Artificial Intelligence Criminal Investigation in Indonesia

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Abstract
Artificial intelligence (AI) is a machine-type technology that mimics human behavior, then develops on the basis of the knowledge of human thinking, capable of running human thinking processes, and capable of making decisions like humans. Its existence is capable of facilitating human work by making it more efficient and effective. However, the presence of AI is vulnerable to being abused by irresponsible parties to commit a criminal act. The study aims firstly to learn about the development of Artificial Intelligence (AI) settings in the legal system in Indonesia and secondly, to know about the process of criminal investigation based on Artificial intelligence in Indonesia. The results of this study are, first; the rules on AI are not detailed in the law so many opinions are trying to interpret and associate it with Act Number 11 of 2008 on Electronic Information and Transaction. The second in the criminal investigation of AI highlighted is the presence of electronic evidence tools and evidence tools experts in the field of electronics, as well as how to meet the formula of articles in the laws imposed.
1. Introduction

The Industrial Revolution 4.0 becomes one that is used to mark the occurrence of change. The Industrial Revolution 4.0 is a time when digital technologies are very sophisticated, constantly evolving, and being updated. Nowadays, humans are equipped with highly sophisticated digital technology facilities that help to facilitate their work. It is characterized by the integration of digital technology, robotics, artificial intelligence, the Internet of Things (IoT), big data and a variety of other innovative technologies. Factors driving the 40th industrial revolution are artificial intelligence and digital physical frameworks that enable human-machine interaction more generally. Artificial intelligence here acts as a catalyst and processor of the data obtained from the technology, in order to generate useful insights. It could change the methods of human work that were initially "manual" and then evolved into "digitalized" or "automated".

Artificial intelligence (AI) is a machine-type technology that mimics human behavior, then develops on the basis of the knowledge of human thinking, capable of running human thinking processes, and capable of making decisions like humans. Early research related to artificial intelligence was carried out in the 1950s, resulting in problem solving that could be solved by symbolic methods. When AI was first discovered, it was only available in universities and research institutes and there was no practical product to use it. Then the U.S. Department of Defense began using this technology in the 1960s. They developed artificial intelligence by creating the first grassland called the Defense Advanced Project Agency (DARPA) and successfully launched a successful roadmap project in the 1970s. This early research paved the way for the automation and formal thinking seen on computers today.

One of the uses of Artificial Intelligence (AI) is Chat GPT (Generative Pre-Trained Transformer) which is an AI-based model developed by Open AI and encourages deep learning that is capable of making the model understand and produce natural and responsive text, so that with the existence of this Chat GPT it allows humans to interact with machine based on artificial intelligence. Having a model that is able to understand and respond naturally and responsively is very helpful in the course of a research, but Chat GPT technology is still part of a new technology. So further research is still needed to measure and understand its potential and boundaries correctly so that can uses it optimally.

Besides, Artificial intelligence (AI) has flourished in every area of human life, like banking, health, education, even in the field of law. Of course, the presence of AI in technological development is not exempt from the legal regulations in force in a country. Given the technological advances that enable AI to do human work, there will surely be legal issues related to the acts and/or actions it does. Here, AI is an artificial intelligence whose ability to act is limited by the underlying code. In Indonesia itself, there is no specific and clear regulation on artificial intelligence. It will be a legal
problem in the future when AI technology commits legal acts that are not in accordance with the positive legal provisions in force in Indonesia. He has the power to do what is lawful, so that he is not excepted, as is man to do that which is wrong, or to do evil that is harmful to others. If you look at some of these states positioning AI as a legal subject with rights and obligations. However, this does not apply in Indonesia under Indonesian positive law, AI is not a subject of law.

Therefore, the law as an instrument of social reform must be able to regulate new developments, new technologies and changes arising from these things, in order to support, accelerate and realize the social and economic development of the country.

Based on the problems described above, the research question in this study covers two main issues, namely, first, how the development of Artificial Intelligence (AI) settings in the legal system in Indonesia and second, how criminal investigation processes based on Artificial intelligence (IA).

2. Research Method

Legal research is an analytical process involving a particular method, system, and way of thinking and aimed at studying a legal phenomenon and trying to solve problems that arise. Therefore, a proper problem-solving method is needed. This method supports the research process according to the research formula and the research objectives to be achieved.¹

Based on the existing problems, this research is part of a type of qualitative research conducted on the basis of inter-related interpretive practices in the hope of gaining a better understanding of the subject of the study to be studied, in this case, a better comprehension of the process of investigation of crime based on Artificial Intelligence (AI) in Indonesia. This research includes qualitative research with a phenomenological approach by seeking to gain an understanding of a particular event with methods used to approach the actions of people aimed at obtaining the facts or causes of the occurrence of such events, by looking at the subject of study from the point of view of the subject itself.

The type of data used in this research consists of primary data and secondary data. Primary data is obtained directly from informants through interview methods that are based on an effort to dig, understand and disseminate extensively about the process of investigation of crime based on Artificial Intelligence (AI) in Indonesia, while secondary information is derived from library studies in various sources related to the

subject of the study such as books, journals, and other resources related to artificial intelligence in crime in Indonesia.

The data collection process in this study covers three stages, namely: The Getting In process, the researcher enters the site with the permission of the research. Through the snow ball technique, using a gradual acceleration system, the researchers search for the information they need, hold observations and capture the meaning of the phenomena they track. Logging data, researchers use data collection techniques that focus on applying in-depth interview techniques. Analysis of data used in the form of words structured in the sentence text and its properties only as supporting data. Data presentation is derived from a set of information that is structured and gives the possibility of conclusion withdrawal and action. Then the data analysis is done in an open way at the beginning and then more focused on the end (like a funnel). Qualitative research is descriptive, the flow of data is analyzed in the form of a description of phenomena, not numbers or coefficients of relationships between variables.

The research uses data triangulation techniques by collecting reports of cases of Artificial Intelligence in Criminal Prosecution in Indonesia. As well as an analysis of several previous studies that have studied the use of Artificial Intelligence in national law but none specifically analyze and study the process of investigating Artificial intelligence (AI) based crime in Indonesia.

3. Result dan Discussion
The Development of Artificial Intelligence (AI) in The Legal System of Indonesia

The more massive technological developments of today have an impact on human lives that are easier, more efficient, and communicate with each other are becoming more frequent, so that the advancement of state-of-the-art technology brings mankind to progress over time. Artificial intelligence in the world was first developed in the 19th century by the leading scientist Alan Turing, then over time this technology was developed again by other technology scientists to the present stage that is widely used in everyday life.

Andreas Kaplan and Michael Haenline defined Artificial Intelligence (AI) as the ability of a system to interpret external data, then learn from that data and then use it...
to perform tasks to a specific goal with a flexible pattern of adaptation. So it can be said that Artificial Intelligence (AI) is an agent created by humans with the ability to perform certain tasks or purposes just like ordinary humans. The existence of Artificial Intelligence (AI) or what is often referred to as artificial intelligence, has made the pattern of human work that was originally done manually now transformed into a pattern that is all-digital and automated.

There is a technology that can help human activity or work activities so it can be easier, but not a few of these technologies are used negatively by irresponsible people to use in harm to others for their own benefit. So with that, we need regulations that regulate artificial intelligence so that the use of the technology can be directed towards the positive. In Indonesia itself, the regulations governing artificial intelligence in the Indonesian legal system can be found first in the Act Number 11 of 2008 on Electronic Information and Transactions or commonly called the ITE Act. It is expected that this Act will solve a variety of technological problems and can provide benefits in solving problems related to technology. However, in the legislation it does not explicitly give the definition of Artificial Intelligence (AI), so it raises various opinions that try to interpret AI and associate it with the provisions in the AI Act.

Although the law does not specifically regulate and specifically mention the name of the technology, the law sets out the same thing about automated devices as artificial intelligence. The development of regulations related to artificial intelligences in the legal system in Indonesia is as follows:

1) Law Number 1 of 2024 on the Second Amendment to Law Number 11 of 2008 on Electronic Information and Transactions

Abroad, Price Water Cooper (PwC) has conducted a study, the results of which show that by 2030, 38% of jobs in the United States will potentially be replaced by artificial intelligence, followed by Germany by 35%, followed up by the UK by 30%, and Japan by 20%.

Looking at artificial intelligence technology that can perform acts and actions of something like human beings, it demands a country to create an AI-related arrangement specifically to protect people from the use of the technology in the future. Artificial intelligence regulations based on applicable laws or positive laws in Indonesia relating to such technology devices

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are the Law Number 1 of 2024 on the Second Amendment of the Act No. 11 of 2008 on Electronic Information and Transactions.

This law was formulated as a national response to the developments in technological development in Indonesia that are so rapid. The hope of this regulation is to solve any problems arising from a technology and information system that is used negatively to create legal certainty and provide usability and solve all technological problems that arise. However, the law does not define artificial intelligence explicitly and does not describe in detail or in detail what it is about which it raises some opinions from various groups who are trying to interpret artificial Intelligence by linking it to the ITE Act.

In the laws in force in Indonesia, i.e. the ITE Act, artificial intelligence is grouped into an electronic system and an electronic agent, if it refers to the nature and characteristics of artificial intelligences and is associated with the definition or meaning of electronic systems mentioned in the legislation on information and electronic transactions. So there's a similarity that one of the ways that artificial intelligence works is to collect data, then process it, and more than that is to analyze it, as well as display and transmit electronic information, it's described in article 1, paragraph 5, of the ITE Act:

“Electronic systems are a set of electronic devices and procedures that serve to prepare, collect, process, analyze, store, display, announce, transmit, and/or disseminate Electronic Information”

Furthermore, the basic classification of artificial intelligence as an electronic agent is not much different from the classification of artificial Intelligence as a electronic system in which the similarity of acts and actions of artificial intelligence is associated with the definition of the electronic agent itself, which is an electronic system device that is created to perform an act or action of the order of a person against an electronic information automatically, it is in accordance with the characteristics of artificially intelligence itself based on the understanding in Article 1 paragraph 8 of the Law on Electronic Information and Transactions.8

Artificial intelligence is based on the laws in force in Indonesia, so it is true that artificial intelligence itself is not a subject of law but that it is only a limit of an object of law which of course is the technology of which the implementation is operated by man himself.

Artificial intelligence berdasarkan hukum yang berlaku di Indonesia maka sejatinya artificial intelligence itu sendiri bukanlah sebuah subyek hukum akan tetapi artificial intelligence itu merupakan hanya sebatas sebuah obyek hukum

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yang mana tentunya artificial intelligence itu sendiri merupakan teknologi yang pelaksanaannya dioperasikan oleh manusia itu sendiri. So according to the regulations in force in Indonesia today artificial intelligence is classified not as a subject of law but merely as an object of law.

2) **Government Regulation Number 71 of 2019 on Electronic System Maintenance and Transactions**

The efforts to guarantee the security of Indonesian citizens must be understood broadly, both of their well-being, independence, and security, the only guarantee of safety from the impact of the use of artificial intelligence in today’s Indonesia, given the current situation of Indonesia being a country vulnerable to the negative impact of such AI technology, where Indonesia is a prominent target in terms of the digital economy because of the population of Indonesia 265.4 million people, as much as 50% of its population is using the Internet.\(^9\)

The use of artificial intelligence in the national scope in Indonesia has become a new highlight in the development of technology in Indonesia, with new developments in the field calling for a regulation that covers the matter which will direct the use of such technology in a positive direction, therefore the state responded by forming regulations that cover the matter with the above legislation, although in the regulation does not mention and define artificial Intelligence specifically but implicitly in other words electronic agents.

In addition to the law on information and electronic transactions, the state also regulates related artificial intelligence in a Government Regulation Number. 71 year 2019 on Maintenance of Electronic Systems and Transactions (hereinafter commonly referred to as “PP PSTE”), this government regulation is present to supplement the above laws. In article 1, paragraph 3, it is stated that an electronic agent is a device of an electronic system designed to take action against an electronic information automatically organized by a person, so that the definition in this regulation is consistent with the above law and implies that artificial intelligence is an object of law and not a subject of law. PP PSTE is considered to be supportive of the use of artificial intelligence in some sectors such as finance, health, agriculture, manufacturing, retail, and transportation, but this regulation does not specifically or specifically regulate artificial intelligences because it only regulates related systems and electronic transactions.\(^{10}\)

Based on some of these settings, the pattern of Artificial Intelligence (AI) has

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\(^{10}\) (Priowirjanto, 2022) Op.Cit.
not been explicitly regulated. It clearly shows that Indonesia is not ready to keep up with technological progress. Even the 2023 Criminal Code, which is the lex generalis of criminal law in Indonesia, does not regulate technological developments that could be detrimental to society.

**Artificial Intelligence Based Criminal Investigation in Indonesia**

In connection with the process of investigating a crime, including an Artificial Intelligence (AI) based crime, the investigator conducted the investigation on the basis of the provisions of the Code of Criminal Procedure Law (CUHAP) and the Law Number 2 of 2002 on the State Police of the Republic of Indonesia. Criminal investigations are basically law enforcement measures that restrict and restrict citizens’ actions with the aim of restoring a distorted balance between the individual interest and the general interest in maintaining and creating security and order. This is because criminal investigation is also part of criminal law enforcement, must be carried out in accordance with the provisions and regulations of the applicable laws. An investigation of a crime is carried out only when an investigator conducts an investigation into an alleged crime. After an investigative order has been issued, a criminal investigation may be initiated, an investigator or an assistant investigator may take legal action against persons and objects or goods related to the crime, by carrying out some action in the investigation, namely arrest, detention, inspection, search, and detention.\(^\text{11}\)

In addition, the Police also has a Cyber Criminal Prosecution Directorate at the Indonesian Police Headquarters that deals with cybercrime. The Tipidsiber Directorate deals only with criminal cases that violate the Republic of Indonesia Act Number 1 of 2024 on Electronic Information and Transactions. (UU ITE). These crimes consist of crimes that use computers as a primary tool (computer crimes) and crimes which use the computer as an auxiliary tool. (computer related crime). Artificial Intelligence (AI), which is a computer-made intelligence, is supposed to be part of this type of crime, but due to the limitations of the law, it creates confusion, chaos, even uncertainty as to whether criminal law will enforce crimes committed by AI.\(^\text{12}\)

Basically, Artificial Intelligence (AI) is a technology that has the same intelligence as humans in terms of action and thinking. Artificial intelligence is designed to deal with problems in a way very similar to the human decision-making

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process and has the concept of imitating human intelligence through computer codes (algorithms). Based on that definition, then Artificial Intelligence (AI) or artificial intelligence can be equated to a robotic that can work when there is a human command to use it.

Artificial intelligence or AI becomes a study of how to make computers do things that today can be done better by humans. Malware or Malicious Software is known as malicious software, which is software that is explicitly designed to perform malicious activity or destroy other software. It's the fruit of technological advances, where AI becomes a technological innovation that eventually turns malware into a disaster for technological development as a deadly and security-threatening weapon. Examples of malware-AI crimes are such as Jackpotting, deepfake voice or video, phishing spear, and so on, malware has evolved so that it produces various types of operandi modes to fulfil its malicious purposes, using AI, they can automate the operandi mode so the perpetrators are more likely to commit crimes. In other words, computer-related crimes include Malware where AI and computers are used as a tool of crime to hack and commit other cybercrimes. The same is true of AI technology software that was originally intended to help humans, but instead used to attack or commit criminal acts. One example is jackpotting on an ATM that is a real form of hardware abuse.

On the process of criminal investigation based on Artificial Intelligence (AI) is not much different from the ordinary crime investigation. Although the crime based on artificial intelligence has an actus reus of its human, only in the investigation that is highlighted is the presence of electronic evidence tools and evidence tools of electronic field, as well as how to comply with the formula of articles in the law imposed. Then in the process of examination, both the examination of witnesses and suspects that are highlighted from the investigation of Witnesses that are examined by experts in the field of electronics and the examinations of the accused that are related to the acts, although AI did it itself but there are human acts for the existence of the crime. For example, in terms of the use and distribution of products produced by AI-enabled applications, such as manipulated porn videos.

This enforcement is a barrier to victim witnesses in cases of Artificial Intelligence (AI)-based crimes that are difficult to present, because the victim's Witnesses are usually outside the region or even abroad, which makes it difficult for investigators to conduct witness examination and investigation results. The role of this witness is crucial as there are rarely witnesses in an Artificial Intelligence-based crime case (AI). However, based on jurisdictional aspects, the handling of this criminal offence will

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13 Dwi Galih Ramadhan, “Perlindungan Hukum Atas Invensi Artificial Intelligence Di Era Industri 4.0 & Society 5.0”, Universitas Islam Indonesia, 2022.
not work if the jurisdictional aspects are neglected. This is because the mapping of cybercrime also involves inter-regional, inter-territorial, and inter-national relations, so the establishment of clear and absolute jurisdiction is necessary.\textsuperscript{15}

In terms of the evidence that exists in a crime based on artificial intelligence is different from the evidence in other crime. Where the media used in Artificial Intelligence (AI) based crime are data or Internet/computer systems that are easily deleted, modified, or concealed by the perpetrator. This means of proof may be referred to as electronic evidence, electronic information and/or electronic documents and/or printed documents. Referring to the provisions of article 5 of the Act No. 1 of 2024 on the Second Amendment of the Law No. 11 of 2008 on Electronic Information and Transactions, which reads:

1. Electronic Information and/or Electronic Documents and/or printed documents are legal proof tools.
2. Electronic information and/or Electronic documents and/or printed products as referred to in paragraph (1) constitutes an extension of the legitimate proof means in accordance with the Law of Events applicable in Indonesia.
3. Electronic data and/o electronic documents are declared valid when using the Electronic System according to the provisions laid down in this Act.
4. The provisions concerning electronic information and/or electronic documents as indicated in paragraph (1) do not apply in any other way specified in the Act.

Later, in the Explanation of Article 5 (1) of Act Number 1 of 2024 on the Second Amendment of Law Number 11 of 2008 on Electronic Information and Transactions, it was stated that the existence of electronic information and/or electronic documents is binding and recognized as a valid means of proof to provide legal certainty to the maintenance of electronic systems and electronic transactions especially in the proof process and in matters relating to legal acts carried out through electronic systems:

a. Additional means of proof that have been regulated in criminal proceedings law in Indonesia, e.g. Law Number 8 of 1981 on Criminal Law Proceedings. Electronic information and/or electronic documents as Electronic Evidence Tool adds the kind of evidence tool regulated in the Code of Criminal Procedure.

b. Expands the scope of the evidence tool that has been regulated by the law of criminal proceedings in Indonesia, for example in the Code of Criminal Procedure.

Until now, the evidence from these electronic devices is still difficult to bind to

the fact that information is often manipulated. As a result, the existence of electronic information evidence significantly requires additional evidence in practice. In future criminal matters, the execution of all electronic means of evidence is only acceptable to be realized as evidence in accordance with its validity, as well as binding on the elements contained in the Constitutional Court decision No. 20/Law-XIV/2016.16

As for the other obstacles in the enforcement of criminal law based on Artificial Intelligence (AI) when analyzed based on Lawrence M. Friedman's theory of the legal system17, as follows:

1. The Legal Substance

The legal substance is a rule, norm, and pattern of human behavior which, in its substance, includes the rules of the laws which are in force in a binding manner. So it becomes a guideline in the social order and also as a guide for the law enforcement apparatus in carrying out its duties. Rules of law written or referred to in the material sense, that is, written rules made legally and binding by central officials or local officials. Artificial Intelligence (AI) based crime is not specifically regulated in Indonesian law enforcement rules. At the moment, the only rule in force is Act Number 1 of 2024 on the Second Amendment of Act Number 1 of 2008 on Electronic Information and Transactions (UU ITE). The optimization of Artificial Intelligence (AI) as a means of information can be attributed to the “Electronic Agent” in the ITE Act. As in Article 1 of the ITI Act, “Elektronic agent” is an electronic system created to perform an action against a certain electronic information created by humans. In addition, Article 21 letter c of ITE Law, states that the organizer of the electronic agent is responsible for all legal consequences of the execution of electronic transactions carried out through the electronic agency. So, the maker of this "electronic agent" is responsible for its failure.18

Furthermore, in Government Regulation No. 71 of 2019 on Electronic Systems Maintenance and Transactions, it is also explained that the electronic system operator is responsible as a legal subject for the maintenance of electronic systems carried out, except in cases of force majeure. According to Government Regulations No.71 of 2019, according to the laws in force in Indonesia, AI is basically not a subject of law but only a legal object, so in its implementation AI is operated by humans.19

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19 Muhammad Widyawan, “Artificial Intelligence Criminal Investigation in Indonesia”
As far as proof is concerned, until now there have been clear rules in the use of electronic proof tools in the UK. However, with the development of information and communication technology, evidence tools have undergone significant changes with the appearance of evidence tools in electronic information form after the introduction of the ITE Act.\textsuperscript{20} While the Criminal Code Procedure only regulates the validity of the means of proof in article 184, the rules concerning these means of evidence also need to be specially included in the Code in this modern era. Since the Code is based on the basic principle of legality, that is, any conduct or act that is considered a criminal act must first be regulated by the law to make a clear formula.

Seeing from the ITE Act, it does not explicitly lay down formal requirements for submitting electronic evidence, such as an electronic letter. When an electronic letter is used as evidence in trial, there are efforts to ensure that it protects the confidentiality, authenticity, authoritative, and integrity of correspondence that is highly vulnerable to change or counterfeiting. The establishment of electronic evidence as valid and acceptable evidence in courts regulated by the current ITE Act cannot be considered to meet the requirements of judicial practice. This is because electronic evidence is still adjusted to the rules that exist in the window of material law.\textsuperscript{21} Given that the judicial system is based on officially binding law, the preparation of electronic evidence is essential to obtaining legal certainty (as a valid and binding means of evidence when presented to the court) on the law of events is still so necessary to legal certainness.

2. Legal Structure

The legal structure comprises all the components that play a role in law enforcement, ranging from the police, the prosecution, the judiciary, and the judicial institution. This legal structure also includes the legislative body that formulates the law.

The enforcement of legal proceedings against crimes based on artificial intelligence or Artificial Intelligence (AI) is not without the role of law-enforcement agencies. According to the information provided by Ipda Arep Dewanta S.P, S.Tr.K, M.H., as a Kasubnit 1 Unit lidik 1 Satreskrim Polrestabes Semarang, some technology or AI is often used to assist the proof process, namely as follows:

a. Mambis (Mobile Biometric Identification System) or portable tool connected


\textsuperscript{21} Ibid, p. 379.
to the database server to help fingerprint identification processes in particular
used in the case of discovery of bodies without identity.

b. Face Recognition or a portable device used to help identify people by entering
a sample of photos that will be subsequently displayed in the system so that
the results are compared to people with faces that are in value have a match
by the system.

c. Analyses' Notebook or a software application that helps to analyze a large
amount of data such as bank account data or call data record from a cell phone
number.  d. Cellebrate is a tool that is used to read and retrieve data from either
the cell phone that has already been deleted or that has been removed.

The working process of such technology is not always perfect, but there are
obstacles that hinder its application, such as:

a. The tool in the fingerprint reader can only be applied to the fingerprints that
are intact and not damaged in the sense of the discovery of the corpse that is
rotten, or the finding of the sample fingerprint that is imperfect in the
courtroom such as the stacked, shifted fingerprint, becomes an obstacle to the
tool for reading the samples.

b. Face recognition can not read photos that are less clear wearing a hat or mask
and cctv viewing angle is not good.

c. Mambis and face recognition tools are owned only by the INAFIS Satreskrim
Polrestabes Semarang unit, so in requesting data requires coordination with
members of the inafis and only the operator can operate the device.

d. ANB/analys's notebook requires expertise in the use of such applications,
wherein inlining such expertise no routine training is carried out and analysts
must study such applications automatically and purchase the laptop
hardware and software of ANB independently not supported office. Idik Unit
1 has only one member who has this analytical ability.

e. Retrieving account data or phone recording data is difficult to obtain, there
must be a lengthy procedure in requesting data to both the bank and the
telecommunications provider Company, so it takes a long time.

f. Cellebrate is owned only by the Polri Forensic Laboratory, where the data
collection must be coordinated and the status of the HP is already in the
evidence that is in the other sense already under investigation.

g. The car direct finder only belongs to Dit Krimum Polda, Dit Krimus, and Dit
Intel, so we have to coordinate to borrow the tool as well as the operator of
the tool.

In addition to the obstacles in the proof process, as for the impediments in
the process of the Artificial Intelligence (AI) based criminal proceedings, as
submitted by Endang Sri Lestari, S.H., M.H, the prosecutor at the Southern
Jakarta State Prosecutor's Office in the examination of expert witnesses at the trial, that in practice, expert Witnesses who are present in trial are rarely able to match such knowledge and the majority of the expert witnes are difficult to be present in the Trial, so the Prosecution General who will read the BAP Expert's testimony at trial. As a result, the judge is not so understandable, so the judges in giving the judgment only around the penalties of imprisonment or fines contained in the provisions of the ITE Act.

It can then be concluded that most of the law enforcement (APH) has not understood with the holes in the crime based on Artificial Intelligence (AI), so the lawsuits and the verdicts resulting can not give justice to the protection of the rights of the victims and when seen from the practice, still few experts reside from the scientific side. As endang Sri Lestari, S.H., M.H. says, in the process of data protection-based ITE cases it is difficult to be tried.

3. Legal Culture

The culture of law encompasses how patterns of behavior and human nature respond to the existence of the substance of law and the structure of law, so that as long as any legal substance is related to the regulation of laws, as well as whatever legal structure is in enforcing the law, but without being mixed with the culture of the law by its society then the law will run ineffective.

Artificial Intelligence (AI)-based criminal law enforcement is still at odds with the Indonesian culture, which is considered one of the causes of the failure of a maximum law-enforcement. A lot of societies are still under-understood by the advances of technology, so they are still public and not so comprehensive of the forms of deception through technology. The advancing era of technology and today's globalization is a driving force for society to be able to balance existing technological developments.

In today's digital age, many Indonesians are victims of fraud on online platforms. It's not apart from still low citizen literacy about digital security. This is demonstrated by reports coming into the Ministry of Communications and Information and not all of those reports can be continued because it is difficult to find the perpetrators. As cybercrime modes grow and evolve, there is an increasing threat to technology security. For example, fraud with digital invitations through short messages has increased in recent months. In this case, the fraudsters are embedding Malware APK (Application Package File) documents into the digital invitation. So when clicked, we're downloading an application designed to retrieve personal data that causes the financial data on
our phones to be erased and exhausted.22

It is very important to know about technological fraud that there are some
types of fraud which can harm the public:23

a. Pishing, a fraud committed by deceiving a victim via email or social media
to steal personal data, the perpetrator sends a fake link or creates a false
website. So make sure to always check the URL before entering personal
data.

b. Identity theft, using someone else's identity, such as a phone number or a
credit card, to earn money.

c. Cheating, we are encouraged not to be seduced by an offer that is too good
to be true, where the perpetrator will ask for personal information or money
through a fake gift.

d. Psychological Manipulation-based fraud, targeting personal data and
information through computers, emails, social media messages, and mobile
phones. So be careful and not be affected by threats or suspicious requests.

Based on the numerous cases of such technology embezzlement, so people
need to improve their digital literacy to prevent fraud to protect themselves from
online fraud can include critical assessment of information, verifying news before
sharing it, and reporting negative content.

4. Conclusion

The existence of AI in positive law in Indonesia is listed in Act No. 11 of 2008
on Electronic Information and Transactions or ITE Act. However, the rules on AI
are not detailed in this law so many opinions are trying to interpret and associate
it with the ITE Law. So according to the regulations in force in Indonesia today
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examined by experts in the field of electronics and the examinations of the accused

22 Tatang Mulyanan S., 24 Februari 2023, “Literasi Keamanan Digital Rendah, Masyarakat Jadi Korban
Penipuan”, Diakses dari Literasi Keamanan Digital Rendah, Masyarakat Jadi Korban Penipuan - Kompas.id,
pada tanggal 28 Mei 2024.

23 Cermati.com, 16 November 2023, “14 Jenis Cyber Crime, Kejahatan Internet yang Merugikan”, Diakses
dari 14 Jenis Cyber Crime, Kejahatan Internet yang Merugikan - Cermati.com, pada tanggal 28 Mei 2024.
that are related to the acts, although AI did it itself but there are human acts for the existence of the crime. For example, in terms of the use and distribution of products produced by AI-enabled applications, such as manipulated porn videos. The challenge is to present victims of AI-based crimes because the victims are usually from outside the region or even abroad so it is difficult to give testimony for the investigation of the case. In addition, the other obstacle is for the proof of an AI-based crime. Most of the evidence is a computer system or an Internet system whose nature is so easy to delete, modify, or hide by the perpetrator that it will be more difficult for investigators to uncover an AI-based crime case.

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