415

APPLICATION OF CRIMINAL LAW TO UTILIZATION ARTIFICIAL INTELLIGENCEIN INDONESIA

By
Murshal Senjaya
Ilmu Hukum Universitas Pasundan
Email: murshalsenjaya@gmail.com

Article Info	ABSTRACT
	In Indonesia there are no specific legal regulations that regulate AI, this is the reason the ITE Law has an expansion to regulate legal regulations related to AI. In the ITE Law, AI is an electronic system and electronic agent where the elements contained in the legal regulation of electronic systems and electronic agents in this case are in accordance with the characteristics of AI in carrying out the actions and deeds it carries out. In relation to actions carried out by AI, those who have the authority to be responsible under the ITE Law are electronic system administrators who consist of legal subjects who can be held accountable for the use of AI. The use of AI from a criminal law perspective, in this case, AI cannot be classified as a legal subject, because according to several experts, the concept of responsibility is that it has awareness and can will its actions, and as is known, AI does not have awareness of the actions it carries out and also AI cannot will it. regarding the possibility of a criminal act being committed, and from a criminal law perspective related to responsibility in the use of AI, the creators and users of AI can be held responsible for the actions committed by the AI. Because humans are absolute legal subjects in criminal law who have awareness and an element of intentionality regarding the actions and actions carried out by AI

Corresponding Author:
Murshal Senjaya
Ilmu Hukum Universitas Pasundan
Email: murshalsenjaya@gmail.com

1. INTRODUCTION

Technological changes and developments are global changes that have quite a significant impact within a country. Likewise in Indonesia, technological developments have had a big impact on people's lives. This development will fundamentally change society, both in terms of behavior, patterns of social relations and ways of working.

Indonesia as a country of law certainly regulates the lives of its people with applicable laws. It is hoped that the current law will be able to become the basis for resolving all existing problems. Current developments present the fact that technology has taken a very important role in people's lives. In the end, it must be acknowledged that technology will determine the sustainability of human life, especially Indonesia, which is currently facing the industrial revolution 4.0.

The study states that the term industrial revolution 4.0 first appeared in 2011, when the German government introduced a technology utilization strategy called industry 4.0.1 Behind the development of industry 4.0, there are technological developments that have become activators for the start of this era, namely Artificial Intelligence (AI) or commonly called artificial intelligence. Shifting mechanisms in the manufacturing process will be completed in the work of smart machines that interact with each other and users.[1]

---

[1]Reza Yogaswara, "Artificial Intelligence as a Driver for Industry 4.0 and its Challenges for the Government and Private Sectors," Journal of the Telematics and Information Society 10, no. 1 (2019), p. 67–72.

416

International Journal of Social Science (IJSS)
Vol.3 Issue.4 December 2023, pp: 415-422
ISSN: 2798-3463 (Printed) | 2798-4079 (Online)

....

One of the uses of artificial intelligence is in the legal sector, especially what is currently being developed is contract design. Contract drafting can be completed via electronic contracts. This is clear evidence that the use of artificial intelligence has developed along with human needs with the aim of realizing efficiency and lightening the workload.

The development of technology in the legal field can be clearly seen in the emergence of e-courts. E-court is a series of trial processes carried out online.[2]The existence of this system is considered to have an impact both directly and indirectly on the advocate profession. If you look further, an Artificial Intelligence product has been born operating in the legal tech field which has been proven to be able to defeat the ability of advocates to do their work. The speed and accuracy of legal tech is beyond the capabilities of an experienced lawyer.[3]

The presence of technology in the legal sector can be a golden door to a more advanced legal industry. The industrial revolution 4.0, through connectivity and digitalization, is able to increase manufacturing chain efficiency and product quality. However, on the other hand, this could be a threat to the conventional legal industry because the industrial revolution 4.0 will also eliminate 800 million jobs worldwide by 2030 because they will be taken over by robots. So it cannot be denied that Indonesia, as a country that has a fairly high workforce and unemployment rate, will experience a significant impact.[4]Artificial Intelligence or Artificial Intelligence, better known in Indonesian (AI), is one of the technological developments that is of concern to several countries.[5]

Artificial Intelligencecan be emulated in several developed countries as a special basic consideration in the development of regulations and policies."[6]Indonesia needs policies and regulations that can adapt to current technological developments, namely Artificial Intelligence. Even "Law Number 19 of 2016 concerning Amendments to Laws

Number 11 of 2008 concerning Electronic Information and Transactions" ("UU 19/2016"), which is one of the legal domains regulating various new legal acts in the field of technology, must be updated to regulate Artificial Intelligence which is already present in social life.

Artificial Intelligenceor Artificial Intelligence is "technology in the form of machines that can imitate human behavior and is developed with knowledge of human thinking and can carry out human thinking procedures".[7]

Artificial Intelligence technology which was created to be able to carry out activities in such a way as humans has become a concern for people's lives as Artificial Intelligence can carry out legal actions or the same legal acts as humans can do.

In fact, in 2016, Microsoft developed an Artificial Intelligence chatter bot (AI chatter bot) called "Tay". Tay is depicted in the speaking voice of a teenage girl. Tay was developed to improve service for customers with the ability to speak millennial slang.

Tay, through learning, was developed to interact with humans with the ability to adapt, however, Tay's ability to put all data into a data storage area and not being able to separate data also caused problems, such as when Tay posted articles via social media Twitter that were bad and offensive.[8]

Artificial Intelligencenot placed in the position of a legal subject where Artificial Intelligence can also carry out legal actions or legal actions. If we look closely, Artificial Intelligence can only be placed as a legal object in Indonesian positive law. However, judging from the capabilities of Artificial Intelligence which are increasingly sophisticated and will continue to develop over time, it can be said that Artificial Intelligence cannot be placed as a legal object, but Artificial Intelligence which can carry out legal actions or legal actions can be placed as a legal subject. who has a proper position with humans and legal entities.

---

[2]Lisfer Berutu, "Creating Simple, Fast and Low Cost Justice with e-Court," Scientific Journal of the World of Law 5, no. 1 (2020), p. 41–53.

[3]Esther Salmerón-Manzano, "Legaltech and Lawtech: Global Perspectives, Challenges, and Opportunities," Laws 10, no. 2 (2021), p. 24.

[4]Venti Eka Satya, "Indonesia's Strategy for Facing Industry 4.0," Brief Information on Economics and Public Policy 10, no. 9 (2018), p. 19–24

[5]Yusuf, "A common understanding is needed regarding this matter

AI Development in Indonesia – Directorate Generalof Technology",https://aptika.kominfo.go.id/2020/02/perlu-pemahaman-bersama-tangan-pengembangan-ai-di-indonesia/, accessedon November 4, 2023

[6]Ibid

[7]Naiman Fahrudin, "Application of the Finite State Machine Method in the Adventure Game „FRANCO"*",*Informatics Engineering Student Journal, Vol. 2, no. 1, March 2018, p. 447

[8]Qur"ani Dewi Kusumawardani, "Progressive Law and the Development of Artificial Intelligence Technology", Journal Veritas et Justitia 5, Vol. 5, no. 1, June 2019, p. 170

....

To be able to explain the position of Artificial Intelligence, the big challenge for the government is to prepare policies and regulations for Artificial Intelligence which will become a part of social life according to Indonesian positive law in order to achieve social welfare and prosperity in the development of the country from input, thoughts. as well as knowledge conveyed to law enforcers, especially on Artificial Intelligence.

With the existence of AI in technological developments, of course this cannot be separated from the legal regulations that apply in a country. By looking at the technological advances possessed by AI which can carry out human work, of course this can give rise to several legal problems related to the actions and/or deeds it carries out. Where AI is an artificial intelligence that is limited by the code that underlies its ability to perform actions.

In Indonesia there are no regulations that specifically and clearly regulate AI and of course this will be a legal problem in the future if AI technology carries out legal actions that are contrary to the positive legal provisions that apply in Indonesia. In this case, AI is seen from its ability to carry out actions and deeds, so it is no exception that AI can carry out legal actions like humans, for example committing a criminal act that harms another party.

If you look at several countries that have used AI technology in various fields, of course some of these countries have positioned AI as a legal subject that has rights and obligations, but this does not apply in Indonesia because AI is not a legal subject according to positive law in Indonesia, therefore in this case, it is related to responsibility for actions and legal acts carried out by AI that need to be explained in this research, especially from a criminal law perspective.

Based on the description above, the problem formulation is:
1. Who is responsibleRegarding the Use of Artificial Intelligence in Indonesia?
2. HowApplication of Criminal Law to the Use of Artificial Intelligence in Indonesia?

2. LITERATURE REVIEW
1. Artificial Intelligenceand Legal Subjects

Artificial intelligence or in English its term "Artificial Intelligence" or abbreviated as AI, namely artificial means artificial, while intelligence is an adjective which means intelligent.[9]Artificial Intelligence was created to be smart and intelligent in order to be able to do tasks exactly and better as done by humans while imitating the functions of the human brain, in terms of reasoning, thinking, knowledge, understanding language, decision making, and problem solving.[10]

With human input, it is possible for Artificial Intelligence to receive knowledge and by simulating the reasoning process, Artificial Intelligence can use its knowledge and think like a human to solve existing problems. Even though it cannot receive researchers, experience and knowledge like humans, through the efforts provided by humans, Artificial Intelligence can obtain the knowledge it needs.[11]

Artificial Intelligencecreated in such a way with the aim of being the same as humans and even surpassing humans in helping or as a substitute for humans to carry out an action. Thus, Artificial Intelligence which can carry out legal acts cannot be classified as a legal object but can be classified as a legal subject which is equal to other legal subjects.

Legally, one of the basic sources of law that regulates technology in particular is Law 19/2016. Law 19/2016 was formed based on the considerations stated in the considerations section of Law 19/2016 that Law 19/2016 was formed to respond to technological developments and advances. Law 19/2016 is entrusted to be able to overcome all problems related to technology. However, Law 19/2016 does not significantly explain the meaning or meaning of Artificial Intelligence. If Artificial Intelligence is linked to Law 19/2016 then Artificial Intelligence is only classified as Electronic Information, this is explained in "Article 1 Number 1 of Law 19/2016".

If seen from the understanding of "Article 1 Number 1 of Law 19/2016" it can be interpreted that Artificial Intelligence is only limited to a legal object and does not view Artificial Intelligence as a legal subject. In Law 19/2016, what is only referred to as legal subjects are:
a) "Sender"
b) "Recipient"
c) "People"
d) "Business Entity"
e) "Government".

----

[9]Anggia Dasa Putri and Dapit Pratama, "Expert System for Detecting Cybercrime Using the Web-Based Forward Chaining Method in Batam City", Edik Informatics Journal, Vol. 3 No. 2, March 2017, p. 199.

[10]Ririen Kusumawati, "Human Artificial Intelligence (Artificial Intelligence): Future Dream Technology", Ulul Albab Journal: Journal of Islamic Studies, Vol. 9, no. 2, 2008, p. 265.

[11]Ibid, p. 266

418

International Journal of Social Science (IJSS)
Vol.3 Issue.4 December 2023, pp: 415-422
ISSN: 2798-3463 (Printed) | 2798-4079 (Online)

....

In point c, the consideration section of Law 19/2016 also opens up space for Law 19/2016 to make changes or adapt and follow technological developments to new forms of legal acts. So the position of Artificial Intelligence as a legal subject is not a dream or fantasy, but the position of Artificial Intelligence as a legal subject is a change, development, breakthrough and makes it possible for the law itself.

Theoretically, legal subjects who can make legal actions or legal actions and legal subjects contained in Indonesian positive law are "humans (natuurlijke person)" and "legal entities (rechts person)".[12] However, according to Salmond, "So far as legal theory is concerned, a person is being whom the law regards as capable of rights and duties. Any being that is so capable is a person, even though he is a man."[13]

Based on Salmond's statement, it can be said that legal subjects have human or non-human capacities that have been determined by law. According to him, during the slavery era, humans were not seen as legal subjects or persons by the law itself. Meanwhile, non-humans but determined by law can be seen as legal subjects or persons who have obligations and rights equal to humans themselves.[14]

According to LJ van Apeldoorn, "to be able to carry out legal actions, certain conditions are required, namely legal subjects who have the ability to hold rights". According to LJ van Apeldoorn, "the ability to hold rights in question must be differentiated from capacity in legal actions, as minors and people under guardianship are called legal subjects because these people have rights. However, from a legal perspective, these people are declared incompetent in legal actions. In this case, what determines whether a legal subject is competent or not is the law."[15]

Based on this explanation, it can be understood whether something can be declared as a legal subject or not is determined by the current law. Likewise with Artificial Intelligence, Artificial Intelligence like other legal subjects has rights and obligations as obligations and rights are actions that must be regulated by legal norms.

Artificial IntelligenceIndeed, it cannot be equated exactly with humans as a whole because Artificial Intelligence does not have humanistic characteristics like humans, but Artificial Intelligence can be equated with the position of a legal entity which is also declared a legal subject by law.

Legal entities are non-human supporters of rights and obligations based on law. As legal subjects, legal entities have the ability to take legal action or legal actions.[16]

Artificial IntelligenceMore precisely, it can be equated with legal subjects as legal entities rather than human legal subjects, as Artificial Intelligence can be called a supporter of rights and obligations that can carry out legal actions or legal actions, such as the examples of Artificial Intelligence which have been explained in the background section.

Another example is that in 2017, Riyadh, the capital of Saudi Arabia, granted Saudi Arabian citizenship to a beautiful, human-like robot named Sophia. In 2017, a robot named Shibuya Mirai, through special regulations, obtained a residence permit from the Japanese government.[17]

With the acceptance of Artificial Intelligence in human life, this has provided the possibility that Artificial Intelligence can be accepted as part of a legal subject. Artificial Intelligence is widely used in the legal field, especially among legal practitioners. Artificial Intelligence is used to carry out due diligence and research on certain things that are often done conventionally by lawyers.

2. Criminal law

Criminal law is legal regulations regarding criminal matters. The word "criminal" means something that is "criminalized", that is, by a powerful agency delegated to an individual as something that is unpleasant for him or her and also something that is not delegated on a daily basis.

Of course there is a reason to impose this penalty, and this reason should be related to a situation in which the person concerned acted less well. So, the element of "punishment" as retribution is implied in the word "criminal".[18]

---

[12]Dudu Duswara Machmudin, Introduction to Legal Science (A Sketch), PT Refika Aditama, Bandung, 2016, p. 32.

[13]Peter Mahmud Marzuki, Introduction to Legal Studies Revised Edition, Kencana Prenadamedia Group, Jakarta, 2018, p. 205-206.

[14]Ibid, p. 208

[15]Ibid., p. 211-212

[16]Otje Salman Soemadiningrat, op.cit, p. 33

[17]Qur"ani Dewi Kusumawardani, op.cit, p. 177

[18]Wirjono Prodjodikoro, Principles of Criminal Law in Indonesia, PT Refika Aditama, Bandung, 2014, p 1

....

....

Then Sudarsono stated that in principle criminal law is the law that regulates crimes and violations of the public interest, and these acts are threatened with a crime which constitutes suffering.[19]

According to Moeljatno, criminal law is part of the total law in force in a country, which provides the basics and rules for:

a. Determining which actions cannot be carried out, which are prohibited, accompanied by threats or sanctions in the form of certain criminal penalties for anyone who violates these prohibitions.
b. Determine when and in what cases those who have violated these prohibitions can be subject to or be punished as threatened.
c. Determine how the criminal imposition will be carried out if someone is suspected of having violated it.[20]

Another definition of criminal law According to Simons (Utrecht), provides the following definition of criminal law:[21]"Criminal law is all the orders and prohibitions imposed by the state and which are threatened with a penalty (criminal) whoever does not obey them, all the rules that determine the conditions for the consequences of the law and all the rules for carrying out (sentencing) and carrying out the crime.

3. RESEARCH METHODS

The research method is descriptive analytical, namely describing the problems and facts that occur based on positive legal norms, namely the laws related to this research.

The normative juridical approach method is to use positive legal norms relating to the application of criminal law to the use of Artificial Intelligence in Indonesia.

Data analysis was carried out qualitatively, meaning without using numbers and statistical formulas.

4. RESULT AND DISCUSSION

Legal responsibility for the actions of Artificial Intelligence needs to be studied properly. Even though Artificial Intelligence has the same legal subject position as a Legal Entity, responsibility for legal actions carried out by Artificial Intelligence must be clear and have legal certainty. This responsibility must be borne by the User of Artificial Intelligence as well as the Legal Entity whose responsibility is the director of the company or head of the foundation.

However, those responsible for Artificial Intelligence are not only limited to Artificial Intelligence Users, there are still important parties who should not be excluded, namely the Creators of Artificial Intelligence. The creator of Artificial Intelligence is the one who creates Artificial Intelligence which will be used by Artificial Intelligence Users from the start, algorithmic systems, databases, designs and other things that form Artificial Intelligence until the end.

The creator of Artificial Intelligence must also be held responsible for legal actions carried out by the Artificial Intelligence he created. If there is an error in its creation or there is deliberate intent in creating Artificial Intelligence which can harm other people without the awareness of Artificial Intelligence Users who are unfamiliar with Artificial Intelligence science then the Artificial Intelligence User will be harmed.

In this case, in order to provide clearer legal certainty regarding responsibility for legal actions carried out by Artificial Intelligence, Indonesian government institutions can issue legislation specifically for Artificial Intelligence in determining the rights and obligations of the parties, namely Users of Artificial Intelligence and Creators of Artificial Intelligence. which explains each party's limitations regarding responsibility for Artificial Intelligence.

Like legal entities, Artificial Intelligence Users and Artificial Intelligence Creators can make authentic deeds before a notary and obtain approval from government agencies such as the Ministry of Law and Student Human Rights or the Ministry of Communication and Information.

With this authentic deed, the identity of Artificial Intelligence is clear and legal certainty is given to Users of Artificial Intelligence and Creators of Artificial Intelligence. Apart from that, by implementing this authentic deed, it can make things easier for supervisors
from the relevant government agencies regarding Artificial Intelligence and can minimize crimes using Artificial Intelligence by other parties and can reduce the creation or use of illegal Artificial Intelligence or Artificial Intelligence resulting from copying or counterfeiting.

In this case, criminal responsibility is also known as Criminal Liability, where the concept of criminal responsibility does not only look at the legal aspects that apply in a country but is also related to moral values and justice in society.

---

[19]Tutik Quarterly Point, Introduction to Legal Science, Achievements of Pustaka Publishier, Jakarta, 2016, p.216
[20]Ibid, p. 216
[21]Moeljatno, Principles of Criminal Law, Rineka Cipta, Jakarta, 2018, p. 8.

....

420

International Journal of Social Science (IJSS)
Vol.3 Issue.4 December 2023, pp: 415-422
ISSN: 2798-3463 (Printed) | 2798-4079 (Online)

....

In Indonesia, in relation to the implementation of criminal responsibility, in this case, we adhere to a dualistic understanding, where this understanding makes a difference between criminal acts and the implementation of criminal responsibility. According to this understanding, rules regarding criminal acts are rules that are formed and enforced in a country where these rules aim to regulate acts that are prohibited in criminal law and other acts that are outside of these prohibited acts.

Meanwhile, the concept of regulating criminal responsibility aims to determine the suitability of a legal subject, whether it is legal to impose a crime on it. Not all acts can be categorized as criminal acts, an act and action that can be said to be a criminal act can be said to be so if it contains an unlawful nature in it, and the act contains an element of error which consists of intention (Dolus) and also negligence (Culpa) (Tanjung, 2018).

According to Roeslan Saleh, in relation to criminal responsibility, it can be defined as "the continuation of an objective reproach for a criminal act and then subjectively being subject to a crime for that act". The purpose of objective censure is that the action then carried out by the legal subject is a prohibited action where the action is contrary to the law, both formal and material.

Then, what is meant by subjective criticism is that it focuses on the perpetrator or author of a prohibited act. In simple terms, subjective censure is a person or legal subject who commits an act that is prohibited and contrary to the law.

Therefore, if a criminal act is committed if a person has a fault within themselves which means they cannot be held responsible, then in this case criminal liability cannot possibly exist.

According to Simons, criminal responsibility is a psychological condition in such a way that, based on a person's point of view, criminal efforts can be justified. The meaning is that a person who commits a criminal act can be said to be capable of being responsible for a criminal act if he knows and realizes that the act is an act that is against the law and is able to determine his own will based on his self-awareness.

In fact, the requirements for a person to have criminal responsibility are based on: 1) The existence of a criminal act committed, 2) The existence of an error in the form of intention (Dolus) and negligence (Culpa), 3) The existence of responsibility from the perpetrator, and 4) There is no excuse. A mistake is a form of responsibility itself.

In relation to intentionality, doctrinally, intentionality is the will of the perpetrator in realizing the action he is carrying out, which can then be divided into intentionality as an intention, then intentionality with definite awareness and intentionality with possibility.

According to Van Hamel, who believes that the limits of responsibility are related to the meaning of: 1) Being able to understand the meaning and consequences of the action carried out, 2) Being able to be aware that the action is contrary to public order, and 3) Being able to determine the will in carrying out the action.

In the concept of criminal responsibility for legal subjects, in this case it is borne by the perpetrator of the act, and the basis for imposing a crime on the perpetrator for the action he has committed must contain an element of unlawfulness, then the perpetrator can be held criminally responsible for the action. However, criminal responsibility can be lost to the perpetrator if elements are found within the perpetrator that result in the loss of the ability to be responsible.

In relation to AI regarding the concept of criminal responsibility in its use, of course the focus is whether AI can be held criminally responsible for the actions it carries out. Bearing in mind the principle of responsibility in criminal law, namely (Geen straf zonder schuld; Actus non facit reum nisi mens sir rea), no crime applies if there is no error.

It should be noted that the subject of criminal law that applies in Indonesia is the individual (Naturalijk Person) and in accordance with the expansion of the subject of criminal law, legal entities (corporations) can become the subject of criminal law in Indonesia. Regulations regarding AI in Indonesia have not been specifically regulated and formed, therefore interpretation is needed to determine whether AI is a legal subject or not in Indonesia.

Based on the ITE Law, AI is an electronic system and an electronic agent, which of course carries out all actions and actions carried out by AI under orders from humans, which in the ITE Law, these orders are given by the organizers of electronic systems which consist of several legal subjects in it.

Therefore, based on this, AI cannot be said to be an independent legal subject or equated with other legal subjects. Because one of the concepts of criminal liability is the independent skills possessed by the legal subject, and the skills possessed by AI are not independent skills that it possesses but rather automatic conditions created by humans.

Based on Van Hamel's opinion which explains the limits of responsibility which is then associated with AI, in this case AI does not understand the meaning of the consequences it carries out and AI cannot determine its will to carry out an action, and AI does not have awareness in carrying out an action. law.

....

....

In relation to consciousness, humans as absolute legal subjects in criminal law are not always free from negligence regarding the actions they commit, whereas AI is a set of tools created by humans themselves, so it can be said that awareness of this is not found in AI.

Therefore, from several limitations of liability, AI does not have the ability to become a legal subject that can be held accountable in criminal law. Regarding accountability in the use of AI, in this case looking from the perspective of applicable criminal law, if AI commits an act or act against the law, this can return to the concept of responsibility in criminal law, namely that those responsible are the creators and users of the AI itself. .

According to Simons, the perpetrator of a criminal act must be aware and know and be able to determine his will regarding his actions, in which case the AI does not have awareness of its actions but is based on orders and is limited in determining its will in accordance with the intentions and objectives of its creator, and the opposite applies to those who have awareness of their actions. The AI itself is the AI user, therefore if the AI commits a criminal act that harms another party, if we look at the error, then the intentionality and negligence comes from the AI user, which responsibility can be absolutely borne by the AI user. .

5. CLOSING

1. In Indonesia there are no specific legal regulations that regulate AI, this is the reason the ITE Law has an expansion to regulate legal regulations related to AI. In the ITE Law, AI is an electronic system and electronic agent where the elements contained in the legal regulation of electronic systems and electronic agents in this case are in accordance with the characteristics of AI in carrying out the actions and deeds it carries out. In relation to actions carried out by AI, those who have the authority to be responsible under the ITE Law are electronic system administrators who consist of legal subjects who can be held accountable for the use of AI.

2. The use of AI from a criminal law perspective, in this case, AI cannot be classified as a legal subject, because according to several experts, the concept of responsibility is that it has awareness and can will its actions, and as is known, AI does not have awareness of the actions it carries out and also AI cannot will it. regarding the possibility of a criminal act being committed, and from a criminal law perspective related to responsibility in the use of AI, the creators and users of AI can be held responsible for the actions committed by the AI. Because humans are absolute legal subjects in criminal law who have awareness and an element of intentionality regarding the actions and actions carried out by AI.

Artificial 6. SUGGESTION

1. Intelligence is actually included in the definition of an Electronic Agent, which means that all legal obligations and legal responsibilities are attached to the Artificial Intelligence device provider.
2. To be able to apply AI usefully in Indonesia, the Agency for the Assessment and Application of Technology (BPPT) has published the National Strategy for Artificial Intelligence for Indonesia 2020-2045. However, the order is still at the broad policy direction stage and does not regulate in detail.

REFERENCES

[1] Anggia Dasa Putri and Dapit Pratama, "Expert System for Detecting Cybercrime Using the Web-Based Forward Chaining Method in Batam City", Edik Informatics Journal, Vol. 3 No. 2, March 2017.
[2] Dudu Duswara Machmudin, Introduction to Legal Science (A Sketch), PT Refika Aditama, Bandung, 2016
[3] Esther Salmerón-Manzano, "Legaltech and Lawtech: Global Perspectives, Challenges, and Opportunities," Laws 10, no. 2 (2021)
[4] Lisfer Berutu, "Creating Simple, Fast and Low Cost Justice with e-Court," Scientific Journal of the World of Law 5, no. 1 (2020)
[5] Moeljatno, Principles of Criminal Law, Rineka Cipta, Jakarta, 2018
[6] Naiman Fahrudin, "Application of the Finite State Machine Method in the Adventure Game „FRANCO‟",Informatics Engineering Student Journal, Vol. 2, no. 1, March 2018
[7] AI Development in Indonesia – Directorate General of Technology",https://aptika.kominfo.go.id/2020/02/perlu-pemahaman-bersama-tangan-pengembangan-ai-di-indonesia/, accessedon November 4, 2023
[8] Peter Mahmud Marzuki, Introduction to Legal Science Revised Edition, Kencana Prenadamedia Group, Jakarta, 2018
[9] Qur‟ani Dewi Kusumawardani, "Progressive Law and the Development of Artificial Intelligence Technology", Journal Veritas et Justitia 5, Vol. 5, no. 1, June 2019

....

[10] Reza Yogaswara, "Artificial Intelligence as a Driver for Industry 4.0 and its Challenges for the Government and Private Sectors," Journal of the Telematics and Information Society 10, no. 1 (2019)

[11] Ririen Kusumawati, "Human Artificial Intelligence: Future Dream Technology", Ulul Albab Journal: Journal of Islamic Studies, Vol. 9, no. 2, 2008

[12] Tutik Quarterly Point, Introduction to Legal Science, Pustaka Publishier Achievement, Jakarta, 2016

[13] Venti Eka Satya, "Indonesia's Strategy for Facing Industry 4.0," Brief Information on Economics and Public Policy 10, no. 9 (2018)

[14] Wirjono Prodjodikoro, Principles of Criminal Law in Indonesia, PT Refika Aditama, Bandung, 2014