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Jl. Prof. KH. Zainal Abidin Fikri KM. 3.5 Palembang 30126 Telp. +62711362427
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# Artificial Intelligence and the Law: The Use of Artificial Intelligence as a Tool to Assist Judges in Deciding Polygamy Cases

**Ibnu Akbar Maliki[1], Zezen Zainul Ali[2], Muhammad Khusaini[3]**
UIN Sunan Kalijaga Yogyakarta
*Email: 22203012001@student.uin-suka.ac.id*

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***Abstract:*** *This research aims to discuss the relationship between Artificial Intelligence (AI) and law. The emergence of the idea of using AI as a tool to analyse judges' decisions has generated mixed responses. On the one hand, the use of AI can be used as a tool to objectively ensure legal certainty, but on the other hand the use of AI can displace the legal supremacy of judges in court. This attracts the author's attention to examine the use of AI in analysing legal cases and as a consideration for judges in deciding polygamy cases. Polygamy itself is a very complex case in court. Judges' considerations in deciding polygamy cases do not only consider procedural aspects, but also involve substantial aspects related to the cumulative and alternative conditions of polygamy. As a chatbot-based platform, AI certainly has limited access in analysing the legal complexity in polygamy cases. This research focuses on the analysis of AI in analysing polygamy cases both in terms of legal basis and justice. This research method is normative with a conceptual legal approach, data is obtained by netnography using the ChatGPT/OpenAi platform and analysed using the content analysis method. The results showed that there were two aspects that were considered by the judge in the AI version of the polygamy case. First, the juridical aspect which is based on the polygamy provisions in the Compilation of Islamic Law. The second aspect is the social aspect based on gender justice. In addition to presenting the essence of several laws and regulations, AI also provides complex social analyses with a gender justice perspective with simple and straightforward sentences. However, this does not mean that AI can be an absolute and stand-alone consideration in polygamy licence cases. AI is only a complement that makes it easier for judges to analyse cases. This is because the judge's involvement in cognitive and psychological aspects is still needed in interacting with litigants in court.*

## Introduction

Technological advances have targeted all areas of human life, one of which is known as Artificial Intelligence. (Munshi dkk., 2022). Artificial intelligence or better known as articifial intelligence (AI) has recently changed the shape of the world (Posner & Fei-Fei, 2020). In recent years the use of AI has been utilised in various aspects such as social, economic, education and also law (Karnouskos, 2022). Where the goal is to assist

humans in completing congnitive tasks, and also assist in various areas of community service (Jacey & Yuniarti, 2022).

Recently, the discourse on the use of AI in the field of law has become a conversation that attracts attention because it can help cognitive work with sophisticated processes. Many government agencies and even international organisations are are trying to discuss how AI can be applied in the legal process (Yalcin dkk., 2023). The development of articifial intelligence in law can build predictive models so that it can be used to encourage and give consideration to court decisions. This can help judges and lawyers identify cases quickly (Aletras dkk., 2016). For example, in 2018 the Commission of the Council of Europe made a decision to use articifial intelligence in its judicial system, and the decision has even been made into a written regulation (Zlatescu & Zlatescu, 2019).

As noted, some other countries that have used articifial intelligence in decision-making have been the United States in some of its jurisdictions (Carneiro dkk., 2014), and China are already using AI in their justice system (Contini, 2020). In Malaysia, courts in Sabah refer to AI recommendations in sentencing defendants (Ker, 2020). Furthermore, in Colombia, the Colombian government created the articifial intelligence-based robot Siarelis to recommend solutions in dispute resolution to judges (Hussain dkk., 2023). The use of AI in various countries is carried out because AI has potential and can also save time and can provide consistent recommendations (Reiling, 2020), also includes data processing (Shafique, 2022).

The emergence of the idea of using AI as a tool to assist judges in deciding a case has received mixed responses. On the one hand, the use of AI can be used as a tool to ensure objectivity and legal certainty. But on the other hand, the use of AI can displace the rule of law and the independence of judges in court. This makes it interesting to study how the use of AI in analysing legal cases and becomes a consideration for judges in deciding a case. It is not impossible, with the advancement of technology and looking at several other countries that have implemented AI in the judicial system, Indonesia also has a great opportunity to be able to consider the existence of AI in the judicial process, especially now that the courts in Indonesia have led to digitalisation or often called E-court.

Based on literature facts, studies that discuss articifial intelligence and law in detail in providing legal considerations for judges' decisions are not discussed in detail in specific cases. Existing studies only tend to criticise and also look at the answer of articifial intelligence from the point of view of justice. Precia Jacey and Siti Yuniarti examined how AI is applied in several countries and attempted to compare them, the use of AI has helped minimise judges' bias to achieve justice and increase time and cost efficiency (Jacey & Yuniarti, 2022). Tania Sourdin examines how the functions of AI in deciding a case so that human intelligence is likely to be complemented by technological advances (Sourdin, 2018). In contrast to previous studies, Francesco Contini and Stanley Greenstein, explain judges remain responsible for the consequences of their actions suggested by AI (Contini, 2020), then limit the areas where AI can be used without compromising the integrity and maintaining the rule of law (Greenstein, 2022). Based on the facts of the

literature above, there is no study that specifically examines how the role of artificial intelligence in recommending legal considerations to judges, especially family law, in this case polygamy permits.

Polygamy licence cases are very complex cases in court. Because, there are many aspects that must be considered by the judge in giving a decision. There are at least two requirements in a polygamy licence. First, the cumulative requirements, which include written consent from the wife, the certainty that the husband will be fair and guarantee the living needs of the wife and children. Second, alternative conditions, which include the wife's condition that she cannot fulfil her obligations due to illness, disability, or inability to bear offspring (Surjanti, 2014). Related to this complexity, AI as a tool to assist judges in deciding polygamy cases certainly still faces various challenges. This is because AI itself is a chatbot machine that has limited access to substantial matters, such as the strict requirements in polygamy cases.

This article seeks to fill this gap in the literature by showing that artificial intelligence can also be used as a tool in analysing Indonesian law, in this case polygamy cases. As such, this article seeks to answer two questions: (1) How does AI analyse the legal reasoning recommended by judges in polygamy cases in Indonesia? (2) How does AI analyse legal reasoning from the perspective of gender and justice in polygamy cases?

This article departs from the argument that technological advances can certainly have positive and negative impacts, not least in the realm of law. The emergence of the idea of applying artificial intelligence in the justice sector, especially in providing legal recommendations to judges, raises ethical implications as a risk to the independence of judges themselves and procedural transparency. Although judges are not bound by this artificial intelligence, it can often influence judges' decisions. On the other hand, there is a serious threat to the rule of law because it is replaced by the technological sophistication of artificial intelligence (AI). But on the other hand, technological developments cannot be avoided and can also provide convenience and speed in processing a law.

## Method

The research method in this study is normative with a conceptual legal approach, data obtained by digging data sourced from the internet through the ChatGPT/OpenAi platform. Primary data sources are obtained from ChatGPT's answers to the author's desired commands, namely legal considerations for polygamy permits in Indonesia. Meanwhile, secondary data is obtained from related literature, especially on artificial intelligence and legislation. Data collection in netnography uses the documentation method on the text of answers generated by ChatGPT on questions asked about polygamy. The collected data was then analysed using textual and contextual content analysis techniques using the normative legal framework in Indonesia and several other relevant regulations. After the data is analysed, a conclusion is drawn.

## Results and Discussion

### Articifial Intelligence and How it Works in the Field of Law

Articifial Intelligence refers to systems that exhibit intelligent behaviour by analysing the environment and taking action (with a certain degree of autonomy) to achieve specific goals (Boucher, 2020). But this definition is not just limited to the methods used. In fact, Articifial Intelligence is an umbrella term that covers a wide range of technologies and applications that have little in common with actual intelligence. This is because it utilises so many technologies, applications and contexts, greater precision is required to find a constructive meaning. For example, debates about "expert systems" being used in consulting roles, need to know about algorithms that are data-driven and automate data for decision-making. So it is important to be able to distinguish between opinions about future developments that are based on speculation.

Articifial Intelligence is the use of technology to automate human tasks that usually require human intelligence. The type of technology emphasised in Articifial Intelligence usually focuses on automating certain types of tasks that require intelligence (Russell & Norvig, 2010). For example, a game of chess requires various cognitive abilities such as reasoning, strategising and planning, and decision-making. Similarly, when one is translating a language, Articifial Intelligence will activate higher systems that will process symbols, context, language, and meaning (Unterrainer dkk., 2006).

Based on some of the above definitions, although it does not fully describe all AI activities, it is still useful as a general explanation of how AI works because in practice it can be used for many human activities. AI systems are often able to produce intelligent and useful work without using human intelligence. These systems do so by using heuristics and detecting patterns in data as well as using knowledge, rules, and information specifically encoded by humans into a form that can be processed by computers (Russell & Norvig, 2010). Through this computational process, AI can often produce satisfactory tasks that would otherwise require complex intelligence and cognitive skills.

#### 1. How AI Works in Processing Commands

There are two general approaches in computer systems to perform the tasks of AI. The first approach involves machine learning, where these systems rely on algorithms that detect patterns in the data used to make intelligent decisions (Flach, 2012). The second approach, on the other hand, involves the representation of knowledge and logical rules, where facts and rules about specific activities are explicitly programmed into the software (Gass dkk., 1986). The second approach, on the other hand, involves the representation of knowledge and logical rules, where facts and rules about specific activities are explicitly programmed into the software.

In general, articifial intelligence is divided into two waves that outline the chronological development with different approaches. The first wave, describes early AI techniques described as "symbolic AI". While this approach may seem outdated, it is still very relevant and still

successfully applied in some domains. The second wave, describing data-driven approaches, is the newest group and has grown rapidly over the past two decades and is the renaissance point of AI to date. The aim is to equip readers with an understanding of the main concepts and methods in AI, so that they have an in-depth knowledge of deep learning and understand the difference between fuzzy logic and evolutionary methods (Boucher, 2020).

**a. First Wave: Symbolic Articifial Intelligence**

This first wave is symbolic AI, this wave refers to an approach to developing intelligent machines by encoding the knowledge and experience of experts into a set of rules that can be executed by machines. This AI is described as symbolic because it uses symbolic reasoning, for example if X=Y and Y=Z then X=Z, so that the data can be used to solve problems.

This symbolic AI approach is the dominant approach that has been around since the 1950s to 1990s. It is still used in many contexts, from thermostats to advanced robots. Symbolic AI consists of two popular approaches, namely expert systems and fuzzy logic.

The first is expert systems, in which human expertise applied in applications creates a set of rules that a computer programme can follow, explaining step by step how to intelligently decide and respond to certain situations. These rules are referred to as algorithms and are usually expressed as code in an "if-then-else" format. Symbolic AI can be said to "put humans in the loop" because the decision-making process is closely related to how human experts make decisions (data inputting). In fact, any intelligence in these systems comes directly from human expertise recorded in a "machine-readable" format that computers can use.

Secondly, fuzzy logic, which is another approach to expert systems that allows variables to have a "truth value" between 0 and 1, thus capturing how well a variable fits into a category. This allows data to be ranked by category. That number may depend on the reading of an object, as well as other relevant factors, such as other described indicators. Fuzzy logic is particularly useful for capturing the intuitive knowledge that experts make correct decisions in the face of multiple uncertain variables that interact with each other. They have been used to develop camera control systems that automatically adjust their settings to suit conditions, and in stock trading applications to establish rules for buying and selling under different market conditions (Boucher, 2020).

**b. Second Wave: Machine Learning and Data-Driven Artificial Intelligence**

Machine learning refers to various techniques that automate the process of learning algorithms. This is in contrast to first-wave approaches where performance improvements were only achieved by humans customising or adding expertise coded directly into the algorithm. While the concepts behind these approaches are as old as

symbolic AI, they were not widely applied until after the turn of the century when they inspired the current resurgence of the field. In machine learning the algorithm is usually improved by training itself on data.

The practical application of this approach has indeed grown over the past decade. While the methods themselves are not particularly new, a key factor in the advancement of these approaches has been the considerable increase in the availability of data. The enormous growth of AI is data-driven. Typically, machine learning algorithms find their own way of recognising patterns and applying what they have learned to make statements about the data. Different machine learning methods are suited for different tasks and situations, and have different implications (Boucher, 2020).

## 2. AI and Law

AI and law involves the application of computer and mathematical techniques to make law easier to understand, manage, useful, accessible or predictable. In the mid-20th century, there is a history of researchers taking ideas from computer science and artificial intelligence and applying them to law. From the 1970s to the 1990s, there were many law and artificial intelligence projects that focused on the formal modelling of legal arguments for computer processing and the computerised modelling of laws and legal rules. Since at least 1987, the International Conference of Articifial Intelligence and Law (ICAIL) has regularly held conferences to present the use of AI technology in law (Sichelman & Atkinson, 2015).

### a. AI in Legal Practice

Legal practitioners have performed many tasks engaged in the legal field, such as advising clients, providing legal balances, predicting risks, drafting agreements and other contracts, making demands, and many other activities. The advent of electronic inventions in the mid-2000s made possible the so-called predictive coding through the help of technology (Yablon & Landsman-Roos, 2013). Predictive coding is a general term for computer-based document review techniques designed to automatically distinguish potentially relevant or irrelevant legal discovery documents. More recently, these predictive coding techniques have utilised AI techniques such as machine learning and knowledge representation to help automate an activity.

However, it is important to understand the limitations of predictive coding automation. Computers generally do not have the final say on the relevance of documents. Ultimately, legal practitioners make the decision about whether an individual document is relevant to the case and the law at hand. The reason is that computer software is simply not capable of making these decisions, which involve understanding the law and facts, and dealing with strategy, policy, and other abstractions that current AI technology does not handle well.

Another interesting use of the use of machines in legal practice is predicting legal outcomes (Marr, 2018). More and more people interested in the outcome of legal cases are using machine systems to predict case outcomes and relying on data rather than intuition to help assess their chances of winning a case.

**b. Judges' Use of AI in Decision Making**

The use of AI in law will involve using AI to automate legal tasks only if there is some structure or prototype of data that has been patterned. In contrast, the tasks of a legal practitioner involved in abstract thinking, problem solving, and law enforcement that are not automated cannot be processed. The use of AI to make substantive legal or policy decisions. An example is the use of artificial intelligence systems by judges to make or consider sentencing or bail decisions for defendants. For example, when deciding whether to release a defendant on bail, the judge needs to conduct a risk assessment of the risk to be decided.

Today, judges are increasingly using software systems through artificial intelligence (AI) to provide scores that attempt to quantify risk and legal judgement. These systems typically utilise machine learning algorithms that use data on past crimes and applicable regulations and attempt to extrapolate the data to make legal predictions. While judges are not bound by these automated scoring or predictive judgements, they will be impacted to some extent in their decision-making.

**c. Limitation of AI in Legal Cases**

When exploring the future based on the current achievements of artificial intelligence, we must be careful. People sometimes think that because AI has successfully automated one complex task, it can be used to automate almost any other type of complex task (Gibney, 2017). However, artificial intelligence tends to be a narrow intelligence, suited to specific types of tasks with specific characteristics (Desai, 2017). Current AI technologies tend not to adapt from one activity to another unrelated activity. For example, creative legal arguments or problem solving. In short, current AI techniques tend to work best for activities that have well-defined prototypes, rules, correct answers, and semi-formal or formal structures that shape the process (Vincent, 2019).

In contrast, AI tends to perform poorly or not at all in domains that are conceptual, abstract, value-intensive, open-ended, policy-oriented, or judgemental, require common sense or intuition, involve persuasion or arbitrary discourse or involve the meaning of real-world humanistic concepts, such as social norms, social structures, or social institutions (Pontin, 2018).

Ultimately, it is still humans, not computers that determine whether a document is useful and relevant to the law and the case. As discussed above, this is a good example of how many advanced AI systems still require human involvement, and offers lessons for the wider use of AI in law. In areas of law or legal practice that

involve judgement, human cognition may be difficult to replace given the current state of AI technology.

## Settlement of Polygamy Permit Cases Based on AI Recommendation

As discussed earlier, AI technology is an artificial intelligence that can perform a task with the commands we enter in the chatbot. In this case the author enters several commands that will be processed by AI, data collection or AI answers will be presented in general.

### *User Commands in an AI chatbot*

"Give me a detailed legal analysis of the granting of polygamy permits to husbands by judges in Indonesia!"

### *AI answers to User commands*

The initial answer from AI showed something unexpected, because AI stated that he could not provide access to legal data from a certain period of time, as follows:

"For the record, I as a language AI do not have access to the latest information after September 2021, therefore I cannot provide information on legal changes that occurred after that date.."

However, even though AI has limited data as mandated above, AI still provides a detailed legal analysis regarding the granting of polygamy permits to husbands. First, AI mentioned that polygamy regulations in Indonesia are contained in the Compilation of Islamic Law (KHI) Article 3 paragraph (2), which stipulates that a husband may have more than one wife on condition of obtaining permission from the local religious court.

In addition, the AI also explains the conditions for granting a Polygamy Permit, the judge must ensure that the conditions have been met before granting a polygamy permit. Some of the general conditions that can be considered by the judge in granting a polygamy licence include:

a. Fairness and Equality of Treatment: The husband must be able to prove that he will treat the wives fairly and equally. Although polygamy is permitted in Islam, the granting of a polygamy licence must not result in unfairness or unequal treatment of the wives.
b. Economic Viability: The husband must be financially capable of meeting the needs of all the wives and children that may be born from the polygamy.
c. Consent of First Wife: Generally, a polygamy licence requires the consent of the first wife. However, if the first wife refuses to give consent, this is not necessarily an obstacle to obtaining the licence, as the judge will also consider certain reasons in assessing the application.
d. Underlying Reasons: The husband must provide strong and valid reasons why he is applying for polygamy..

Furthermore, AI recommends judges in giving consideration to be observant and thorough in all aspects related to polygamy, both from the legal, economic and justice aspects..

"The judge will carefully consider all aspects related to the polygamy application. Consideration will be made based on the basis of Islamic

> law, the principles of law applicable in Indonesia, as well as social and humanitarian values. The judge will also examine whether the husband has fulfilled all the requirements and whether the request can be accommodated without harming other parties."

In addition, AI recommends legal analysis of granting polygamy permits to judges in Indonesia by considering the protection of the rights of women and children. Polygamy has the potential to create injustice and instability in family life, especially if it is not properly regulated and if wives and children do not receive sufficient legal protection. Therefore, judges must ensure that the rights of women and children are not neglected in the polygamy licence process.

> "The granting of polygamy permits by judges in Indonesia must be based on legal aspects, human values, and the protection of the rights of women and children. The purpose of granting a polygamy licence is to achieve balance and justice in family life, not to harm or create injustice. Therefore, the process of granting polygamy licences must be carried out in a transparent, equitable manner, and with due regard to relevant social and moral aspects."

In granting a polygamy licence, judges must also adhere to the principle of gender justice. Gender justice means treating all parties fairly and equally, without favouring one particular gender. The granting of polygamy permits should not be used as a tool to harm women's rights, but must be accommodated with the principles of justice and equality. Referring to Indonesian marriage law, women's rights include at least several aspects, namely: 1) iddah nafkah, consisting of nafkah, maskan (shelter) and kiswah (clothing) to the former wife during the iddah period; 2) nafkah mut'ah, which is given by the husband to the former wife which is mandatory in the form of money or objects unless the former wife is qobla al-dukhul; 3) nafkah madhiyah (past nafkah); and 4) hadhanah (child custody) (Hamzah & Saepullah, 2022).

Indonesian law also guarantees women who are victims of divorce the right to feel safe during the trial process, the right to be cared for mental and physical health until recovery and pressures judges to consider gender equality and non-discrimination. This legal certainty is a manifestation of the principle of justice and equality between husband and wife after divorce.

## Testing the Credibility of AI Answers Based on Polygamy Law in Indonesia

Indirectly, AI has given an idea of its identity when it provides legal answers to various questions asked. On the one hand, there are answers that facilitate legal analysis. However, there are also answers that are still general in nature and require caution in applying them to a case.

Meanwhile, AI's construction of polygamy law still prioritises databases available on the internet. This can be seen when AI has not been able to provide specific answers on certain aspects. Especially questions that have not been studied intensively and published in cyberspace for a certain period of time. An example of this is as stated earlier, when AI could not provide an answer about the granting of polygamy permits to husbands by

judges in Indonesia. Therefore, this section will examine the suitability of AI's answers to the legal norms of polygamy in Indonesia.

### 1. Juridical Analysis

Normatively, the provisions on polygamy in Indonesia have been regulated in Law No. 1 Year 1974 on Marriage. This law is a form of positive response to regulate a husband who wants to marry more than one person. Likewise, the birth of the Compilation of Islamic Law (KHI) regulates the provisions of polygamy for Muslims. Ideally, both regulations aim to provide provisions and requirements for husbands who want to be polygamous. The regulation is an effort to protect wives and wives as well as a form of minimising the arbitrary attitude of the husband towards his wife. The purpose of this law is as a principle to achieve the purpose of marriage, which is to create a family that is sakinah, mawadah and rahmah. (Zuhrah, 2017).

The grounds on which a polygamist is allowed are regulated in Article 3-5 of Law Number 1 Year 1974. Article 3 states that the court may grant a polygamy licence as long as the parties concerned wish. Article 4 states that a polygamy licence will be granted if, firstly, the wife cannot fulfil her obligations as a wife. Secondly, the wife is physically disabled or has an incurable disease. Third, the wife cannot bear offspring (Law Number 1 Year 1974).

There are also those who say the conditions for polygamy if one of the alternative conditions is fulfilled, and the three cumulative conditions. Alternative conditions are all those in Article 4 above. While the cumulative requirements are, (1) written consent from the wife/wives. (2) There is certainty that the husband is able to guarantee the living needs of his wife and their children. (3) a written guarantee that the husband will be fair to his wives and children (Law No 1 Year 1974) (Munawar, 2021).

Meanwhile, the KHI is also no different from the Marriage Law in this polygamy issue. Specifically for Muslims, the implementation of polygamy is regulated in the Compilation of Islamic Law Book I on Marriage Law Chapter IX Article 55 to article 59. Article 55 of KHI explains as follows.

(1) Having more than one wife at the same time is limited to four wives.
(2) The main condition for having more than one wife is that the husband must be fair to his wives and children.
(3) If it is not possible to fulfil the primary condition mentioned in paragraph (2), the husband is prohibited from having more than one wife.

Meanwhile, the technical implementation and pre-requisites of polygamy are explained in Article 56 KHI as follows.

(1) A husband who wishes to have more than one wife must obtain permission from the Religious Court.
(2) The application for permission referred to in paragraph 1 shall be made in accordance with the procedure as stipulated in Chapter VIII of Government Regulation No.9 of 1975.
(3) A marriage contracted with a second, third or fourth wife without the permission of the Religious Court shall have no legal force..

Furthermore, in Article 57 KHI, the Religious Court only gives permission to a husband who will have more than one wife if there are reasons as mentioned in Article 4 of the Marriage Law. So basically the court can give permission to a husband to have more than one wife if desired by the parties concerned. Furthermore, Article 59 also illustrates how great the authority of the Religious Court is in granting licences. So that for wives who do not want to give consent to their husbands to commit polygamy, the consent can be taken over by the Religious Court (Surjanti, 2014).

From the juridical review of polygamy above, there are at least two regulations governing polygamy in Indonesia, namely Law Number 1 Year 1974 on Marriage (Marriage Law) and the Compilation of Islamic Law (KHI). However, the analysis of the answer given by AI in relation to polygamy is only based on KHI. Textually, AI's answer did not mention the Marriage Law as a basis for consideration in granting a polygamy licence.

Although not mentioned directly, the answer basically indirectly represents the polygamy provisions contained in the Marriage Law. This is because KHI itself is a derivative of the Marriage Law and is specific to Muslims in Indonesia (Asriati, 2012). For example, in the case of polygamy, the Marriage Law regulates in general terms the technicalities and conditions of polygamy, such as the wife's consent and that it must be done through the Court. This provision is then regulated in more detail in the KHI, which is the absolute authority of the Religious Courts. Some aspects that are regulated in detail by KHI include the maximum number of wives and permission from the wife.

Why then does the AI only mention KHI and not the Marriage Law? In terms of technology and data, this question can be answered in terms of the availability and dominance of data available on the internet. The majority of requests for polygamy licences are made by Muslims and filed in the Religious Courts. Referring to statistics compiled by the Supreme Court, there were 1,030 polygamy licence cases filed in the Religious Courts, ranging from the Religious Courts to the Religious High Courts. This figure also includes the number of cases filed in the Syar'iyah Court. Meanwhile, there is no data on applications for polygamy permits by people of other religions in the Supreme Court. Scientific studies and other written sources available in cyberspace publications are also dominated by polygamy licences by Muslims.

Therefore, AI's answer is certainly influenced by the condition of data availability, where KHI is the legal material often used in polygamy licence cases in the Religious Courts.

The presence of the Marriage Law - textually - in AI's answers could not occur if the questions asked were still general in nature. As with the question posed by the researcher, namely: "Give me a detailed legal analysis of the granting of polygamy permits to husbands by judges in Indonesia!". However, this can be overcome by asking more specific questions that directly involve the text of the relevant laws, such as "Give me a detailed legal analysis of the granting of polygamy permits based on the Marriage Law and the Compilation of Islamic Law by judges in Indonesia!".

## 2. Social Analysis

Polygamy is full of social issues in it. A lot of judges' considerations involve social glasses in granting or refusing polygamy licences, one of which is the gender perspective. As the concept of gender justice championed by feminists, the goal is to achieve an egalitarian relationship between men and women in the household. Such as husbands and wives who nurture, respect and support each other, parents who provide equal opportunities and treatment to their children, both male and female (Sumardi, 2015). Meanwhile, the occurrence of polygamy in households is considered to complicate the occurrence of gender justice.

Normatively, there are at least two main points in Musdah Mulia's view of the concept of fairness in polygamy. First, the fairness in question is not only in terms of material things such as maintenance but also in immaterial things, namely the tendency of love and affection. Second, fair criteria that include two aspects in it, impossible or almost no one is able to fulfil it except the Prophet SAW. Musdah Mulia's view of fairness clearly contradicts the fiqh scholars who argue that the fairness requirement referred to in the polygamy verse only concerns fairness in nafkah and mabit (overnight turn) (Wahyuninto, 2018).

Meanwhile, in the courts, gender sensitivity of judges is also needed in polygamy licence cases. In this case, the judge should not only stick to the laws and regulations that explain that a man can commit polygamy if the alternative and cumulative conditions are fulfilled. This will show that the judge only acts as a mouthpiece for the law without making legal discovery efforts in answering cases that develop in the community.

In terms of evidence, the judge should also not only focus on the statement of readiness to be fair, a statement giving permission for the husband to commit polygamy, and a certificate of being able to meet the needs of his wives and children, without paying attention to evidence that explains the health of the parties related to the reasons for proposing polygamy because they are unable to have offspring. In this case, the material truth regarding the husband's fair behaviour must be taken into consideration by the judge (Mustika, 2022).

From the analysis of the social framework above, the answer given by AI has covered all the values of gender justice in polygamy. There are at least four elements contained in AI's answer to polygamy, namely justice and equality of treatment, economic feasibility, consent from the first wife, and underlying reasons. Substantially, these four elements have contained the formal and material requirements as in court decisions.

Moreover, AI also recommends the intervention of social elements in dealing with polygamy cases. These social elements include legal aspects, human values, and the protection of the rights of women and children. This is because polygamy is not only related to the husband and wife, but also the children.

## AI in Polygamy Law: Between Opportunities and Challenges

It is undeniable that involving AI in law enforcement can bring convenience. Because it is able to process data and make the digest needed in the case settlement process. Thus, the practice of law enforcement, which originally required the examination of data and various sources of written law, can be easily done in a short time by AI.

Basically, there are several roles of AI in the law enforcement sector. Firstly, Document Processing. AI can be used to automate the processing of legal documents. This includes classifying documents, flagging important issues, and extracting relevant information from them. Secondly, Risk Analysis. AI can be used to predict case outcomes. It provides information on the possible legal risks that a litigant may face. That way it helps judges and advocates make decisions and speeds up the decision-making process. Third, Information Retrieval. AI is able to search for information from legal databases and other information sources. In some cases, AI is used to perform network analysis and find linkages between information. Fourth, Decision Making. The use of AI in the legal sector can even help make decisions. For example, AI can be used to predict case outcomes to provide strategy recommendations. AI can also estimate the costs required to settle a case (Eka, 2023).

The various conveniences offered by AI have been proven when asked questions regarding the analysis of the granting of polygamy permits by judges. Basically, when analysing a decision on a polygamy permit case, several written documents need to be analysed. Some of these written documents include the Marriage Law, KHI, and other implementing regulations such as Government Regulation (PP) Number 10 of 1983 concerning Marriage and Divorce Permits for Civil Servants (PNS). What has been conveyed by AI is also not much different from these provisions, both from a juridical and social perspective. Thus, its existence can save time in providing a legal analysis. In this aspect, AI is certainly one of the positive opportunities in polygamy cases in court.

Furthermore, can the legal analysis of AI stand alone and be an absolute in a polygamy licence decision? In the opinion of the researcher, the answer is no. Because there are several aspects of cognition that cannot be touched by AI. Some conditions and situations that cannot be read by AI are

the emotional or psychological conditions of the litigants, and the social and cultural realities in the local environment.

This was also expressed by Awaludin Marwan when examining the possibility of the replacement of legal scholars by AI. Indeed, not all jobs can be replaced by technology, including what is done by legal scholars. Such as the emotional dialogue with clients by an advocate, including the interaction of judges with litigants. Coordinating with investigators, law enforcement officials and the government. The role of legal scholars is still quite relevant and significant. Artificial intelligence technology cannot be as flexible as humans in the aspects of interaction and communication (Marwan, 2023). Meanwhile, it is this aspect that actually takes a considerable role in addition to extracting justice through written sources.

Therefore, the presence of AI analysis in polygamy cases can only be positioned as a complement in terms of consideration. This is because there are several elements and procedures in evidence that must rely on the judge's judgement and suspicion. One of the most important examples is the judge's belief about the fairness of the husband who wants to be polygamous. Matters that touch on this cognitive realm can certainly only be read by the conscience and human values possessed by the judge, not technology.

## Conclusion

In general, there are two things that are used as legal considerations for polygamy permits in AI's version of the answer. AI recommends judges to analyse polygamy based on the applicable legal framework, namely KHI. In addition, AI also provides a general description for judges in providing considerations for making decisions. Some aspects that need to be considered in polygamy permits are justice and equality of treatment, economic feasibility, consent from the first wife, and the reasons underlying polygamy.

The analysis provided by AI is the result of the essence of several laws and regulations applicable in Indonesia, although the laws are not explicitly mentioned. AI also provides social analyses that have involved complex gender justice perspectives in simple, straightforward sentences. However, this does not mean that AI can be an absolute and stand-alone consideration in polygamy licence cases. In this case, AI is only one of the complements that make it easier for judges to analyse cases. This is because the judge's involvement in cognitive and psychological aspects is still needed in interacting with the litigants in court.

These findings provide an overview of the role and significance of AI in law enforcement in Indonesia. By knowing its shortcomings and advantages, the optimisation of AI can be further developed as a tool to assist judges in giving decisions. Future research is expected to develop the use of AI in other cases, especially in matrimonial law.

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