

Utilization of Artificial Intelligence in Drafting Judges' Decisions in Commercial Courts*

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Abstract

Artificial intelligence (AI) is experiencing rapid development due to advances in communication and information technology. AI is designed to create computer systems that can mimic human intellectual capabilities. Optimizing the increasingly widespread use of AI to meet societal needs has also penetrated the legal world. AI plays a significant role in the judicial process, given the increasing burden of trials and efforts to achieve speedy, simple, and low-cost justice. In line with its rapid development, it is necessary to ascertain the legal standing of AI and its role in formulating judicial decisions in courts, particularly in commercial courts. The research in this article uses a normative approach, examining applicable legal norms through dogmatic or doctrinal research. The research approach is conceptual. A literature review was conducted by analyzing previous research in the form of scientific articles, laws and regulations, and mass media related to the discussion. From this research, it can be concluded that the position of AI can be interpreted as that of a child and a parent, as subjects of civil law, who have control, as stipulated in the in loco parentis doctrine. With this doctrine, the use of artificial intelligence prioritizes human responsibility without limiting technological development. Commercial court judges apply straightforward evidentiary procedures, eliminating the need for artificial intelligence assistance in deciding bankruptcy cases. Artificial intelligence remains necessary in commercial courts, limited to the administrative scope of bankruptcy cases.

Keywords: Artificial intelligence; in loco parentis; Commercial Courts

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A. INTRODUCTION

Artificial intelligence, commonly referred to as AI, has undergone rapid development over the past decade, driven by advancements in communication and information technology. AI is designed to create computer systems that can emulate human intellectual capabilities. In the current digital landscape, artificial intelligence has garnered widespread attention due to its ability to deliver significant positive impacts across various fields. The presence of AI technology today has profoundly influenced societal behavioral patterns and modes of thinking. The role of AI technology has been directly felt within communities. Artificial intelligence is not limited to applications in the telecommunications industry; it also extends to various sectors, including manufacturing, distribution, services, banking, and government. ([Ririh, 2020](#))

The optimization of increasingly widespread artificial intelligence usage to meet societal needs has also extended to the legal domain. Artificial intelligence has been utilized by the Supreme Court in the form of E-Court since 2018. The Supreme Court also utilizes artificial intelligence in various forms, including court live streaming, Lentera 2.0, Smart Majelis, and e-IPLANS. The implementation of all these applications aims to transform the Supreme Court into a modern judicial institution in Indonesia. ([Medianti, 2023](#))

Estonia is a country that has positioned artificial intelligence as a judge to handle a large volume of cases and improve service efficiency. The Estonian government utilizes artificial intelligence as a substitute for judges to resolve minor civil disputes where the value of the dispute does not exceed 7,000 Euros. Artificial intelligence is considered capable of resolving minor disputes because it does not require the incorporation of judicial discretion in its decisions. ([Yuswar, 2023](#))

In Russia, lawyer robots have been developed that are capable of filing lawsuits on behalf of individuals; additionally, some robots can assist in resolving insurance disputes. The Russian Parliament has responded to this development by preparing the Grishin draft law, which serves as an amendment to the provisions of the Russian Federation Civil Code. This draft law establishes legal liability for the robot's operator, manufacturer, and developer. The Grishin draft law also regulates provisions concerning the assignment of robots as representatives in court. ([Amboro, 2021](#))

United States courts have implemented the eDiscovery system, which functions to filter all information relevant to the trial, as well as to prepare legal considerations for judges in determining decisions on criminal cases. The

eDiscovery system also includes estimates of the outcomes of criminal cases and provides answers to judges' questions. ([Reiling, 2018](#))

United States courts have implemented a robot lawyer that serves as legal counsel for the defendant during trials. The application known as DoNotPay operates by directly observing all arguments in the trial and informing the defendant of everything that needs to be presented during the proceedings. Courts in Shanghai have also implemented artificial intelligence known as the 206 System. This system is designed to process verbal instructions and provide information related to the trial. The system can execute instructions to prepare trial minutes. It is equipped with the ability to identify speakers in the trial, read trial facts, identify evidence presented during the proceedings, and provide legal considerations. ([Chenyu, 2020](#))

Based on the aforementioned facts, artificial intelligence technology has the potential to replace the role of judges and can be utilized to produce judicial outputs in both civil and criminal matters. Artificial intelligence has the opportunity to supplant the role of judges because, in practice, judges always employ syllogism or deductive reasoning. Judges position the parties in opposition to one another to ascertain the fundamental truth. Legal facts, serving as the minor premise, must be compared with the elements of legal norms, which are positioned as the concept of truth or the central premise. This comparison between the minor premise and the central premise is expected to yield a conclusion. The resulting conclusion is not a novel insight that surpasses what has been established in the central premise. ([Putro, 2020](#))

The aforementioned legal reasoning in the form of a syllogism serves as the pattern applied in artificial intelligence technology. In conducting legal reasoning, artificial intelligence converts the deductive reasoning process into a pattern that aligns with computer engineering principles. This reasoning constitutes a system that enables artificial intelligence to conclude from the minor and central premises, based on the logic of legal reasoning. ([Ashley, 2017](#))

Artificial intelligence has been able to develop the construction of syllogistic legal reasoning in the form of CMLRs programs, or computational models of legal reasoning. This program construction can perform analysis of a legal narrative, conduct legal reasoning, create legal arguments, predict the outcomes of judicial processes, and prepare responses to legal issues. ([Ashley, 2017](#))

The CMLR's program consists of a series of steps that execute algorithms replicating a judge's thought process, thereby enabling the

prediction of a judge's deliberations through artificial intelligence. Suppose a judge's thinking pattern can be transformed into a predictive and accurate model using algorithms. In that case, artificial intelligence has the potential to be utilized and can assume the authority to render decisions previously held by the judge. Artificial intelligence plays a significant role in the judicial process, particularly in light of the increasing caseload, as well as in efforts to achieve a swift, simple, and cost-effective justice system. ([Morison, 2020](#))

Artificial intelligence was created as a representation of a high-quality human life, encompassing tasks such as work planning, problem-solving, reasoning, thinking skills, idea generation, and other activities that enhance work processes efficiently and effectively. (Bhora & Shravan, 2019) Some people consider artificial intelligence to be the 'new gold', so ongoing efforts are needed to explore its potential. ([Hartanto, 2021](#))

Artificial intelligence plays a significant role in various aspects of social life, including law enforcement. ([Simanjuntak, 2023](#)) The innovations provided by artificial intelligence have a significant impact on state and social processes, leading some technology experts to argue that humanity today cannot survive without the use of artificial intelligence technology in its various forms. Comprehensive improvements in artificial intelligence technology should be utilized to improve public welfare. ([Sutrop, 2019](#))

Artificial General Intelligence (AGI) is a form of artificial intelligence that possesses the ability to learn, understand, and behave in ways similar to humans. This artificial intelligence is a higher level than normal artificial intelligence (AI) because it can carry out tasks that have not been previously trained. The difference lies in its ability to think, the existence of feelings and emotions, and basic human abilities. AI is a hypothetical machine intelligence that can learn and understand all intellectual commands that humans can carry out. ([Google Cloud, n.d.](#)) Additionally, there is another type of artificial intelligence, known as artificial superintelligence, which possesses intellectual abilities that exceed human intelligence. At the most advanced level, this artificial intelligence possesses sophisticated cognitive abilities and a remarkably advanced thinking capacity that surpasses that of humans. ([IBM, n.d.](#)) If both artificial intelligences have self-awareness like humans, then their differences from humans will disappear. Both types of artificial intelligence are predicted to disrupt human existence. ([Amboro & Komarhana, 2021](#))

The rapid development of artificial intelligence often sparks debate in the legal world. The most notable controversy concerns its ability to replace judges. Some legal experts believe that AI cannot yet replace judges, especially

in the criminal justice system. Judges are believed to retain the authority to impose sentences, using their beliefs to determine their verdicts. The role of AI in the criminal justice system is currently limited to the administrative aspects of case processing, and it is not yet capable of handling procedural law. AI is not yet capable of determining the guilt or innocence of a defendant. Other legal experts believe that AI can make sentencing recommendations for defendants by applying jurisprudence and utilizing built-in references. This capability is based on the prediction that, in the future, AI will become increasingly sophisticated and capable of analyzing human character and beliefs. ([Sebayang et al., 2024](#))

The use of artificial intelligence technology in producing products for judicial institutions in Indonesia can be a pillar of hope for modern society to meet all its legal needs. Artificial intelligence can provide efficiency and flexibility due to technological advancements. The use of artificial intelligence technology can assist judges in issuing decisions and assisting in case administration, and has the potential to be established as an alternative means of judicial proceedings, particularly in commercial courts, given the increase in bankruptcy disputes. Given the shift in societal behavior and mindsets, as well as the needs of the legal sector, it is appropriate for the government to modernize the legal sector. ([Sugiarto, 2021](#))

Based on the aforementioned considerations, it is necessary to conduct a discussion in the form of an article entitled "The Use of Artificial Intelligence in Drafting Judges' Decisions in Commercial Courts." The issues raised in this article concern the regulation of artificial intelligence in positive law in Indonesia and its application in drafting judges' decisions in commercial courts.

B. METHODS

The research in this article uses a normative approach by examining applicable legal norms. The research is conducted to obtain the principles or doctrines in the applied positive law. Normative research is often referred to as dogmatic studies or doctrinal research. Because the object of research in doctrinal research is positive law, which will be explored to determine the legal doctrine or principles underlying it, this research will review the concepts practiced in implementing positive law. Positive law is conceptualized as written rules created by authorized institutions. Therefore, the doctrines to be explored are only those underlying the formation of legislation, excluding unwritten legal norms.

The research approach is implemented through a conceptual framework. This approach is carried out to gain an understanding of the views and doctrines applied in legal science, so that they can be used as a basis for developing arguments in resolving legal problems. Literature studies or literature reviews are conducted by analyzing previous studies in the form of scientific articles, laws and regulations, and mass media related to the discussion. All collected literature materials are then classified using appropriate categories. The results of the literature review are compiled systematically and assessed to obtain conclusions from the issues raised. Primary legal materials include the Civil Code, the Criminal Procedure Code, Law Number 1 of 2024 concerning the Second Amendment to Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law), Government Regulation Number 71 of 2019 concerning Electronic Systems and Transactions, and Law Number 37 of 2004 concerning Bankruptcy and Suspension of Debt Payment Obligations (K&PKPU Law). Secondary legal materials primarily come from scientific articles by previous researchers.

C. RESULTS AND DISCUSSION

1. Regulation of the Legal Status of Artificial Intelligence in Positive Law in Indonesia

Artificial intelligence technology is closely related to electronic systems; therefore, its application falls under the ITE Law. As an electronic system, artificial intelligence is a series of electronic procedures and devices that perform functions related to electronic information, including preparation, collection, processing, analysis, storage, display, announcement, delivery, and dissemination of information. Artificial intelligence can also be conceptualized as an electronic agent, as regulated in Article 1, paragraph (8) of the ITE Law. An electronic agent in this provision is defined as a device from an electronic system that is formed to carry out an activity related to certain electronic information automatically. The definition of 'automatic' in this article serves as a bridge to interpreting artificial intelligence as an electronic agent. In other words, the provisions governing electronic agents can also be applied to artificial intelligence. ([Pratidina, 2017](#))

Article 21 of the ITE Law stipulates regulations regarding electronic agents in connection with the implementation of electronic transactions. The ITE Law stipulates that the party organizing an electronic agent is essentially the party organizing an electronic system. An electronic agent is a format for organizing an electronic system. Therefore, all rights and obligations of the

party organizing an electronic system also apply to the organizer of an electronic agent. ([Mahardika et al., 2020](#))

The ITE Law states that electronic system providers are all parties who, individually or collectively, provide, manage, and operate electronic systems for the needs of others or their own. These parties include specific individuals, state administrators, the public, and business entities. Providers must ensure that the electronic systems they use are secure, reliable, and accountable. All legal consequences of using electronic agents are the responsibility of the organizer, assuming that failure or errors in using the electronic system are not due to user carelessness. ([Mahardika et al., 2020](#))

The responsibilities of electronic agent providers are regulated in the Electronic Information and Transactions (EIT) Law. The ITE Law also regulates obligations related to data confidentiality, control of user personal data, and guarantees of user privacy. Electronic agent providers are also responsible for delivering information related to the implemented electronic system to prevent harm to users. Electronic agent providers are also responsible for providing features that make it easier for users to change information in transactions being processed. Regulation of artificial intelligence cannot be separated from legal norms related to science and technology. ([Sebayang et al., 2024](#))

Artificial intelligence is an electronic system programmed to solve problems using human-like thought processes and action models. Artificial intelligence has penetrated all aspects of life that were initially limited to human intervention, as defined by technology. As it develops, artificial intelligence is no longer limited to assisting with human tasks but has the potential to replace them. This is possible because artificial intelligence is more credible than humans. Similarly, in the judicial system, artificial intelligence judges are more reliable than human judges if they are capable of producing written decisions and justifications. System tools in the form of legal reasoning logic can be embedded in artificial intelligence, enabling it to render legal decisions. ([Amboro & Komarhana, 2021](#))

Lawmakers have now acknowledged that public authority functions can be exercised using artificial intelligence. This situation raises questions about the legitimacy of legal capacity and the subsequent assessment of legal risks associated with the use of artificial intelligence. ([Atabekov & Yastrebov, 2018](#))

Artificial intelligence has been recognized in several countries as a legal entity with specific capabilities. In 2017, the Saudi Arabian government announced that it would grant citizenship to an artificial intelligence robot

named Sophia. In the same year, the Japanese government granted residency to a robot named Shibuya Mirai. The existence of artificial intelligence, with its inherent intelligence capable of performing legal acts, has legal consequences regarding accountability and protection, as well as provisions governing all rights and obligations related to this technology. ([Kusumawardani, 2019](#))

The growing development of artificial intelligence raises questions about its legal status. In Indonesia, the legal status of artificial intelligence has not been clearly regulated. Several governments around the world have treated artificial intelligence as if it were human, as evidenced by Saudi Arabia and Japan's accord of legal status to robots. Indirectly, these government decisions have positioned artificial intelligence as human. This decision is based on the similarity between artificial intelligence and humans from a cognitive perspective, as well as its ability to perform human-like activities. ([Amboro & Komarhana, 2021](#))

The above interpretation certainly cannot affirm the status of artificial intelligence as a legal subject. However, with the rapid development of technology, it is necessary to clarify the legal status of whether or not artificial intelligence can be considered a legal subject. This clarity is crucial, given the ability of artificial intelligence to engage in activities that could be construed as legal acts, as well as the potential for unlawful acts. This is a consideration regarding the need for clarity on the legal status of artificial intelligence and its regulations. ([Prianto et al., 2020](#))

In addition to the view that places it as a legal subject, there is a school of thought that positions artificial intelligence as an object, so that all legal provisions related to objects apply. In this view, artificial intelligence is considered a legal object, rather than a legal subject. It therefore does not possess the rights and obligations typically associated with humans or legal entities. Based on the provisions of Articles 503 and 504 of the Civil Code, artificial intelligence can take the form of tangible or intangible objects and is categorized as a movable object. In accordance with Article 509 of the Civil Code, movable objects are goods that can be moved or moved independently. If artificial intelligence is considered like an object, the legal consequence is that responsibility for the object rests with the owner of the object. ([Amboro & Komarhana, 2021](#))

From a historical perspective, non-human entities have been personified. These non-human entities take the form of legal entities. Legal entities can be classified as artificial legal subjects that are philosophically personified as if they were human beings. Because they are personified like humans, legal

entities are considered capable of exercising rights and obligations and are accountable for all their legal actions. This situation will raise considerations regarding the potential for artificial intelligence to be classified as a legal subject. Another perspective considers that artificial intelligence is legally considered an object. Therefore, the legal status of artificial intelligence cannot be determined because no legislation details explicitly its legal status, thus indicating a legal vacuum. ([Prianto et al., 2020](#))

Legal entities and anything external to humans cannot be equated with humans, as they lack the physical and spiritual elements that are unique to humans. However, if the perspective used is external appearance or physical form, then legal entities also possess this aspect. Legal entities are a collection of humans with both physical and spiritual elements. Therefore, if the characteristics are applied from a physical perspective, the personification of legal entities can be understood. Legal entities possess these characteristics; in addition to being an element of legal relations within the human environment, they themselves are comprised of human organs. The appropriate interpretation of the personification of artificial intelligence is to search for similar characteristics that can be applied to justify the personification. ([Amboro & Komarhana, 2021](#))

The idea that artificial intelligence is treated like a human can be considered controversial and unethical, especially when a tool designed to assist humans is perceived as having human-like qualities. There is a fundamental difference between humans and artificial intelligence, evident in the absence of natural elements in its formation process. Because artificial intelligence is not formed naturally like humans and lacks the element of an organism, it can be said that artificial intelligence is very different from humans in its naturalness. Historically, the debate over the recognition of legal subjects arose when the view emerged that corporations are considered legal subjects. Corporations are not considered organisms, but they are filled with humans. On the other hand, there is a need for human activity towards corporations as legal subjects. ([Widiyono, 2013](#))

The fictional theory proposed by Friedrich Carl von Savigny posits that only humans are considered legal subjects, while legal entities are viewed as fictional and created solely by the state. Because they are fictional, legal entities do not actually exist, but humans imagine legal actors as legal subjects whose status is considered similar to that of humans. The organ theory proposed by Otto von Gierke views legal entities as a reality, akin to the nature of human personality in legal relations. Legal entities are considered to be real individuals

and have their own will, which is structured through their organs, including administrators and members. Everything decided by these organs is the will or desire of the legal entity. ([Rido, 2001](#))

The personification of artificial intelligence requires a foundation of relevant and robust facts and data. Referring to the theory of organ theory, something personified as a human must meet the requirements, namely, the characteristics of a human personality in legal relations. The personification of artificial intelligence is undoubtedly very different from human personality, due to the presence of physical, spiritual, and intellectual elements. The physical is the physical element of humans capable of carrying out legal acts visibly. The spiritual carries out the role of human morality, enabling it to distinguish between right and wrong, good and evil, justice and injustice, and so on. This spiritual element will guide human life to remain on the right path. The intellectual element is responsible for promoting progressiveness and creativity, ensuring that human life remains within the framework of progress. ([Sudjito, 2012](#))

Upon considering the interpretation of the provisions in positive law in Indonesia, the position of artificial intelligence can be reviewed based on the articles in the Civil Code. In this article, artificial intelligence can be considered a form of labor, establishing a relationship between workers and employers as regulated in Article 1367, paragraphs (1) and (3), of the Civil Code. A person is responsible not only for losses resulting from their own actions, but also for losses resulting from the actions of people under their responsibility and supervision. Employers and individuals who instruct others to represent them are liable for losses resulting from the actions of their subordinates. Based on these two articles, it can be interpreted that artificial intelligence is a worker, so that all responsibilities can be borne by the employer who is in the position of owner. ([Anggraeni and Partners, 2023](#))

Another view holds that if artificial intelligence is considered a worker, then it has a legal relationship with its owner, who acts as an employer. Artificial intelligence will be responsible to its employer if it engages in activities that violate the law. Artificial intelligence, considered a worker, can certainly be held accountable both as an individual and in its relationship with its employer. If artificial intelligence is considered a legal subject, then all its legal actions will be its sole responsibility. In practice, in the real world, this is very difficult and requires careful regulatory planning; otherwise, humans will still be responsible for the losses incurred. ([Amboro & Komarhana, 2021](#))

Discussions on the legal status of artificial intelligence will always be related to legal capacity, which is defined as the ability to exercise legal rights

and obligations. Legal capacity is closely related to the concept of legal subjects, also known as legal personality. Legal personality is based on recognition granted by applicable law. Once legal personality is established, legal capacity automatically arises. Without legal capacity, the essence of a legal subject is lost. Legal capacity can be defined as legal authority. Legal capacity and legal subjects both clarify each other's meaning, thus indicating that they are considered similar or identical. Legal capacity exists between an independent legal subject, on the one hand, capable of fully exercising rights and obligations, and an object, on the other. A partial legal subject, on the one hand, possesses legal capacity and, on the other, lacks any legal capacity. ([Schirmer & Bachmann, 2020](#))

In Indonesian civil law, the concept of partial legal capacity has been practiced within specific, case-specific contexts. Article 2 of the Civil Code stipulates that an unborn child, in terms of civil rights and interests, can become a legal subject, even after birth but before reaching the age of adulthood. In an effort to obtain an inheritance, the child requires another party to exercise their rights and obligations. The inability to exercise these rights and obligations fully and perfectly creates a legal subject with partial legal capacity. Artificial intelligence can be positioned as a partial legal subject, capable of exercising only some rights and obligations. ([Schirmer & Bachmann, 2020](#))

Legal responsibility is transferred to the legal subject who acts as its representative or guardian. Practically, artificial intelligence has no legal liability. Philosophically, artificial intelligence is still considered to have a human-like existence. ([Schirmer & Bachmann, 2020](#))

The provisions stipulated in Government Regulation Number 71 of 2019 concerning Electronic Systems and Transactions state that in the implementation of electronic systems, the party responsible as a legal subject is the organizer, in this case, the human. Based on these provisions, it can be understood that artificial intelligence is not a legal subject, but rather a legal object whose operation requires human assistance as the driver of the electronic system. Artificial intelligence cannot be classified as a legal subject and is also not a legal entity. Unlike artificial intelligence, legal entities possess autonomy to act and create policies, and therefore have the rights and obligations of legal subjects. ([Amboro & Komarhana, 2021](#))

Artificial intelligence cannot be equated with a legal entity, as its operation requires human involvement. ([Jumantoro et al., 2024](#)) Artificial intelligence can increase efficiency in the litigation process, but it cannot easily replace or intervene in judges' decision-making.

Thus, the position of artificial intelligence can be interpreted as that of a child and a parent, as subjects of civil law, who have control, as stated in the *in loco parentis* doctrine. This doctrine refers to the responsibility of several individuals within an organization to carry out functions similar to the responsibilities of parents to their children. With the rapid development of artificial intelligence, it is necessary to establish its legal position appropriately. Artificial intelligence can be viewed as a partial legal subject using the *in loco parentis* doctrine. The legal implications of everything resulting from the use of artificial intelligence become the responsibility of the party possessing the artificial intelligence. By applying the principle of *in loco parentis*, the use of artificial intelligence still prioritizes the existence of humans as responsible parties without limiting technological development. The application of the *in loco parentis* doctrine will position artificial intelligence as a means for the good of all humanity. ([Future of Life Institute, 2017](#))

2. Utilization of Artificial Intelligence in Drafting Judges' Decisions in Commercial Courts

Artificial intelligence is human-made and lacks will, consciousness, or the ability to be morally accountable for its actions. It operates using algorithms and data embedded into the system by humans. This means that artificial intelligence cannot possess the legal capacity of humans. ([Sebayang et al., 2024](#))

Decision-making by artificial intelligence cannot be guaranteed to be perfect without human intervention, and human supremacy remains crucial in decision-making. Each legal case is unique in terms of the perpetrators, time, place, circumstances, and motivation. In fact, it is impossible to have two cases that are entirely identical in terms of the legal subjects who committed the offense, the time, place, and motivation that drove the perpetrators to take legal action, as well as all parties involved.

In making a decision, artificial intelligence carries out its operations using processing logic with programmed algorithms based on information input into the system, to obtain predetermined results. ([Sourdin, 2018](#)) Information input into the system is derived from legal databases that have been processed using natural language processing mechanisms to identify legal norms. Based on these legal databases, artificial intelligence will select data related to the case being processed. The results of this selection will serve as a legal source, providing the basis for judges' decisions. ([Sourdin, 2018](#))

The primary advantage of utilizing artificial intelligence is its ability to process data quickly and accurately, as well as conduct legal reference searches

and collect trial facts, thereby reducing the workload of the panel of judges and making verdicts more efficient and consistent. (Fagan & Levmore, 2019) Factors that influence the determination of a judge's decision consist of the formation or composition of the judges (ad hoc judges or professional judges), the factual circumstances of the case, the rules of procedural law, the evidence in the trial, the substance of the rules governing the case, and the method for deciding whether the facts correspond to the evidence. (Sebayang et al., 2024) These factors are complicated to comprehensively replace by artificial intelligence because they are closely related to legal competence (*rechtbekwaam*). The concept of legal competence requires an awareness of an act and the ability to accept responsibility for its legal consequences.

Legal systems must process an ever-increasing amount of data, including legislation, judicial decisions, and trial evidence. Artificial intelligence can automate various routine tasks, including contract analysis, precedent finding, and legal document drafting. This automation will help judges focus on more complex issues that require critical consideration and analysis. Artificial intelligence is also capable of translating data into more easily understood languages. Artificial intelligence will significantly assist judges in managing data, organizing documents, and analyzing legal issues in a systematic and efficient manner. (Thomson Reuters, 2017)

Artificial intelligence is essential in court proceedings that require judicial discretion and consideration, particularly in criminal and civil cases that require complex evidence. Artificial intelligence will play a role in analyzing legal acts and related legal regulations, making it easier for judges to make decisions. From a legal perspective, artificial intelligence can perform legal reasoning by analyzing information from legal databases. Artificial intelligence is expected to enhance efficiency in the litigation process, but not to the extent of intervening or replacing the role of judges in decision-making.

In criminal law, values are relative and require judicial discretion. Therefore, in this context, artificial intelligence can assist judges in rendering decisions. From a legal reasoning perspective, artificial intelligence can be relied upon to assist in problem-solving. However, when legal considerations are involved, judges must still rely on their personal judgment to make decisions. (Jumantoro et al., 2024)

Decisions made by artificial intelligence tend to be rigid and pay little attention to other humanistic factors, especially since judges are obligated to provide information on all considerations. Information generated by artificial intelligence carries an inherent risk of a black box effect. This risk is that it

cannot provide information on how data is processed from start to finish. ([Završnik, 2020](#))

A judge's *ratio decidendi* must remain based on conscience. Judges, when making decisions, must not only rely on positive law but also consider the human element. Artificial intelligence, as an entity that is not a legal subject, cannot replace the role of a judge due to its lack of moral values and conscience. While AI can assist judges in making informed decisions regarding legal issues, it cannot replace the principle of justice, which requires the application of human conscience. ([Jumantoro et al., 2024](#))

When handing down a criminal sentence, judges are required to apply the provisions stipulated in Article 183 of the Criminal Procedure Code, which states that, in addition to the presence of two pieces of evidence, the judge must also have a valid conviction regarding the evidence presented (i.e., a negative, valid judgment). Artificial intelligence cannot use the term "judge's conviction." Artificial intelligence will also encounter difficulties, particularly when the system must develop algorithmic patterns for various legal cases. ([Sebayang et al., 2024](#))

Judges still have the authority to impose sentences based on conviction. The ability of a judge to determine whether someone is guilty or not remains a challenge for artificial intelligence to replicate. However, artificial intelligence can play a role by providing recommendations regarding the amount of punishment to be imposed on the defendant, utilizing reference codes, articles, and jurisprudence embedded in the artificial intelligence engine. ([Gunawan & Tanjung, 2024](#)) However, artificial intelligence cannot consider the context and in-depth considerations in making decisions. Only a panel of judges, as a group of humans, can understand the complexity of decisions, including fairness, moral considerations, and other human aspects that are crucial in making a decision. Resolving criminal cases requires the subjectivity and deliberation of the panel of judges, who use all the evidence gathered and the facts revealed during the trial. ([Rongkonusa et al., 2023](#))

In civil cases that require complex evidence, artificial intelligence is expected to accurately and efficiently analyze documents such as contracts, letters, and financial reports. Artificial intelligence has the capacity to assist judges in identifying patterns related to civil cases. Artificial intelligence is capable of recognizing patterns in financial transactions and the legal actions of the parties involved. Artificial intelligence, using natural language processing, will be able to assist judges in predicting trial outcomes. Based on all the information processed in a legal database, artificial intelligence can assist judges in writing court decisions. Artificial intelligence can provide examples of civil

decision formats from previous trials that resemble the dispute currently being tried. After the panel of judges completes the trial process and renders a verdict, artificial intelligence can manage all data related to the civil dispute, such as documents, party data, court schedules, and court decisions, by entering them into the legal database.

Judges in commercial courts process bankruptcy applications based on the provisions of Law Number 37 of 2004 concerning Bankruptcy and Suspension of Debt Payment Obligations (UU K&PKPU). Article 8, paragraph (4) of the K&PKPU Law states that if some facts or conditions prove that the bankruptcy provisions as referred to in Article 2, paragraph (1) of the K&PKPU Law are met, then the bankruptcy application must be granted by law. The requirements in Article 2, paragraph (1) of the K&PKPU Law include the existence of a debtor who has two or more creditors and has not paid off a debt that has matured and is collectible. Article 8, paragraph (4) of the K&PKPU Law, in the explanation section, states that the definition of facts or conditions that can be proven is the existence of two or more creditors and the existence of a debt that has matured and has not been paid. From the explanation, it can be inferred that the introductory provisions of simple proof apply the concept of simple proof to all bankruptcy requirements as specified in Article 2, paragraph (1), of the K&PKPU Law. A simple proof can be carried out if the bankrupt defendant does not express an exception *non adimpleti contractus*, which is interpreted as an exception stating that the creditor himself did not perform first. This exception results in the existence of a debt that is still in dispute, so that the implementation of simple proof cannot be carried out. ([Gunawan & Tanjung, 2024](#))

A simple proof can be separated into four components: the existence of debt, debt that has matured and can be collected, payment in full has not been made, and the existence of at least two creditors. Debt is an obligation that must be fulfilled, in rupiah or foreign currency, which has been stated or will arise in the future (contingent). Debt can arise from a contract or a legal obligation. Creditors have the right to obtain repayment of their receivables; if not paid, it will be taken from the debtor's assets. Debt in this situation refers to the existence of a legal relationship between at least two parties in a material context, which gives rise to obligations for certain parties. Obligations can be interpreted as the obligation to act, the obligation not to act, or the obligation to provide something. Debt that arises due to an agreement can be separated, whether due to an agreement with consumers or another agreement, so that one party is positioned as the debtor. ([Rongkonusa et al., 2023](#)) Suppose there is a difference in the amount of debt between the debtor and the creditor. In that

case, this does not constitute an obstacle for the panel of judges in determining a bankruptcy decision, in accordance with the provisions of Article 8 paragraph (4) of the K&PKPU Law.

The existence of a debt can be proven by showing the existence of the agreement document that forms the basis of the obligation. The bankruptcy petitioner can also present other evidence that they have neglected to fulfill their obligations within the agreed-upon timeframe, thus giving the creditor the right to demand payment of the debt. In a simple proof process, debt that is past due and collectible is proven by explaining the due date that resulted in the debt becoming collectible. If the agreement stipulates a payment period, the debt becomes legally due once the specified period has passed, and it can be collected. However, if the payment period is not specified, proof is required that the bankruptcy petitioner has issued a warning to the debtor. A warning letter or warning sent by the creditor to the debtor contains a warning to complete, not to carry out, or to submit something in accordance with the agreement that has been drawn up. The warning letter serves as evidence that the debt is due and can be collected.

In resolving disputes in a commercial court, the bankruptcy petitioner must also prove that the defendant has not fully paid the debt. As a basis for the bankruptcy petition, the debtor's debts that have matured can be clearly proven to have not been fully paid. When the debtor fails to fulfill the obligations stated in the agreement, the debtor may lack the desire to fulfill the obligations, or the debtor may not be able to fulfill the obligations. However, the panel of judges is not required to prove the motivation or background for the debtor's failure to fulfill the obligations. The panel of judges is not required to specifically seek facts that cause the debt not to be paid, thus making the evidentiary process more complex. ([Rongkonusa et al., 2023](#))

In a commercial court hearing, a bankruptcy petitioner is required to prove the existence of other creditors who also have outstanding receivables. The bankruptcy petitioner can prove the existence of other creditors by requesting their presence at the hearing. The other creditors are expected to state that they can actually prove the existence of outstanding debts. The bankruptcy petitioner can also prove the existence of other creditors by presenting documents that establish agreements providing the basis for the debt-receivable relationship that arose between the debtor and the other creditors. The bankruptcy petitioner can also prove in court the existence of a list of claims recorded with the other creditors. The debtor's financial statements, obtained by the bankruptcy petitioner from a reliable source, such

as a public accounting firm, can be submitted to the panel of judges for use as simple evidence. The bankruptcy petitioner can also submit a letter from Bank Indonesia in the form of a BI Checking as proof of the existence of other creditors. A court decision that lists the defendant as bankrupt and also declared as a debtor in another bankruptcy dispute can also be submitted by the bankruptcy applicant as evidence to the panel of judges at trial. ([Rongkonusa et al., 2023](#))

To ensure legal certainty, during the process of examining evidence until the issuance of a bankruptcy petition decision, the commercial court judge is absolutely required to use the provisions in Article 2 paragraph (1) of the K&PKPU Law as a reference. This is based on the consideration that the dispute that arises is a petition for a declaration of bankruptcy, so that the panel of judges is only tasked with conducting the examination and implementing the legal rules to determine whether the bankruptcy petition has fulfilled the provisions of the bankruptcy requirements or not. Extralegal aspects are not the focus of the panel of judges' considerations, including aspects of the debtor's financial health. The panel of commercial court judges in the trial process does not need discretion in issuing a decision. Suppose it can be proven that the petition has fulfilled the elements of bankruptcy as regulated in Article 2, paragraph (1) of the K&PKPU Law. In that case, the panel of commercial court judges has no other consideration for not declaring the debtor bankrupt. The panel of judges does not need to rely on artificial intelligence to make decisions in cases. Artificial intelligence is still needed in commercial courts only within the scope of bankruptcy case administration.

D. CONCUSSION

The status of artificial intelligence can be likened to that of a child and a parent as subjects of civil law, where control is exercised, as stipulated in the doctrine of *in loco parentis*. By applying the *in loco parentis* doctrine, the use of artificial intelligence still prioritizes the role of humans as responsible parties without limiting technological development.

The bankruptcy requirements in Article 2 paragraph (1) of the K&PKPU Law include the existence of debt, debt that has matured and can be collected, payment in full has not been made, and the existence of at least two creditors. In accordance with Article 8, paragraph (4) of the K&PKPU Law, the panel of judges applies simple evidence related to all of these bankruptcy requirements, so there is no need to rely on artificial intelligence assistance in deciding cases. Artificial intelligence is still needed in commercial courts only within the scope of bankruptcy case administration.

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