



# THE JURIDICAL STUDY ON THE USE OF ARTIFICIAL INTELLIGENCE IN LAW ENFORCEMENT IN INDONESIA IN THE CONTEXT OF LEGAL DEVELOPMENT

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## Abstract

Current technological developments allow the use of Artificial Intelligence (AI) in every field of human life, such as in the legal field. A concrete example of the application of AI in the legal field is electronic ticketing (E-Tilang) in the traffic field. With the rapid development of technology that has occurred in various aspects of people's lives. The dynamics of life that occur in society at this time should also be followed by changes in the legal field. National legal development should be adjusted to the dynamics of the socio-cultural life of the surrounding community. Legal development is an effective way to build society, based on the consideration that a good national legal system can motivate citizens (who are citizens) in terms of the truth of its content and enforcement power. to behave in accordance with what state law commands and not laws that can enforce compliance with regulations based on coercion from the authorities.

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## I. INTRODUCTION

Currently, the world is entering the Society 5.0 era after the industrial revolution 4.0 era, where technological developments are accelerating, especially during the COVID-19 pandemic. Life goes on and develops, whether we like it or not, whether we want it or not, whether we are ready or not. Therefore, we need to change the paradigm and be willing to learn so that we are not too left behind so that we have responsibility for the future.

The Industrial Revolution 4.0 is characterized by the development of internet-based information and communication technology or called digital technology. This developing technology makes the device more futuristic, intelligent, and even developed to resemble human intelligence. (Nisrina Hikmawati, et al, 2023).

Artificial intelligence (AI) refers to the ability of a computer or computer system to imitate and perform tasks that usually require human intelligence. The main goal of artificial intelligence is to enable computers to perform tasks that usually require human thinking, analysis, decision making, and problem solving. (Yulita Sirinti Pongtambing, et al, 2023).

Experts say the development of artificial intelligence will continue to grow rapidly and have a major impact on many aspects of life, including the economy, transportation, and health.

Current technological developments allow the use of Artificial Intelligence (AI) in every field of human life, such as in the legal field. A concrete example of the application of AI in the legal field is electronic ticketing (E-Tilang) in the traffic field. E-Tilang is an electronic system of monitoring and enforcing traffic laws in electronic form that utilizes Closed-Circuit Television (CCTV) support tools and replaces the manual ticketing system that uses blank or ticket letters. With the implementation of E-Tilang, the bad behavior that usually occurs in the field, namely bribery in ticketing problems, will be resolved with the implementation of E-Tilang, because there is no gap in practicing bribery.

In addition to E-Tilang, AI is also used in the Indonesian judiciary called E-Court. E-Court is a service for registered users to register cases online, get an estimate of case fees online, online payments, summons made by electronic channels, and trials conducted electronically. (E-Court Supreme Court of Indonesia, 2024).

With the rapid development of technology that has occurred in various aspects of community life. The dynamics of life that occur in society at this time should also be followed by changes in the field of law. National legal development should be adjusted to the dynamics of the socio-cultural life of the surrounding community. However, what happens is that the implementation of law in Indonesia is still not perfect, the law runs behind the dynamics of social life, culture and is not in accordance with the legal needs of our society.

Some people hope that AI can take a role in making decisions on law enforcement in Indonesia, this is because AI can process legal documents, conduct risk analysis, search for information, make decisions, case management, and prevent fraud, but it takes a lot of study for AI to be applied with a very important role.

The problem now is that we must find the cause of the slump in legal development in Indonesia and what solutions must be made to overcome this? How can AI or artificial intelligence contribute to law enforcement in Indonesia? How is the application of AI in law enforcement in Indonesia, these questions will be discussed in this paper.

## **II. RESEARCH METHOD**

The approach in this research is to use juridical sociology or legal sociology, which is legal research that applies social sciences for tools (interdisciplinary), social reality in a community construction will be purer to understand and explain using social sciences, so that the focus of juridical sociological research studies is to place law as a pattern in human behavior (law as a behavioral system). In Yusriyadi's opinion, law is actually a reality that can be studied with various methods, Yusriyadi further explained that legal science has an inter-disciplinary nature. Some aspects of the law that want to be known cannot be explained adequately without using scientific disciplines

such as sociology, politics, anthropology, history, economics and others. By using a juridical sociological approach or the sociology of law, a research approach that actually studies the influence of society on law, the extent to which symptoms that exist in society can affect the law. (Muhammad Chairul Huda, 2021).

### **III. RESEARCH RESULTS AND DISCUSSION**

#### **1. Artificial Intelligence Contribution to Law Enforcement**

Terminologically, Minsky defines artificial intelligence as a machine that can use its intelligence to do many things similar to humans. Artificial intelligence aims to illustrate the quality of human life. By encouraging work planning, problem solving, reasoning, idea recognition, thinking skills, and various other activities that can encourage work quickly and efficiently. In addition, Stuart Russell and Peter Norvig argue that artificial intelligence capabilities can be categorized into four groups, namely: systems that can think like humans, systems that can act like humans, systems that can think in a rational way and systems that can act in a rational way. (Aditya Kurniawijaya, et al, 2021).

Law enforcement according to Soerjono Soekanto can be influenced by legal factors, law enforcers, facilities or facilities, society, and culture. (Soerjono Soekanto, 2004) In this case, the facilities and infrastructure factor is related to the tools or devices used to support the implementation of law enforcement. This factor is a very important indicator in the contribution of AI in law enforcement. AI is a device or tool that can be useful in carrying out law enforcement.

There are several successful AI contributions in law enforcement, such as E-Tilang and E-court that have been used and implemented in Indonesia, with the implementation of E-Tilang, it can avoid the occurrence of criminal acts of bribery against law enforcement when a ticket occurs. However, there are many potentials that can contribute to legal development in Indonesia.

The focus of legal development is the creation and updating of legal materials to meet needs. (Moh. Mahfud MD, 1998). The pattern of legal development is the improvement or renewal inward to be able to fulfill the ideals of law in the Constitution. At this time there are several things that have been forgotten in the framework of national legal development, namely for example the “legal development map” which is currently difficult to make, but it is very basic because without it it will be very difficult to determine the position of law in development. (Satjipto Rahardjo, 2009).

Legal development is an effective way to build society, based on the consideration that a good national legal system can motivate citizens (who are citizens) in terms of the correctness of its content and enforcement power to behave in accordance with what the state law commands and not laws that can enforce compliance with regulations based on coercion from the authorities. (Soetandyo Wignjosoebroto, 2002).

In Indonesian positive law, national legal development is regulated in Law Number 17 of 2007 concerning the National Long-Term Development Plan 2005-2025 (RPJPN Law). Provisions in Law

Number 17 of 2007 concerning the National Long-Term Development Plan 2005-2025 (RPJPN Law) there are seven directions of national legal development, namely:

1. Supporting the realization of sustainable economic growth;
2. Regulating issues related to the economy, especially the business world and the industrial world;
3. Creating certainty of investment, law enforcement and legal protection;
4. Eliminating the possibility of criminal acts of corruption and being able to resolve thoroughly the problems of collusion, corruption and nepotism;
5. The realization of a good national legal system, sourced from Pancasila and the 1945 Constitution, which includes the development of legal materials, legal structures including legal apparatus;
6. The realization of a society that has a high awareness in realizing the rule of law;
7. The creation of a just and democratic society.

However, what happens in the field until now is that the application of artificial intelligence by the government is still moving slowly, even though if studied more deeply artificial intelligence has the potential to contribute a lot to law enforcement in Indonesia. Artificial intelligence is a simulation of the process of human intelligence by machines, especially computer systems, the application of artificial intelligence is also able to increase the speed, effectiveness, as well as the accuracy of human labor in the law enforcement sector.

## **2. Application of Artificial Intelligence in Law Enforcement in Indonesia**

Overlapping regulations between central and local governments create significant barriers to investment activities. Local regulations often impose additional taxes and levies that are inconsistent with central laws, increasing economic costs for investors. For example, some regions set additional regulations in the land licensing process that contradict the principles in the Investment Law. In one case, a multinational company faced difficulties in obtaining land rights in a particular region due to different legal interpretations between local and central government. This situation not only hampered the company's operations, but also sent a negative signal to other potential investors. Not only overlapping regulations, the culture of corruption is also a major challenge in creating legal certainty in Indonesia. In the Transparency International report, (J. H. Jack, 1998). Indonesia records a low corruption perception index, indicating that corrupt practices are still widespread, especially in licensing and procurement processes. Foreign investors often complain of illegal fees and lengthy procedures in obtaining business licenses. (Budiman Ginting, 2008). Case studies show that foreign companies often prefer international arbitration to resolve disputes rather than using domestic mechanisms due to a lack of trust in the independence of Indonesian law enforcement agencies. Arbitration cases involving Indonesia in the ICSID forum are also an indicator that the domestic legal system needs to be improved to accommodate the needs of investors.

The application of artificial intelligence in Indonesia has many challenges, one of which is because technology in Indonesia has not been evenly distributed in each region. This can make the application of artificial intelligence slow and less than optimal, the government must carry out development to each region so that technology in Indonesia can be fair and evenly distributed. Other challenges are:

1. Regulation: ethical regulations and more responsible use of artificial intelligence. Ethics surrounding the development and application of artificial intelligence technology is also a concern for major countries. The development and application of artificial intelligence technology that is not regulated by ethics can be detrimental to society. Image generation and speech synthesis are examples of artificial intelligence technologies that can harm society. Artificial intelligence technology can easily be used to create videos, resulting in video footage that was not actually created. While such technology, known as deepfakes, can produce feature-length movies at a lower cost than regular movie production, it can also be used to create false information to incite the public.
2. Privacy: related to the use of data to create artificial intelligence models. This data protection regulation requires regulatory support for the use of data so that the use of artificial intelligence technology can be applied while maintaining the privacy of data sources.
3. Lack of explanation: how the artificial intelligence model arrives at certain decisions/conclusions (in terms of accountability and trustworthiness). This point is especially important for purposes where the model needs to be understandable by humans. This is not only common in Indonesia but also in the artificial intelligence technology development community. This need underlies the development of explainable artificial intelligence.
4. Data availability: How representative and impartial is the data used. Machine learning algorithms, which are currently the dominant technology in artificial intelligence, rely heavily on data availability. If the data used to build the artificial intelligence model is not representative of all cases, the artificial intelligence model will be less accurate and will be tailored to the specific cases that make up the majority of the training data. Therefore, the process of developing training data is one of the most important aspects in building accurate artificial intelligence models.
5. Lack of talent in the development and application of artificial intelligence technology: due to the lack of talent capable of developing artificial intelligence technology, it is likely that Indonesia will only become a market for artificial intelligence technology developed by other countries. Anticipating this possibility requires special attention in developing

artificial intelligence talents. Efforts to develop artificial intelligence talents include the provision of artificial intelligence technology learning materials, the provision of infrastructure that facilitates the acquisition of artificial intelligence technology, as well as the preparation and creation of instructors and teachers in the field of artificial intelligence.

However, if all of the above have been passed, then the application of artificial intelligence in law enforcement can be carried out.

For the legal sector, we can follow in the footsteps of the Chinese Government which has started using artificial intelligence so that court judges can be fair in issuing decisions and the use of artificial intelligence to improve the existing court system. Artificial intelligence will provide recommendations for legal considerations, drafting legal documents and providing warnings in the event of human error in issuing decisions. The artificial intelligence not only collects data in the court but is connected to the Chinese police, which can reduce fraud that occurs in the court.

#### **IV. CONCLUSION**

Until now, artificial intelligence continues to evolve very rapidly, which is due to the many results of research published by researchers and produces products that can be marketed globally which generate profits for buyers and users. Before analyzing the contribution of artificial intelligence to legal development in Indonesia, it is necessary to understand what legal development is meant in this paper. The focus of legal development is the creation and updating of legal materials to meet needs. The pattern of legal development is inward reform to fulfill the legal ideals in the Constitution.

The application of artificial intelligence in Indonesia has many challenges, one of which is because in Indonesia technology has not been evenly distributed in each region, this can make the application of artificial intelligence stagnant and less than optimal, the government must carry out development and modernization to each region so that technology in Indonesia can be fair and equitable.

However, if the above has been passed all eat the application of artificial intelligence can be done perfectly then legal development in Indonesia can occur. There are many sectors that can be applied by artificial intelligence, namely the legal, economic, government, administrative sectors, which can lead to efficiency and savings in the state budget if this happens.

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