

# Utilization of Artificial Intelligence Technology in Law Enforcement in Indonesia

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**Abstract.** The utilization of Man-made brainpower (artificial intelligence) innovation in policing turning out to be progressively significant in the ongoing advanced period. Regulation (UU) no. 19 of 2016 concerning Corrections to Regulation No. 11 of 2008 concerning Data and Electronic Exchanges (UU ITE) is an important lawful premise in endeavors to guarantee security and equity in the computerized domain. In this context, the use of AI in law enforcement enables early detection of cybercrimes, faster and more accurate data analysis, and monitoring of unlawful digital content. However, the application of AI in law enforcement also raises several challenges, such as concerns regarding data privacy, algorithm bias, and transparency in decision-making. Therefore, authorities need to ensure that the application of AI is conducted with due regard for ethical, legal, and justice aspects. In the context of the ITE Law, the use of AI can assist in law enforcement against violations in cyberspace, such as online fraud, defamation, and the spread of false information. With AI technology, law enforcement can increase their ability to overcome digital crime challenges more efficiently and effectively, by the principles of justice regulated in the ITE Law. Thus, the concept of law enforcement through the use of AI technology in the context of the ITE Law brings hope to create a digital environment that is safer, fairer, and more just for all Indonesian society.

**Keywords:** Administrative Procedures, Case, Criminal, Makassar District Prosecutor's Office.

## 1 Introduction

AI is currently being used in various sectors such as trade, health, law, and politics, proving that AI is already utilized in diverse areas of society. Man-made intelligence has 3 (three) levels of progress or development, in particular: (1) Artificial Narrow Intelligence (ANI), which is a type of Powerless man-made intelligence. (2) Artificial General Intelligence (AGI), otherwise called Solid artificial intelligence, has abilities indistinguishable from people. (3) Artificial superintelligence (ASI) was purposely assigned to outperform human abilities. [1]

One of the boundaries found in executing artificial intelligence in Indonesia is the authority factor, particularly openly benefits, with complex help techniques that expect advancement to give answers for local area issues.[2] Pioneer capacity is a vital perspective in confronting the 4<sup>th</sup> Industrial Revolution. [3] Where people can't beat machines, yet people have minds that separate the two, a pioneer should shape a social initiative framework with solid association and impact through administration style.

Artificial Intelligence (AI) can be used to analyze crime data and make predictions regarding the location and time of crime incidents. It can enable the police to allocate resources more efficiently. In addition, AI can be operated to detect patterns of fraud, corruption, or other crimes in various aspects of law enforcement, such as in the investigation and audit process. In the digital era, digital evidence such as text messages, emails, or video recordings can be processed using AI technology to support investigations and law enforcement. AI can also be used to analyze the risk of conflicts of interest in law enforcement institutions, to prevent abuse of power or acts of corruption. By utilizing AI in data analysis, decisions taken by law enforcement agencies can be more objective and based on strong evidence. AI systems can be used to monitor the performance and behavior of law enforcement officers, as well as evaluate law enforcement processes to ensure compliance with rules and ethics. The use of AI technology in law enforcement can also provide equal access to legal services for the community, including in terms of legal aid and legal information. Although the adoption of AI in law enforcement in Indonesia can bring great benefits, it is important to remember that the implementation of this technology must also be supported by clear regulations, protection of personal data, and ensuring that decisions taken by AI systems are non-discriminatory and by the principles of justice.

Some groups hope that AI can take a role in making decisions regarding law enforcement in Indonesia, this is because AI can process legal documents, carry out risk analysis, search for information, make decisions, case management, and prevent fraud (Telkomuniversity.com, October 4, 2023). However, it surely requires further study regarding the use of AI in law enforcement. This article examines the role of AI in law enforcement in Indonesia. It is hoped that this article will be useful and provide recommendations for policymakers in using AI as a law enforcement tool in Indonesia.

The problem in this paper is what is the concept of law enforcement through the use of artificial intelligence (AI) technology?

## **2 Method**

### **2.1 Method**

The approach employed in drafting this paper is a rigorous scientific method involving data that directly portrays issues at hand, followed by analysis and concluding issue resolution. Data collection entails observation and research to find solutions for organizing this document. Within the scope of the research objectives, the realm of this study falls under qualitative exploration, thus, a qualitative approach will be utilized. Petrus Soerjowinoto et al. noted that qualitative methods emphasize the researcher's process of issue definition to construct a comprehensive and holistic understanding of the subject matter.[4]

### **2.2 Approach**

The regularizing juridical methodology, in particular, the technique used to explore issues concerning regulation and legal guidelines, including the principles that can be utilized as a reason for looking at issues and their lawful outcomes. For this situation, Regulation (UU) No. 19 of 2016 concerning Alterations to Regulation No. 11 of 2008 concerning Data and Electronic Exchanges (UU ITE).

Regularizing juridical methodology completed on specific legal guidelines or composed regulations, which connect with the idea of policing the utilization of computerized reasoning (artificial intelligence) innovation.[5] The examination portrays what is going on of the article under study, to be specific zeroing in on guideline and the idea of policing the utilization of man-made consciousness (artificial intelligence) innovation by and by.

### **3 Result and Discussion**

#### **3.1 Artificial Intelligence (AI) Provisions in Indonesian Legislation.**

Based on present conditions, AI development is currently in a phase characterized by a limited form of AI, as it still relies on human operation. However, there is potential for AI to surpass human capabilities and execute tasks without human intervention. In Indonesia, the development of AI is regulated by various laws and regulations. For example, Article 1 No. 8 of Regulation (UU) No. 19 of 2016 concerning Corrections to Regulation No. 11 of 2008 concerning Electronic Data and Exchanges (UU ITE) defines an Electronic Specialist as a device within an electronic system designed to act on specific electronic data autonomously held by an individual. It is important to note that this definition currently applies to AI, as AI operations are still initiated by individuals directing specific actions using AI. Nevertheless, should AI development progress to a point that exceeds human capabilities, the existing definition in the ITE Regulation may no longer be sufficient to govern AI in Indonesia.

Regulation No. 11 of 2008 concerning Data and Electronic Exchanges (UU ITE) contains provisions about the use of information technology, including AI, in electronic transactions, providing a legal basis for AI utilization in various aspects of digital life. Additionally, Government Regulation Number 71 of 2019 on Artificial Intelligence (AI) Development Policy Implementation regulates the implementation of AI development policies in Indonesia, encompassing AI usage in both public and private sectors.

Moreover, AI technology must adhere to the Guidelines for AI usage in Public Services. The Indonesian government has established guidelines regarding AI usage in public services to enhance efficiency, quality, and accessibility for the community. Furthermore, the Indonesian Government is currently formulating a national policy related to AI development, encompassing regulations, standards, and ethics for AI implementation in diverse sectors. It is addressed in the Draft Law on Personal Data Protection, which includes provisions concerning data processing in the context of AI to ensure adequate personal data protection. In terms of transparency, the Government and relevant institutions are developing standards for ethics and transparency in AI usage, which will serve as guidelines for AI developers and users in Indonesia. The application of AI is expected to yield maximum benefits for society, with due consideration for legal, ethical, and justice aspects, under Indonesian laws and regulations.

In the realm of law and regulation, Satjipto Rahardjo's concept of progressive law emphasizes that regulations are crafted not for their own sake, as suggested by certain legal theories, but to promote the well-being and happiness of people. Consequently, regulations always remain in a state of "taking shape," continually evolving to serve the needs of society.[6].

### **3.2 Concept of Law Enforcement Through the Use of Artificial Intelligence (AI) Technology.**

Please note that law enforcement performed by a device or tool will be treated differently from law enforcement accomplished by a human. Riki Perdana Waruwu said that a magistrate is attached to 3 (three) types of justice when abiding cases, namely legal, moral, and social justice. Apart from that, Abdurrahman Rahim said that in the law enforcement process, AI cannot provide benefits because AI cannot be considered. AI cannot offer justice even though it uses algorithms, and AI cannot consider the merits of a concern. AI will never be able to replace the profession of a judge, because AI cannot think like humans who have feelings, intentions, and conscience[7].

The notion of Law Enforcement through Artificial Intelligence (AI) Technology itself can be described as follows:

1. **Criminality Prediction**  
AI can be used to analyze historical crime and community data, authorizing law enforcement to predict the location and timing of potential crimes.
2. **Fraud and Corruption Detection**  
With fast and in-depth data analysis capabilities, AI can help detect patterns of fraud, corruption, or other acts that are difficult to manually detected.
3. **Digital Evidence Processing.**  
AI can be utilized in identifying, analyzing, and interpreting digital evidence such as text messages, emails, and video recordings, thereby strengthening legal cases.
4. **Supervision and Monitoring.**  
AI systems can be used to monitor the behavior of law enforcement officers, identify potential ethical violations, and evaluate performance and compliance with legal procedures.
5. **Interest and Compliance Risk Analysis.**  
AI can assist in analyzing the risk of conflicts of interest in law enforcement agencies, as well as ensuring that decisions and actions taken are within the applicable legal framework.
6. **Data-Based Decision Making.**  
By utilizing data and AI analysis, law enforcement can make more objective, accurate, and fast decisions based on strong evidence.
7. **Increasing the Efficiency and Effectiveness of Law Enforcement.**  
The use of AI in law enforcement can increase the efficiency and effectiveness of the investigation, supervision, and law enforcement processes as a whole.

With this notion, AI technology in law enforcement can help strengthen the legal system, advance transparency, support more accurate decisions, and ensure fairness in law enforcement. However, it is important to remember that AI undertaking must be in line with the principles of ethics, privacy, and fairness to ensure fair and unbiased law enforcement.

Some argue that AI cannot exhibit human emotions, intentions, and conscience, highlighting the inherent limitations of AI in empathizing and possessing moral judgment, which are innate human traits. While AI demonstrates intelligence in processing data and making rapid, accurate decisions, it does not possess the capacity to experience emotions, exhibit morality, or rely on intuition like humans do. To address this challenge, the following steps can be taken:

1. **Development of Ethics and Standards for the Use of AI.**

It is important to develop clear ethics and standards in the use of AI, including those regarding fairness, transparency, and adherence to moral values.

2. **Human Supervision and Control.**  
Even though AI can provide recommendations or decisions, human supervision and control are still needed to ensure that the decisions accepted are human values.
3. **System Design Based on Humanitarian Principles.**  
AI systems can be designed by considering humanitarian aspects, such as justice, diversity, and human rights so that the resulting decisions are more connected with human values.
4. **AI Ethics Education and Awareness.**  
It is important to increase public and AI developers' understanding of the ethics of using this technology, to reduce the risk of abuse and discrimination.
5. **Integration with Human Decision Making.**  
AI decision-making can be integrated with human decision-making to achieve more optimal results and consider the factors that AI cannot measure, such as empathy and conscience.

By enacting these measures, we anticipate that the integration of AI across various sectors will continue to yield significant benefits for mankind, all the while ensuring that decisions and actions taken are under human values and justice.

It is important to note that AI technology in law enforcement in Indonesia has the potential to improve the efficiency, accuracy, and accountability of the legal system, offering valuable support for law enforcement officers. However, it is essential to prioritize ethical and privacy considerations in its implementation. Moreover, the use of AI in law enforcement, particularly by the police, should not be seen as diminishing the role of human involvement in the law enforcement process. Instead, it emphasizes that AI is meant to supplement and enhance the law enforcement process, highlighting the ongoing importance of human law enforcers.[8]

Efforts and preparatory steps so that AI technology supplies guarantees of just legal certainty in Indonesia can be prepared with the following efforts:

1. **Development of Clear Regulations.**  
Establish comprehensive regulations that govern the use of AI in a legal context, ensuring that this technology adheres to principles of justice and legal certainty.
2. **Supervision and Transparency.**  
Ensure that there is an effective monitoring mechanism for AI uses in law enforcement, as well as ensuring transparency in decision-making involving AI technology.
3. **Training and Education.**  
Conduct training and education to law enforcement officials on the use and implications of using AI in legal processes to ensure good understanding and ethical use.
4. **Personal Data Protection.**  
Ensure that personal data used in AI systems is adequately protected by applicable personal data protection regulations to safeguard individual privacy.
5. **Regular Auditing and Evaluation.**  
Conduct regular audits and evaluations of AI systems used in law enforcement to ensure compliance with regulations, as well as performance and fairness in decision-making.

6. Collaboration with AI and Ethics Experts.  
Involve AI and ethics experts in the development, implementation, and evaluation of AI systems in law enforcement to ensure that this technology is used responsibly.
7. Development of a System Based on Humanitarian Principles.  
When creating AI systems, it is important to consider humanitarian factors like fairness, inclusivity, and human rights, so that the outcomes align better with human values.
8. Community Participation and Involvement.  
Developing and implementing AI technology in law enforcement, involves the community to ensure that this technology provides fair and equitable benefits for all parties.

The thorough preparation of these steps aims to harness AI technology for the benefit of law enforcement in Indonesia, ensuring fair legal certainty for all members of society. The link between the ITE Law and the utilization of AI technology in pursuing fair law enforcement is integral to their shared objectives. This connection can be articulated as follows:

1. Regulations Regarding Cyber Crime.  
The ITE Law regulates various crimes in cyberspace, such as online fraud, spreading false information, and defamation. AI technology can detect, analyze, and address these cybercrimes efficiently.
2. Digital Content Monitoring.  
The ITE Law has provisions related to monitoring digital content that violates the law. AI technology can help in automatic content monitoring to identify and remove illegal or harmful content.
3. Law Enforcement Against Online Violations.  
With the application of AI, law enforcement can perform data analysis quickly to identify violations of the ITE Law, track perpetrators, and take appropriate legal action.
4. Cybercrime Detection and Prevention.  
AI technology can be used to conduct early detection of potential cyber crimes so that prevention efforts can be performed more effectively, such as malware or phishing attacks.
5. Digital Evidence Processing.  
In cases involving digital evidence, AI technology can assist in the collection, analysis, and interpretation of that evidence to strengthen the legal case being built.
6. Data-Based Decision Making.  
By utilizing data and AI analysis, law enforcement can make more objective and accurate decisions in handling cases involving violations of the ITE Law.
7. Compliance with the Principles of Justice.  
By implementing transparent and accountable AI technology, it is hoped that law enforcement against violations of the ITE Law can be carried out more fairly and fairly for all parties.

As technology continues to advance, the use of AI in law enforcement efforts is expected to become more effective and efficient, providing greater guarantees of justice in our increasingly digital world. Worldwide, AI has been leveraged to streamline the enforcement of regulations, resulting in significant improvements in effectiveness and efficiency. In

Indonesia, advanced technology has already begun to transform public administration, particularly in the establishment of legal entities, the implementation of e-courts, and the facilitation of online regulation. AI serves as a tool to enhance human work, enabling greater precision and effectiveness, and can be compared to an electronic agent within a system that acts upon human commands, as defined in "Article 1 Number 8 of the ITE Regulation." Even within an automated framework, human input remains crucial. Ultimately, applications still require active human intervention to produce meaningful results.[9].

Examples of the application of AI in assisting law enforcement in Indonesia are as follows:

1. Financial Crime Detection System.  
How it works:
  - AI is used to analyze suspicious or unusual financial transaction patterns.
  - AI systems can identify potential money laundering, fraud, or other financial crimes.
  - Law enforcement can use the results of this AI analysis to conduct further investigations and take appropriate legal action.
2. Facial Recognition for Suspect Identification.  
How it works:
  - The AI system can be used to recognize the suspect's face from CCTV footage or photos.
  - With facial recognition technology, law enforcement can quickly identify suspects and link them to criminal cases under investigation. This helps speed up the process of identifying and arresting suspects.
3. Data Analysis for Crime Prediction.  
How it works:
  - AI can be used to analyze crime data that occurred in the past and predict crime patterns that may occur in the future.
  - With this information, law enforcement can take preventive action or take more proactive action to prevent crime.
4. Digital Evidence Processing System.  
How it works:
  - AI can be used to assist in the processing of digital evidence, such as metadata analysis, recovery of deleted data, or reconstruction of digital information.
  - This system helps law enforcement in strengthening digital evidence used in legal procedures.
5. Social Media Sentiment Analysis.  
How it works:
  - AI can be used to analyze sentiment and conversation patterns on social media regarding crime issues or potential security vulnerabilities.
  - With this information, law enforcement can monitor developing situations, identify threats, or respond quickly to potential crimes.

The integration of AI technology in various aspects of law enforcement in Indonesia offers the potential to enhance efficiency, accuracy, and fairness, thereby contributing to the improvement of the justice system. With rapid technological advancements, artificial intelligence has swiftly made its way into legal practice. A survey of managing partners of law firms in the US with 50 or more attorneys revealed that over 36% of law firms and over 90%

of large law firms employing more than 1,000 attorneys are already utilizing AI systems in their legal practices.[10].

## 4 Conclusion

The use of Computerized reasoning (computer based intelligence) innovation in policing, on Regulation (UU) No. 19 of 2016 concerning Corrections to Regulation No. 11 of 2008 concerning Data and Electronic Exchanges (UU ITE), promises a significant transformation in efforts to maintain security and justice in the digital era. The concept of law enforcement through AI provides opportunities to increase efficiency, accuracy, and speed in dealing with crimes in cyberspace. With the help of AI technology, law enforcement can perform early detection of cybercrime, deeper data analysis, and predict crime patterns for more effective preventive action. Facial recognition systems, social media sentiment analysis, and digital evidence processing are becoming more efficient with the adoption of AI technology. It helps strengthen law enforcement against violations regulated in the ITE Law, such as online fraud, defamation, and false information spread. While leveraging AI brings various benefits, challenges related to data privacy, algorithm bias, and decision transparency and addressed. Authorities need to develop regulations that ensure that the utilization of AI in law enforcement is conducted with concern for ethical, legal, and justice aspects. Transparency in the use of AI technology and the protection of personal data is key to maintaining public trust in the law enforcement system supported by AI technology. Thus, the notion of law enforcement utilizing AI technology in the context of the ITE Law offers hope for creating a digital environment that is safer, fairer, and more just for all Indonesian society. With cooperation between authorities, technology experts, and society, the implementation of AI in law enforcement can have a significant positive impact on maintaining legal integrity and justice in the digital era.

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