the hands of judges, AI can speed up the decision-making process by providing an initial idea of possible solutions. <sup>14</sup>

<sup>&</sup>lt;sup>12</sup> D. Hodson, "The Role, Benefits, and Concerns of Digital Technology in the Family Justice System," Family Court Review 57, no. 3 (2019): 425–433, https://doi.org/10.1111/fcre.12429.

Romi Hardhika, "Transformasi Digital Wajah Peradilan: Peran Artificial Intelligence Dalam Penguatan Integritas," *Judex Laguens* 1, no. 2 (7 September 2023), https://judexlaguens.ikahi.or.id/index.php/JL/article/view/22.

<sup>&</sup>lt;sup>14</sup> Imaro Sidqi, Siti Maymanatun Nisa, dan Hening Sukma Daini, "Development of Artificial Intelligence in the Dispute Resolution of Religious Courts," *Jurnal Hukum Islam* 21, no. 1 (11 Juni 2023): 83–112, https://doi.org/10.28918/jhi\_v21i1\_04.



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In addition, AI also plays an important role in ensuring compliance with sharia principles in every legal process. With its analytical capabilities, AI can examine legal documents and transactions to ensure that all procedures follow Sharia rules. For example, AI can determine whether the inheritance distribution follows *faraidh* law or whether the marriage contract meets the legal requirements according to Islamic law. This kind of supervision is important to maintain integrity and conformity with Islamic values in all legal processes in religious courts.<sup>15</sup>

However, although the potential for AI in digitizing legal processes in religious courts is enormous, several challenges must be faced. One of them is the limited adoption of technology. Religious courts still mostly use manual systems and take time to switch to a digital-based system. <sup>16</sup> Training for judges and court officers is also needed to utilize this technology effectively. Religious courts must allocate resources to ensure they are ready to implement AI in their operations. Finally, clear regulations on using AI in religious courts are also one of the things that must be considered. Currently, no policies or regulations specifically regulate the use of AI in religious legal systems. This creates uncertainty about how AI-generated decisions can be legally recognized in the justice system. Additionally, there are concerns about potential biases in the algorithm that could affect the resulting decisions. Therefore, there need to be regulations that ensure that AI is used relatively, transparently, and following Sharia principles.

# The Utilization of Artificial Intelligence in Predicting Decisions Based on Legal Precedents

The use of Artificial Intelligence (AI) in predicting decisions based on legal precedents is increasingly attracting attention in the judicial world. By utilizing AI technology, courts can analyze various previous legal decisions to help predict the outcome of future decisions. AI uses algorithms that identify patterns in past case data, thus helping judges or legal practitioners make decisions faster and more precisely. Thus, AI plays an effective role in accelerating the decision-making process in court. One of the key benefits of using AI in

<sup>&</sup>lt;sup>15</sup> Mariska Cahyani Putri dkk., "Pengaruh Penggunaan Artificial Intelligence Dalam Pembentukan Peraturan Perundang-Undangan," *Terang: Jurnal Kajian Ilmu Sosial, Politik Dan Hukum* 1, no. 2 (21 Mei 2024): 266–284, https://doi.org/10.62383/terang.v1i2.235.

<sup>&</sup>lt;sup>16</sup> Muhamad Hasan Sebyar, "Harmonization of Islamic Legal Institutions and Customary Law in Marriage Dispensation Cases at the Panyabungan Religious Court," *MILRev: Metro Islamic Law Review* 2, no. 2 (12 November 2023): 155–174, https://doi.org/10.32332/milrev.v2i2.7809.



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verdict prediction is its ability to reduce human bias. Court decisions are often influenced by subjective factors from the judge, such as personal views or different interpretations. AI can mitigate this by relying on existing data and precedents, which allows for more objective analysis. As such, AI can help generate more consistent and fair decisions, as those decisions are based on patterns found in the data rather than on personal considerations.<sup>17</sup>

AI can also help judges by providing recommendations based on existing data. For example, if an inheritance dispute case is like previous cases, AI can show how similar decisions are typically made. This provides additional information to judges in the decision-making process, allowing them to consider more factors and provide a more informed verdict. Thus, AI speeds up the process and improves the quality of decisions taken. However, it is important to note that AI does not replace the role of judges. AI only functions as a tool that provides predictions based on existing legal data and precedents. The final decision remains in the hands of the judge, who must consider various other factors, such as social context, human values, and ethics, that may not be fully reflected in the data. AI provides a preliminary picture, but judges still play an important role in ensuring that decisions truly reflect justice. <sup>18</sup>

Of course, the application of AI in decision prediction also has its challenges. The quality and diversity of data significantly affect the accuracy of the predictions provided by AI. The prediction results may be inaccurate if the data is incomplete or does not represent all possible cases. Therefore, it is important to ensure that the data used in AI systems is representative, accurate, and relevant so that the results can be used optimally and benefit the justice system.

# Efficiency of Dispute Mediation through Digital Platforms with the Utilization of Artificial Intelligence

Artificial Intelligence (AI) in Dispute Mediation in Religious Courts offers a potential solution to improve the efficiency of the legal process, especially in resolving family,

<sup>&</sup>lt;sup>17</sup> I. Nengah Gardhita Arsa Putra dan Jeremy Kevin Parlindungan Silaban, "Penerapan Kecerdasan Artifisial Dalam Pengawasan Kekuasaan Kehakiman Sebagai Upaya Mereduksi Disparitas Putusan Pidana Di Indonesia," *Ma'mal: Jurnal Laboratorium Syariah Dan Hukum* 5, no. 4 (30 Agustus 2024): 297–320, https://doi.org/10.15642/mal.v5i4.382.

<sup>&</sup>lt;sup>18</sup> Bagus Gede Ari Rama, Dewa Krisna Prasada, dan Kadek Julia Mahadewi, "Urgensi Pengaturan Artificial Intelligence (AI) Dalam Bidang Hukum Hak Cipta Di Indonesia," *JURNAL RECHTENS* 12, no. 2 (6 Desember 2023): 209–224, https://doi.org/10.56013/rechtens.v12i2.2395.



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marriage, or inheritance disputes. Mediation is one of the main methods of resolving disputes in religious courts. However, distance, time, and cost factors often constrain this process. AI can help overcome these barriers by providing a digital platform that allows mediation to be conducted virtually, making it easier for the parties involved to access. For example, the use of AI-based applications, such as Online Dispute Resolution (ODR), allows parties to a dispute to communicate directly despite being in different locations, without the need to be present in the courtroom.<sup>19</sup>

One of the contributions of AI in mediation is its ability to match mediators with relevant disputes. Based on the data provided by the parties, AI can analyze the characteristics of the dispute and select mediators who have expertise according to the type of problem at hand. For example, in an inheritance dispute involving multiple heirs, the AI may choose a mediator who deeply understands Islamic inheritance law. This helps to improve the fit between the mediator and the dispute, which in turn can speed up the resolution of disputes more efficiently and effectively. In addition, AI can facilitate communication between parties in a dispute. In traditional mediation, physical meetings are often complex, especially for parties in different locations. With AI-based digital platforms, mediation can be conducted remotely, allowing the parties involved to communicate without geographical barriers. For example, in marriage or divorce disputes involving couples living in different regions, AI can provide a virtual mediation room that facilitates face-to-face discussions. This facility reduces the cost and time required for inperson meetings while providing easy access for those who cannot attend in person.<sup>20</sup>

During mediation, AI can also monitor interactions and provide insights to mediators. For example, AI can detect tensions or potential issues during a mediation session. By providing this information to the mediator, AI helps the mediator to focus more on managing the conversation and steer the discussion towards a more constructive resolution. For example, AI-powered digital mediation platforms like JAMS Mediation can provide

<sup>&</sup>lt;sup>19</sup> Raden Tanzil Fawaiq Sayyaf dan Ashfa Afkarina, "Online Dispute Resolution (ODR): Online Mediation As An Alternative For Dispute Settlement During The Covid-19 Pandemic In Religious Courts," *Al'* 'Adalah: *Jurnal Syariah Dan Hukum Islam* 7, no. 1 (30 Juni 2022): 39–56, https://doi.org/10.31538/adlh.v7i1.2119.

<sup>&</sup>lt;sup>20</sup> Hibah Alessa, "The role of Artificial Intelligence in Online Dispute Resolution: A brief and critical overview," *Information & Communications Technology Law* 31, no. 3 (2 September 2022): 319–342, https://doi.org/10.1080/13600834.2022.2088060.



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real-time feedback on the communication patterns and emotions of the disputing parties, allowing mediators to handle tensions more wisely. While the use of AI in mediation offers various advantages, several challenges must be faced, primarily related to technical and ethical issues. One of the main issues is data security and privacy. The data used in mediation must be well protected, so it does not fall into the wrong hands. For example, digital platforms used for dispute mediation must comply with data security standards, such as data encryption and double authentication, to maintain the confidentiality of highly sensitive information. Additionally, while AI can improve efficiency, the algorithms used must be designed not to introduce biases that could affect the fairness of the mediation process.<sup>21</sup>

In addition, the quality of the data used in the AI system also dramatically affects the results obtained. Unrepresentative or incomplete data can produce less accurate recommendations, affecting the mediation results. For example, suppose the data entered the AI mediation system does not include all the information related to the dispute or child custody arrangements in divorce cases. In that case, the AI's mediation results may not consider all relevant aspects, so the resulting decision may be unfair or not follow the expectations of both parties. Overall, AI in dispute mediation in religious courts has excellent potential to improve efficiency, speed up the process, and improve accessibility for parties involved in mediation. AI can help solve many practical obstacles to traditional mediation, such as time constraints and costs. For example, in countries with limited access to religious courts or judicial systems, AI-based mediation platforms can be an effective alternative, as is already being implemented in some developing countries that use ODR to resolve disputes without having to come to court.<sup>22</sup>

However, to achieve maximum benefits, clear regulations regarding the use of AI in the religious justice system are needed, as well as adequate training for mediators and legal practitioners. It is important to create a legal framework that supports these technologies' safe and fair use. For example, some countries have developed regulations governing the

<sup>&</sup>lt;sup>21</sup> Ridho Darman, "Peran ChatGPT Sebagai Artificial Intelligence Dalam Menyelesaikan Masalah Pertanahan Dengan Metode Studi Kasus Dan Black Box Testing," *Tunas Agraria* 7, no. 1 (5 Januari 2024): 18–46, https://doi.org/10.31292/jta.v7i1.256.

<sup>&</sup>lt;sup>22</sup> Layan Al Faitiri, "AI in International Arbitration: What Is the Big Deal? - American Review of International Arbitration," 2024, https://aria-law-columbia-edu.translate.goog/ai-in-international-arbitration-what-is-the-big-deal/?



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use of technology in dispute resolution, such as e-mediation involving AI, which can be adapted by religious courts to ensure that the mediation process adheres to Sharia principles and provides adequate legal protection for all parties involved. With the wise application of this technology, AI can be a handy tool in improving the quality of mediation, providing faster, fairer solutions, and following Islamic law principles. However, technical and ethical challenges must be carefully addressed to ensure that these technologies can be effectively integrated into existing legal systems, particularly in religious courts.

## The Use of Artificial Intelligence in Inheritance Calculation Based on Faraidh's Law

The use of Artificial Intelligence (AI) in the calculation of inheritance based on *faraidh* law has the potential to speed up and simplify the process of distributing inheritance following Islamic provisions. The law of *faraidh* establishes the share of the inheritance each heir must receive, but the calculation can be very complicated, especially in large families with many heirs. AI can help by automatically calculating each heir's share, reducing the chances of calculation errors that often occur in manual ways. For example, in the case of the division of an heir's inheritance, leaving a wife, two sons, and one daughter, the AI can quickly calculate each heir's share according to the law of *faraidh*, which stipulates that the share of a son is twice as much as the share of a daughter. By entering data regarding the number of heirs and their relationship with the heirs, AI can provide accurate and efficient results. This is very useful for religious courts in speeding up resolving inheritance cases.<sup>23</sup>

In more complex cases, for example, when an heir leaves a deceased heir, the AI can calculate the share of grandchildren entitled to receive an inheritance under *faraidh* law. In this case, the deceased heir's child will be replaced by his or her children (the grandchildren of the heir), and the AI can accurately calculate the share the grandchildren must receive. The process is complicated manually, but with AI's help, the inheritance division becomes easier and faster. AI can also help calculate more difficult-to-divot assets, such as land and house properties. For example, if an heir leaves a piece of land that must be divided between multiple heirs, the AI can calculate the value of the land and determine a fair division. If

<sup>&</sup>lt;sup>23</sup> Wathroh Mursyidi dkk., "Pemanfaatan Aplikasi I-Waris Dalam Meningkatkan Kemampuan Para Alim Ulama Dan Masyarakat Desa Panyocokan Ciwidey," *Jurnal Abdimas Prakasa Dakara* 4, no. 2 (31 Oktober 2024): 172–179, https://doi.org/10.37640/japd.v4i2.1943.



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the physical division of property is complex, the AI can suggest alternative divisions in the form of money or other assets. AI helps avoid dissatisfaction among heirs regarding the physical division of assets that cannot be directly divided.<sup>24</sup> Additionally, AI can manage inheritance-related data, such as birth, marriage, and death certificates, to ensure the documents are legal and valid. In inheritance cases involving illegitimate heir claims, AI can verify the legal status of each heir so that religious courts can ensure that only the entitled will receive a share of the inheritance following the provisions of Islamic law.

On the other hand, AI can also address problems that often arise in inheritance calculations, such as discrepancies between recorded data and their claims. For example, in the case of a family with a wife who is not recorded in a formal marriage, AI can calculate the wife's share following the applicable *faraidh* law, avoiding disputes that may arise due to unclear legal status. Regarding efficiency, AI is very beneficial for speeding up the often protracted legacy dispute resolution process. When heirs disagree on the division of the inheritance, AI can provide clear and transparent calculations, reducing the potential for conflict. That way, the mediation and dispute resolution process can run faster and fairer.

## The Utilization of Artificial Intelligence in Handling Contemporary Cases

Religious courts in Indonesia face complex challenges in handling contemporary cases, such as divorce disputes, child custody, inheritance, and the distribution of gono-gini assets. For example, in divorce cases involving child custody, there are often differences of opinion between husband and wife regarding who is more deserving of custody. In big cities, many couples work with tight schedules, making appearing in court in person difficult. In this situation, using Artificial Intelligence (AI) in virtual mediation can be an effective solution, allowing both parties to communicate and find solutions without being physically present while speeding up the resolution process. Another example is the case of a large family

<sup>&</sup>lt;sup>24</sup> Masykurotus Syarifah, "Dynamics of Inheritance Law in the Digital Age: Challenges and Solutions: Dinamika Hukum Waris Dalam Era Digital: Tantangan Dan Solusi," *Nawala Patra Biksa* 1, no. 1 (30 Juni 2024): 26–38, https://doi.org/10.33859/npb.v1i1.535.

<sup>&</sup>lt;sup>25</sup> Aula Damayanti, "Contribution of Islamic Law to Legal Development in Indonesia," MILRev: Metro Islamic Law Review 1, no. 1 (26 Desember 2022): 17–33, https://doi.org/10.32332/milrev.v1i1.6188.

<sup>&</sup>lt;sup>26</sup> Dodon Alfiander, "Disparity in the Considerations of Judges in Deciding Divorce Disputes in Religious Courts and District Courts," *JURIS (Jurnal Ilmiah Syariah)* 21, no. 1 (29 Juni 2022): 109–119, https://doi.org/10.31958/juris.v21i1.5716.



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inheritance involving many heirs and sizable assets, such as land, houses, and family businesses.

In many cases, errors in the calculation of inheritance based on *faraidh* law often lead to lengthy disputes between heirs.<sup>27</sup> For example, an heir is dissatisfied with the manual distribution of inheritance by the religious court. This can be avoided by utilizing AI to perform inheritance calculations automatically and transparently, reducing errors and speeding up the inheritance dispute resolution process. With algorithms programmed to follow the rules of *faraidh*, AI can provide accurate results and comply with Sharia principles, reducing the potential for disputes between heirs.<sup>28</sup>

On the other hand, in the case of gono-gini property division, AI can help map and evaluate the assets that must be divided based on each party's contribution during the marriage. For example, in a divorce case, the husband and wife have a joint business that needs to be divided. However, due to the difficulty of determining each party's contribution to the business's development, manual calculations can cause debate. AI, which can analyze historical data regarding income, contributions, and assets held during a marriage, can help provide fairer advice based on the principles of justice in Islamic law. In the case of child custody, which is often a sensitive issue in divorce, AI can be used to analyze various factors, such as the economic, psychological, and social conditions of both parents, to determine who is more deserving of custody. For example, a mother who works far out of town and does not have enough time to care for her child may find it difficult to obtain child custody, even though she is legally entitled. By using AI, courts can obtain more complete data on family conditions and children's needs and consider these factors in custody decisions, resulting in decisions that are more in line with the child's best interests.<sup>29</sup> In the case of dispute mediation, AI can offer a platform that allows mediation to be conducted online, facilitates conversations between the parties to the dispute, and provides a law-based

<sup>&</sup>lt;sup>27</sup> Ali Akbar Masyayih, Mohammad Wahyu Al Waris, dan Dominikus Rato, "Characteristics of Domestic Violence in the Context of Divorce Legal Formulation of the Religious Chamber in SEMA No. 3 of 2023," *Istinbath: Jurnal Hukum* 21, no. 02 (25 November 2024): 98–114, https://doi.org/10.32332/istinbath.v21i02.9269.

<sup>&</sup>lt;sup>28</sup> Mursyidi dkk., "Pemanfaatan Aplikasi I-Waris Dalam Meningkatkan Kemampuan Para Alim Ulama Dan Masyarakat Desa Panyocokan Ciwidey."

<sup>&</sup>lt;sup>29</sup> G. Rudolf dan P. Kovač, "The Role of Automated Decision-Making in Modern Administrative Law: Challenges and Data Protection Implications," *Central European Public Administration Review* 22, no. 2 (2024): 83–108, https://doi.org/10.17573/cepar.2024.2.04.



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solution that is acceptable to both parties. For example, in hard-to-reach areas, virtual mediation can allow parties to discuss with a mediator without the need to be physically present in court. This is especially relevant in divorce cases or inheritance disputes involving parties from different locations, often requiring considerable time and expense to meet in court.<sup>30</sup>

However, while the potential for AI in digitizing and accelerating legal processes is enormous, the main challenge faced is the unpreparedness of existing regulations.<sup>31</sup> For example, while AI can help process and analyze cases, what is the status and legality of the decisions generated by AI? In the case of mediation or the division of assets, the decision made by the AI system must be legally recognized by the court, which is currently not fully regulated in Indonesian law. So, there needs to be a clear policy regarding accepting the results of decisions produced by this technology.<sup>32</sup>

Another concern is the potential for bias in AI algorithms.<sup>33</sup> For example, if the AI system is not designed with the cultural and social diversity in Indonesia in mind, the resulting decisions could be contrary to local social norms or customs. In the case of inheritance, if the AI does not consider the aspects of local wisdom that affect the distribution of wealth, then the community may not accept the decision. Therefore, the development of AI in the religious justice system must be carried out with great care and consider local values and social diversity. Overall, the application of AI in religious courts provides a considerable opportunity to improve efficiency, transparency, and accuracy in resolving legal disputes. With clear regulatory support and awareness of potential bias in algorithms, AI can be a handy tool in helping religious courts handle contemporary cases more quickly and accurately and improve access to justice for people across Indonesia.

<sup>&</sup>lt;sup>30</sup> Jennifer H. Peck, "Contemporary issues of race/ethnicity, offending behavior, and justice responses," *Journal of Crime and Justice* 39, no. 1 (2 Januari 2016): 1–8, https://doi.org/10.1080/0735648X.2015.1136381.

<sup>&</sup>lt;sup>31</sup> Z.Ü. Kahveci, "Attribution problem of generative AI: a view from US copyright law," *Journal of Intellectual Property Law and Practice* 18, no. 11 (2023): 796–807, https://doi.org/10.1093/jiplp/jpad076.

<sup>&</sup>lt;sup>32</sup> P. Tseng dan T. Cheng, "Artificial intelligence in lie detection: Why do cognitive theories matter?," *New Ideas in Psychology* 76 (2025), https://doi.org/10.1016/j.newideapsych.2024.101128.

<sup>&</sup>lt;sup>33</sup> C. Konukpay, "The Impact of Artificial Intelligence on Social Rights," Accounting, Finance, Sustainability, Governance and Fraud Part F1585 (2024): 161–70, https://doi.org/10.1007/978-981-99-6327-0\_11.



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# Potential and Challenges in the Implementation of Artificial Intelligence in Religious Courts

Artificial Intelligence (AI) in religious courts has excellent potential to increase efficiency and accuracy in the legal dispute resolution process. In Indonesia, religious courts handle various cases such as marriage, inheritance, and sharia economic disputes. One of AI's main benefits is the management of legal documents. For example, religious courts need to access data on marriage, divorce, alimony, and inheritance rights in divorce cases, often scattered across various physical documents. With AI, the management of these documents can be done electronically, which makes it easier to search, store, and process data faster and more accurately. AI also has the potential to help speed up the decision-making process in religious courts. For example, in the case of inheritance, AI can help calculate the division of inheritance according to the law of *faraidh*. The division of inheritances, which are complex and involve multiple heirs, can be done more quickly and precisely, reducing the risk of errors in manual calculations. Thus, AI can reduce the administrative burden of religious courts so that judges can focus on more substantial legal aspects.

However, while AI offers various advantages, its implementation in religious courts also faces challenges. One of the main challenges is the limitations of technological infrastructure. Many religious courts in certain areas still rely on manual systems and physical records. This leads to difficulties in utilizing advanced technologies such as AI. Even if AI is implemented, not all religious courts are ready with adequate infrastructure, such as hardware and a stable internet network. This could hinder the effectiveness of the use of AI in religious courts. In addition, there are concerns about inadequate regulations to support the use of AI in religious courts. Currently, there are no clear regulations on how decisions generated by AI can be legally accepted in the Indonesian legal system, especially in the context of religious courts. This creates legal uncertainty and worries many parties, especially regarding how AI decisions can be accounted for. Using AI in legal

<sup>&</sup>lt;sup>34</sup> K.S. Aboelazm dkk., "Robotic judges: a new step towards justice or the exclusion of humans?," *Journal of Lifestyle and SDG'S Review* 4, no. 4 (2024), https://doi.org/10.47172/2965-730X.SDGsReview.v4.n04.pe02515.



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decision-making can cause doubts among legal practitioners and the public without a clear legal basis.

The issue of trust is also important in the implementation of AI in religious courts. Although AI can provide fast and accurate results, there are still many doubts about its ability to replace the role of humans, especially in matters related to religious values. In divorce or inheritance cases, for example, the AI may be deemed incapable of considering the more profound human or religious factors the judge must consider. Therefore, although AI can support the legal process, many argue that the role of judges is still necessary to ensure decisions that follow religious norms. In addition, the problem of bias in AI algorithms is also noteworthy. AI relies on the data it uses to train it, and if the data used does not cover the entire variety of cases, then the results can be biased. For example, AI trained only on young couples' divorce data may not be able to provide relevant solutions for older couples or may have different dynamics. This bias can cause injustice in decisions made, especially in cases requiring subjective consideration and sensitive social or religious values.

Therefore, a clear policy regarding the use of AI in religious courts is needed. The government needs to develop regulations detailing how AI can be used safely and fairly in religious law. The regulation must include aspects of personal data protection, monitoring potential algorithmic bias, and drafting guidelines that ensure that decisions generated by AI are still legally accountable and following Sharia principles. In addition, training for judges and employees of religious courts is also essential. Religious courts must have adequate knowledge of utilizing AI technology in legal proceedings. With training, judges and religious courts can better integrate AI with Islamic legal principles. This will ensure that AI does not replace the role of humans but becomes a tool that supports more efficient, accurate, and sharia decision-making.

<sup>&</sup>lt;sup>35</sup> P. Burgess dkk., "Using Generative AI to Identify Arguments in Judges' Reasons: Accuracy and Benefits for Students," *Law, Technology and Humans* 6, no. 3 (2024): 5–22, https://doi.org/10.5204/lthj.3637.

<sup>&</sup>lt;sup>36</sup> N. Abdel Samee dkk., "JusticeAI: A Large Language Models Inspired Collaborative and Cross-Domain Multimodal System for Automatic Judicial Rulings in Smart Courts," *IEEE Access* 12 (2024): 173091–173097, https://doi.org/10.1109/ACCESS.2024.3491775.



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### **CONCLUSION**

This research finds that AI has great potential to support the digitization of legal processes in religious courts. For example, managing electronic documents in religious courts can improve efficiency in storing and retrieving data relevant to legal cases. This is important in light of the social fact that religious courts often face difficulties in managing large volumes of physical documents, which affects the speed and accuracy of case resolution. In addition, AI can also be used to predict decisions based on legal precedents, which will significantly help judges speed up the decision-making process. On the other hand, AI plays a role in monitoring compliance with Sharia principles by analyzing legal documents and transactions to ensure that all procedures follow Islamic teachings, an increasingly urgent need amid the increasing complexity of legal disputes. AI can also improve efficiency in dispute mediation. Based on existing social facts, many people find it difficult to access the court because of the distance, cost, and time required for the mediation process. With a digital platform powered by AI, mediation can be carried out virtually, facilitating communication between parties to a dispute and offering a faster and more sharia solution. In addition, AI can speed up inheritance calculations based on Faraidh law, which requires manual calculations that are prone to errors. Social facts show that incorrect inheritance calculations often lead to prolonged societal disputes. However, the application of AI in religious courts faces several challenges, especially related to inadequate regulations. Currently, no laws or policies specifically regulate the use of AI in the religious legal system. This creates legal uncertainty regarding how decisions generated by AI can be legally recognized. Based on social facts, this can lead to fear among legal practitioners and the public about potential errors or injustices in technology-generated decisions. Additionally, there are concerns about potential bias in AI algorithms, which, if not handled carefully, could result in decisions that are unfair or inconsistent with sharia principles.

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### **AUTHOR CONTRIBUTIONS STATEMENT**

Sukindar played a key role in developing the research framework, drafting the report, and conducting data analysis, forming this study's foundation. Hendrik Kusnianto contributed by collecting field data and reviewing the literature to ensure the study's validity. Sarikun was involved in designing the research methodology and processing the data, ensuring that each step was carried out as planned. Benhard Kurniawan Pasaribu was responsible for statistical analysis and the final editing of the document to maintain the quality of the research outcomes. Meanwhile, Muhd Syahazizamir bin Sahmat focused on implementing research software and validating the results, ensuring data accuracy and consistency.

#### **BIBLIOGRAPHY**

- Abdel Samee, N., M. Alabdulhafith, S. Muhammad Ahmed Hassan Shah, dan A. Rizwan. "JusticeAI: A Large Language Models Inspired Collaborative and Cross-Domain Multimodal System for Automatic Judicial Rulings in Smart Courts." *IEEE Access* 12 (2024): 173091–173097. https://doi.org/10.1109/ACCESS.2024.3491775.
- Aboelazm, K.S., K.M. Dganni, F. Tawakol, dan H. Sharif. "Robotic judges: a new step towards justice or the exclusion of humans?" *Journal of Lifestyle and SDG'S Review* 4, no. 4 (2024). https://doi.org/10.47172/2965-730X.SDGsReview.v4.n04.pe02515.
- Al Faitiri, Layan. "AI in International Arbitration: What Is the Big Deal? American Review of International Arbitration," 2024. https://aria-law-columbia-edu.translate.goog/ai-in-international-arbitration-what-is-the-big-deal/?\_x\_tr\_sl=en&\_x\_tr\_tl=id&\_x\_tr\_hl=id&\_x\_tr\_pto=tc&cn-reloaded=1.
- Alessa, Hibah. "The role of Artificial Intelligence in Online Dispute Resolution: A brief and critical overview." *Information & Communications Technology Law* 31, no. 3 (2 September 2022): 319–342. https://doi.org/10.1080/13600834.2022.2088060.



ISSN: 2986-528X

- Alfiander, Dodon. "Disparity in the Considerations of Judges in Deciding Divorce Disputes in Religious Courts and District Courts." *JURIS (Jurnal Ilmiah Syariah)* 21, no. 1 (29 Juni 2022): 109–119. https://doi.org/10.31958/juris.v21i1.5716.
- Amalia, Nova. "Efektifitas Digitalisasi Arsip Surat Melalui Pembuatan Aplikasi Document Management System (DMS) Pada Subbagian Tata Usaha Kantor Kementerian Agama Kota Lhokseumawe." *Jurnal Elektronika dan Teknologi Informasi* 3, no. 2 (30 September 2022): 29–36. https://doi.org/10.5201/jet.v3i2.292.
- Burgess, P., I. Williams, L. Qu, dan W. Wang. "Using Generative AI to Identify Arguments in Judges' Reasons: Accuracy and Benefits for Students." *Law, Technology and Humans* 6, no. 3 (2024): 5–22. https://doi.org/10.5204/lthj.3637.
- Damayanti, Aula. "Contribution of Islamic Law to Legal Development in Indonesia." MILRev: Metro Islamic Law Review 1, no. 1 (26 Desember 2022): 17–33. https://doi.org/10.32332/milrev.v1i1.6188.
- Darman, Ridho. "Peran ChatGPT Sebagai Artificial Intelligence Dalam Menyelesaikan Masalah Pertanahan Dengan Metode Studi Kasus Dan Black Box Testing." *Tunas Agraria* 7, no. 1 (5 Januari 2024): 18–46. https://doi.org/10.31292/jta.v7i1.256.
- Disemadi, Hari Sutra. "Urgensi Regulasi Khusus dan Pemanfaatan Artificial Intelligence dalam Mewujudkan Perlindungan Data Pribadi di Indonesia." *Jurnal Wawasan* Yuridika 5, no. 2 (28 September 2021): 177-199. https://doi.org/10.25072/jwy.v5i2.460.
- Hardhika, Romi. "Transformasi Digital Wajah Peradilan: Peran Artificial Intelligence Dalam Penguatan Integritas." Judex Laguens 1, no. 2 (7 September 2023). https://judexlaguens.ikahi.or.id/index.php/JL/article/view/22.
- Haris, Muhammad Tan Abdul Rahman, dan Tantimin Tantimin. "Analisis Pertanggungjawaban Hukum Pidana Terhadap Pemanfaatan Artificial Intelligence Di Indonesia." *Jurnal Komunikasi Hukum (JKH)* 8, no. 1 (1 Februari 2022): 307–316. https://doi.org/10.23887/jkh.v8i1.44408.
- Hariyanto, Erie. "Public Trust in the Religious Court to Handle Dispute of Sharia Economy." AHKAM: Jurnal Ilmu Syariah 22, no. 1 (30 Juni 2022). https://journal.uinjkt.ac.id/index.php/ahkam/article/view/26216.



ISSN: 2986-528X

- Helaluddin, dan Hengki Wijaya. Analisis Data Kualitatif: Sebuah Tinjauan Teori & Praktik. Sekolah Tinggi Theologia Jaffray, 2019.
- Hodson, D. "The Role, Benefits, and Concerns of Digital Technology in the Family Justice System." *Family Court Review* 57, no. 3 (2019): 425–433. https://doi.org/10.1111/fcre.12429.
- Idri, Idri. "Religious Court In Indonesia: History and Prospect." *JOURNAL OF INDONESIAN ISLAM* 3, no. 2 (1 Desember 2009): 297–313. https://doi.org/10.15642/JIIS.2009.3.2.297-313.
- Kahveci, Z.Ü. "Attribution problem of generative AI: a view from US copyright law." Journal of Intellectual Property Law and Practice 18, no. 11 (2023): 796–807. https://doi.org/10.1093/jiplp/jpad076.
- Konukpay, C. "The Impact of Artificial Intelligence on Social Rights." Accounting, Finance, Sustainability, Governance and Fraud Part F1585 (2024): 161–170. https://doi.org/10.1007/978-981-99-6327-0\_11.
- London, A.J., dan H. Heidari. "Beneficent Intelligence: A Capability Approach to Modeling Benefit, Assistance, and Associated Moral Failures Through AI Systems." Minds and Machines 34, no. 4 (2024). https://doi.org/10.1007/s11023-024-09696-8.
- Masyayih, Ali Akbar, Mohammad Wahyu Al Waris, dan Dominikus Rato. "Characteristics of Domestic Violence in the Context of Divorce Legal Formulation of the Religious Chamber in SEMA No. 3 of 2023." *Istinbath: Jurnal Hukum* 21, no. 02 (25 November 2024): 98–114. https://doi.org/10.32332/istinbath.v21i02.9269.
- Miles, Matthew B, dan A. Michael Huberman. Analisis data kualitatif: buku sumber tentang metode-metode baru. Jakarta: Universitas Indonesia Press, 2014.
- Mursyidi, Wathroh, Ahmad Zamakhsari, Eva Dwi Kumalasari, Datto Jainuddin Abdi, dan Sofyan Hadi. "Pemanfaatan Aplikasi I-Waris Dalam Meningkatkan Kemampuan Para Alim Ulama Dan Masyarakat Desa Panyocokan Ciwidey." *Jumal Abdimas Prakasa Dakara* 4, no. 2 (31 Oktober 2024): 172–179. https://doi.org/10.37640/japd.v4i2.1943.



ISSN: 2986-528X

- Nursyamsiah, Syarah. "Quality Of Public Services In The Religious Court Of Garut Regency In The Covid-19 Pandemic Era." *Jurnal Ilmu Sosial Politik Dan Humaniora* 6, no. 1 (13 Oktober 2023): 12–21. https://doi.org/10.36624/jisora.v6i1.92.
- Pah, A.R., D.L. Schwartz, S. Sanga, C.S. Alexander, K.J. Hammond, L.A.N. Amaral, dan OKN Consortium SCALES. "The Promise of AI in an Open Justice System." *AI Magazine* 43, no. 1 (2022): 69–74. https://doi.org/10.1002/aaai.12039.
- Peck, Jennifer H. "Contemporary issues of race/ethnicity, offending behavior, and justice responses." *Journal of Crime and Justice* 39, no. 1 (2 Januari 2016): 1–8. https://doi.org/10.1080/0735648X.2015.1136381.
- Putra, I. Nengah Gardhita Arsa, dan Jeremy Kevin Parlindungan Silaban. "Penerapan Kecerdasan Artifisial Dalam Pengawasan Kekuasaan Kehakiman Sebagai Upaya Mereduksi Disparitas Putusan Pidana Di Indonesia." *Ma'mal: Jurnal Laboratorium Syariah Dan Hukum* 5, no. 4 (30 Agustus 2024): 297–320. https://doi.org/10.15642/mal.v5i4.382.
- Putri, Mariska Cahyani, Annisa Febyanti, Saskia Azzahra, dan Nurul Amaliyah Putri. "Pengaruh Penggunaan Artificial Intelligence Dalam Pembentukan Peraturan Perundang-Undangan." *Terang: Jurnal Kajian Ilmu Sosial, Politik Dan Hukum* 1, no. 2 (21 Mei 2024): 266–84. https://doi.org/10.62383/terang.v1i2.235.
- Rama, Bagus Gede Ari, Dewa Krisna Prasada, dan Kadek Julia Mahadewi. "Urgensi Pengaturan Artificial Intelligence (AI) Dalam Bidang Hukum Hak Cipta Di Indonesia." *JURNAL RECHTENS* 12, no. 2 (6 Desember 2023): 209–224. https://doi.org/10.56013/rechtens.v12i2.2395.
- Rudolf, G., dan P. Kovač. "The Role of Automated Decision-Making in Modern Administrative Law: Challenges and Data Protection Implications." Central European Public Administration Review 22, no. 2 (2024): 83–108. https://doi.org/10.17573/cepar.2024.2.04.
- Sayyaf, Raden Tanzil Fawaiq, dan Ashfa Afkarina. "Online Dispute Resolution (ODR): Online Mediation As An Alternative For Dispute Settlement During The Covid-19 Pandemic In Religious Courts." Al' Adalah: Jurnal Syariah Dan Hukum Islam 7, no. 1 (30 Juni 2022): 39–56. https://doi.org/10.31538/adlh.v7i1.2119.



ISSN: 2986-528X

- Sebyar, Muhamad Hasan. "Harmonization of Islamic Legal Institutions and Customary Law in Marriage Dispensation Cases at the Panyabungan Religious Court." MILRev: Metro Islamic Law Review 2, no. 2 (12 November 2023): 155–174. https://doi.org/10.32332/milrev.v2i2.7809.
- Sidqi, Imaro, Siti Maymanatun Nisa, dan Hening Sukma Daini. "Development of Artificial Intelligence in the Dispute Resolution of Religious Courts." *Jurnal Hukum Islam* 21, no. 1 (11 Juni 2023): 83–112. https://doi.org/10.28918/jhi\_v21i1\_04.
- Syarifah, Masykurotus. "Dynamics of Inheritance Law in the Digital Age: Challenges and Solutions: Dinamika Hukum Waris Dalam Era Digital: Tantangan Dan Solusi." *Nawala Patra Biksa* 1, no. 1 (30 Juni 2024): 26–38. https://doi.org/10.33859/npb.v1i1.535.
- Tseng, P., dan T. Cheng. "Artificial intelligence in lie detection: Why do cognitive theories matter?" *New Ideas in Psychology* 76 (2025). https://doi.org/10.1016/j.newideapsych.2024.101128.
- Wulandari, Yuyun. "Persepsi Publik Tentang Digitalisasi Layanan Pusaka Kemenag." Da'watuna: Journal of Communication and Islamic Broadcasting 4, no. 5 (2 September 2024): 1858–1872. https://doi.org/10.47467/dawatuna.v4i5.3668.