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Ethics and Law for the Use and Development of Artificial Intelligence Technology

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A B S T R A C T

The development and use of Artificial Intelligence is growing exponentially, resulting in various implications in multi-sectors such as misuse of personal data, assessments prone to bias, uncontrolled automation, etc.) There is a legal vacuum (absence of law) in the use of Artificial Intelligence, so ethical principles of use are needed as a basis for developing a legal framework for Artificial Intelligence in the form of international conventions (law making treaties).Ethics and Law for the Use and Development of Artificial Intelligence Technology is that the use of AI can be an alternative and new breakthrough as an effort to prevent and minimize violations of ethical codes such as by public auditors. In the audit process, AI is designed to collect and determine data dynamically and then process the data to detect fraud in a relatively shorter time and with a higher level of accuracy than auditors in general. However, in the audit process carried out by AI, if viewed from the law enforcement factor, it cannot be said to be a legal subject because the requirements for law enforcement factors, namely facilities and facilities, have not been fulfilled.

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INTRODUCTION

In the era of digitalization, technological developments are the foundation of innovation and the face of future civilization. It is important to know that humanity's ambitions are contradictory, ambivalent, sometimes dangerous and most importantly, unlimited to explore the universe, find ways to extend life and improve biological existence in almost all aspects, achieve exponential growth, protect the environment, make everyday life easier and more useful, restructuring forms of authority and power, understanding the world within ourselves and around us, creating more effective and cheaper weapons, developing tools, expanding individual awareness of collective forms are some of them. In fact, Elon Musk is one of the inspirational figures in the world of technology states that the internet, renewable energy, genetic reprogramming, multi-planetary life, and artificial intelligence are the main areas that will impact humanity and disrupt our species' standard of living.

Since the 1940s, artificial intelligence itself has been a subject of study in the field of computer science driven by authors such as Vannevar Bush and Alan Turing where it later became a real subfield. However, the term "artificial intelligence" was introduced by John McCarthy in 1956.

Artificial Intelligenceor artificial intelligence according to the Encyclopedia Britannica is a branch of computer science that represents knowledge using symbols rather than numbers, and processes information based on heuristic methods or based on a number of rules

Artificial intelligence is increasingly permeating every aspect of our society, from the critical, like health care and humanitarian aid, to the mundane like dating. For example, even in the home, Artificial Intelligence can control many consumer products today, from cooking utensils to thermostats to regulate the temperature in the room. Not only that, e-commerce uses artificial intelligence to control the actions of digital assistants and electronic agents such as buying and selling products worth billions of dollars.

Most recently, the discourse regarding AI has reached the level of sophistication of AGI (Artificial General Intelligence) with a report from a Google engineer who stated that the LaMDA program, a chatbot generator that they are currently developing, has allegedly reached a sentient (conscious) state. Although there is no strong evidence regarding this testimony.

Furthermore, to coincide with Tesla AI Day, Elon Musk introduced a humanoid robot which was initially a bot called Optimus. This is a little contradictory because previously Elon Musk did not approve of the idea of humanoid robots that could replace human jobs. Furthermore, Elon claims that this humanoid robot will be an early milestone in the development of AI into AGI (Artificial General Intelligence) in the next few decades.

Artificial intelligence can make human work thousands of times easier, and is already present in various integral sectors such as business, medical, transportation, law, education, and even the military. However, this technology

does not only come from the best side, artificial intelligence is considered to be a threat, especially its use in the manufacturing sector which substitutes for human work, self-drive vehicles or driverless cars and Tesla's auto-pilot technology which has been recorded as causing traffic accidents in the United States. as many as 273 cases since 2016, LAWS (lethal autonomous weapon) with one example of an RQ-170 type drone (unmanned aerial vehicle) which scouted and managed to find the location of Osama Bin Laden before finally being neutralized by the United States Navy Seal special forces, ROSS AI is an AI software that acts as a legal advisor and conducts legal research, to Sophie the humanoid robot who received citizenship from the government of the Kingdom of Saudi Arabia in 2017, and so forth.

The exponential development and use of Artificial Intelligence technology in various industrial sectors and everyday human life is in fact not accompanied by a competent set of regulations. Although the Three Laws of Robotics (Asimov's Laws) are taken from the science-fiction short story by Isaac Asimov So far there have been underlying ethical rules for the use & development of AI by developers (Google, Microsoft, BMI, etc.), but industry self-regulation does not have binding legal force.

The absence of clear, unification, holistic and transnational or cross-border laws (legal vacuum) is one of the many discourses regarding artificial intelligence.

The use of Artificial Intelligence technology itself has raised many legal issues both in terms of legal norms and positive law in various countries, as well as international law involving several sub-branches such as human rights, criminal law, personal data protection law, international trade, transportation law, labor law. , humanitarian law, etc. Of course, this will have a significant impact on international society, because AI will not only change interactions between individuals but also have implications for relations between countries and change the dynamics between countries and non-state actors. In line with this, the existing international law or status-quo is currently deemed not ready and capable of addressing the different and diverse problems of the entire international community in this new situation. Departing from these conditions, the author feels the need to study and accurately assess the extent to which the use and development of Artificial Intelligence is predicted to shape the future, such as the form of legal efforts taken by organizations under the auspices of the United Nation, state actors, non-governmental organizations and non-governmental organizations. state actors (technology companies), international organizations between countries, non-governmental organizations, academics, experts, and the international community in regulating the use and development of Artificial Intelligence technology in various sectors.

Artificial Intelligencewhich are sui generis or unique, are considered to be global commons because it concerns the public interest and mutual benefit of

the international community. Not only that, legal issues regarding AI as a legal subject or legal personhood/electronic agent are developing due to its uniqueness.

It is not impossible that the use of Artificial Intelligence technology which is multi-disciplinary and cross-sectoral can be a catalyst for economic recovery after Covid-19, overcome global warming, and accelerate the realization of Sustainable Development Goals. For this reason, clear, unified and holistic regulations (legal framework) and legal status are needed in the form of mutually agreed conventions. Of course, state actors and non-state actors as stakeholders are also required to be serious in the use and development of Artificial Intelligence technology so that at least it can reduce the implications. poor use of this technology.

Based on the description above, the problem formulation is:

1. HowUse and Development of Artificial Intelligence Technology?
2. HowEthics and Laws for the Use and Development of Artificial Intelligence Technology?

THEORETICAL REVIEW

Definition of Ethics

Definition of Ethics Etymologically, Ethics comes from the Greek (ethikos), with the meaning "As an analysis of concepts regarding the rules of right or wrong. Application to moral character or moral actions, with full responsibility".

Tracing the origins of ethics cannot be separated from the original ethos in Greek which means "custom". In the Webster's dictionary, ethics means special character, sentiment, character, morals, or beliefs that guide a person, group or institution.

In a more explicit meaning, the quote in the ethics book defines ethics terminologically, ethics is a systematic study of the nature of the concepts of value, good, bad, right, wrong and so on and the general principles that justify us applying them to anything. Here ethics is interpreted as the basis of a person's morality and at the same time behavior.

Ethics can be interpreted as the values and norms in a society. This contains the meaning of morality or morality, such as what can be done, which is appropriate or inappropriate, and so on. Ethics as a science is the study of morality, an effort to study the morality of society, the values that apply in society, and the characteristics that need to be developed in life. what an individual should do or not do.

According to Issa Rafiq Beekun, Ethics can be defined "as a set of moral principles that distinguish good from bad". Ethics is a normative field of science because it plays a role in determining what an individual should do or not do.

Artificial Intelligence

Technological developments are increasingly showing their fangs in various countries. Not only developed countries, but developing countries are also competing to innovate. Previously the industrial revolution focused on the use of electronics and technology to automate production.

Currently, in the era of the Industrial Revolution 4.0 or Fourth Industrial Revolution (4IR), human, machine and data connectivity is getting closer. There are several technologies that are indicators of the 4IR era, including the Internet of Things (IoT), Artificial Intelligence, Wearable Technology, Advanced Robots and three-dimensional printing.

These technologies emphasize efficient, intelligent use and accelerating human performance. Artificial Intelligence is one of the 4IR technologies whose existence is increasingly eagerly awaited by various countries because of its benefits. In general, the Artificial Intelligence creation project includes 2 groups, namely the Artificial Intelligence Group and Other Related Groups.

The Artificial Intelligence Group consists of data scientists and strategic consultants, while the Other Related Group consists of data scientists, domain experts, the business experts, and software developers. Each party moves from upstream to downstream to carry out their roles which are interrelated with each other.

Artificial Intelligenceworks by combining large amounts of data that have unique characteristics and cannot be processed by conventional computers ("Big Data") with algorithmic mathematical capabilities.

The processed data will be recorded and stored as knowledge in Artificial Intelligence to make decisions. The decisions or outputs made by Artificial Intelligence are similar to decisions managed and produced by the human brain. Different from other computer programs, Artificial Intelligence can do various things that humans usually do, and can even do things that are superior to those done by humans to complete more complex tasks.

This is what gives rise to the opinion that Artificial Intelligence has artificial intelligence like humans. LawGeex is an example of Artificial Intelligence technology. LawGeex is used to review agreements.

This technology from the United States is claimed to be able to review not only "right" or "wrong" decisions, but can change contracts in detail like a review carried out by a legal consultant. Apart from LawGeex, there is Instagram which has used Artificial Intelligence to filter all comments uploaded on Instagram to overcome cyberbullying.

In Indonesia, Artificial Intelligence technology is starting to be used in several sectors. The Ministry of Communication and Information of the Republic of Indonesia launched an anti-hoax chatbot developed by PT Prosa Solusi Smart to tackle the widespread spread of hoaxes in society. Apart from that, there is a Face Recognition platform developed by Nodeflux.

This platform will match the uploaded face with E-KTP photo data managed by the Population and Civil Registration Service. Then recently a

Covid detection tool was created with GeNose which uses an Artificial Intelligence system.

The existence of various types of Artificial Intelligence certainly cannot prevent errors from occurring. Artificial Intelligence can cause losses to victims due to output errors it makes.

For example, the results of an agreement review by Artificial Intelligence cause errors in writing clauses and have an impact on the implementation of the agreement. It can also be an error caused by the inaccuracy of Artificial Intelligence in carrying out detection. For example, the results of Face Recognition state that they are accurate even though the objects are different, thus causing misuse of the data by someone.

METHODOLOGY

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 ethics and law of the use and development of artificial intelligence technology.

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

RESULTS AND DISCUSSION

Ethics and Legal Discussion of the Use and Development of Artificial Intelligence Technology

The development and use of Artificial Intelligence is growing exponentially, resulting in various implications in multi-sectors such as misuse of personal data, assessments prone to bias, uncontrolled automation, etc.) There is a legal vacuum (absence of law) in the use of Artificial Intelligence, so ethical principles of use are needed as a basis for developing the legal framework for Artificial Intelligence in the form of international conventions (law making treaties) and the establishment of special international organizations.

Law enforcement is an instrument of law enforcement. In the era of developing digital technology, law enforcement, which has so far been inseparable from the professions of police, prosecutors, judges and lawyers, will experience quite a significant shift. Technological advances in the industrial revolution 4.0 era have changed the way people in the digital era interact with the law.

Not only does it force regulators to change their approach, legal professionals and law enforcement officials also have to adapt. There are 3 reasons put forward by Judge Aedit Abdullah from the Supreme Court of Singapore: the presence of Artificial Intelligence, the commodification of law, and the increasing ease of communication.

The phenomenon of Big Data technology will make legal operations easier, which previously still required the touch of the human hand (Law Enforcement), no longer requiring human power to operate. Thus, the role of humans as law enforcers will be threatened by the development of digital technology, which increasingly dominates the role of humans.

The way Artificial Intelligence (AI) works is the way a system works that has been designed in such a way, then AI is born with a complex design and structure to carry out human tasks by imitating the uses of the human brain, such as analyzing data, reasoning, solving problems, and making decisions. As a concrete example, in the audit process, AI is designed to collect and determine data dynamically and then process the data to detect fraud in a relatively shorter time and with a higher level of accuracy than auditors in general.

One AI designed to be able to carry out the audit process as previously explained is Watson. Watson is a cognitive system in the form of a supercomputer designed by Klynveld Peat Marwick Goerdeler (KPMG) and International Business Machines (IBM).

Watson is able to analyze thousands of documents, contracts, and debit and credit data in detail and then summarize them in a short time. There is also a fuzzy method that can make AI produce findings accompanied by judgment or opinion (based on data that has been processed) with a report template like a standard audit report manually made by an auditor.

One of the important projects that influences the provision of legal aid is the emergence of DoNotPay chat in the UK, where currently legal aid services cover more than 1,000 (one thousand) areas of law.

From a global perspective, the world has truly utilized digital technology to make it easier to operationalize regulations, which is much more effective and efficient. In the Indonesian context, the role of digital technology has begun to appear in the fields of public services, such as the process of creating legal entities, e-courts and online law.

Thus, the position of AL is basically a tool/application whose function is to assist human work, so that it is more accurate and effective, or is an electronic agent which is like a device from an electronic system whose function is to take action against an automatic electronic system based on human commands, which of course is in accordance with the characteristics of AI itself by referring to "Article 1 Number 8 of the ITE Law".

As a system designed in an application, of course the working system still requires active human involvement, without the presence of humans an application will not produce conclusions by itself.

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. The AL operational system is not something that stands alone, because AL is nothing more than a tool, which is applied by humans with the intention of speeding up the process of human work itself.

As an application, its existence really helps human work. According to Darshan Bhora and Kuldeep Shravan who quote Minsky's views, which according to the author is a bit of an exaggeration, Artificial Intelligence (AL) is a machine capable of doing various things like humans when using their intelligence. Artificial Intelligence is designed to describe the quality of human life, such as work planning, problem solving, reasoning, recognition of ideas, stimulating thinking abilities, and various other activities that can encourage fast and efficient work.

As a tool created and designed for certain needs and purposes, and in this case it is in the legal field, even though the level of speed and accuracy exceeds that of humans, artificial intelligence (AL) is still not a human being who has feeling and initiative, whose considerations beyond the technical are often much more solution than robots. If AL's function is for matters of an administrative and documentary nature and displays normative legal answers, then AL's function is very fast and helps people, for example in terms of legal contracts and document formalization processes.

When technological progress has reached its peak at such a rapid pace, artificial intelligence has quickly entered legal practice, based on a survey of managing partners of law firms in the United States with 50 (fifty) lawyers or more, found that more than 36% (thirty-six percent) of law firms and more than 90% (ninety percent) of large law firms that employ more than 1,000 lawyers actively use artificial intelligence systems in their legal practices. It is possible that the judicial process (in Indonesia) will also be replaced by artificial intelligence, which is popularly called Artificial Intelligence (AL), or can be said to be the digitalization of the judicial process. Apart from being a threat, the above phenomenon is also a challenge for legal practitioners (law enforcers).

From a progressive legal perspective, the AL phenomenon (if one day in Indonesia) is a legal system that looks at the logic of progressive law, then the ideals of progressive law will be neglected. That law enforcement, which means operationalizing the law only by using applications designed to be operational, will only produce black and white conclusions in a case. When the role of conscience in law is not given a role in deciding cases, then the law will become nothing more than a mechanical robot.

Progressive legal idealism starts from a basic assumption, law is an institution that aims to lead humans to a just, prosperous life and make humans happy. This law does not reflect the law as an absolute and final institution, but rather is determined by its ability to serve humans. The main doctrine of progressive law is not to be submissive or simply submit to existing law but to be critical.

With this progressive legal logic, when Artificial Intelligence (AI) replaces the role of humans in law enforcement and operations, it will not be able to provide substantial justice. As robot technology with its big data may exceed human capacity in providing legal documents as a source of law, however, when AI as an application is then trusted to exist to decide cases that are projected to produce substantive justice, it clearly contradicts progressive law itself.

` Entrusting law enforcement to an application system, which has no conscience is the same as textual law in its new form (neo textual). Progressive law enforcement is implementing the law not just according to the black and white words of the regulations (according to the letter), but according to the spirit and deeper meaning (to the very meaning) of the statute or law. Meanwhile, AI which is based on big data (application) only according to letter will not reach the very meaning, because to arrive at the deepest meaning requires a depth of conscience through deep contemplation. Big data in AI is believed to be able to provide detailed answers, which can be compared to the ability or capacity of human intellectual intelligence. Even beyond human competence, progressive law enforcement is not just about intellectual intelligence, but also spiritual intelligence.

Enforce the law with full determination, empathy, dedication, commitment to the nation's suffering and with the courage to look for other ways than what is usually done. The statement of progressive legal theory further emphasizes that law enforcement is not like a robot, where the basic principle of a robot is to be controlled and programmed.

For example from an ethical perspective. Public Auditors must adhere to the professional code of ethics, namely ethical principles, ethical rules, and interpretation of ethical rules. Apart from that, public auditors are also regulated in the Public Accountant Professional Standards (SPAP), public auditors in carrying out their responsibilities are divided into 3, namely moral, professional and legal responsibilities. However, during his journey, a public auditor still encounters deviations from the code of ethics which reflects that there are still gaps in law enforcement and standards. This certainly endangers the development of the auditor profession because the violations that have occurred so far have resulted in the loss of public trust in the independence of

public auditors. For this reason, the use of Artificial Intelligence can be an alternative and new breakthrough as an effort to prevent and minimize violations of the code of ethics by public auditors, especially those who cover up fraud by an entity, which of course has the potential to lose public trust.

However, in order to strengthen its position to gain benefits from technological advances, especially in the field of auditing in order to prevent and minimize violations of the code of ethics that lead to fraud by entities, Artificial Intelligence must be made a legal subject that can be equalized (its position) with legal entities.

Apart from that, there is a need for rule breaking in making legal breakthroughs by eliminating restrictions on ways of thinking and acting in the law so that the law must be allowed to flow in order to carry out its duty to bring prosperity to human life.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

1. The development and use of Artificial Intelligence is growing exponentially, resulting in various implications in multi-sectors such as misuse of personal data, assessments prone to bias, uncontrolled automation, etc.) There is a legal vacuum (absence of law) in the use of Artificial Intelligence, so ethical principles of use are needed as a basis for developing a legal framework for Artificial Intelligence in the form of international conventions (law making treaties).
2. Ethics and Law for the Use and Development of Artificial Intelligence Technology is that the use of AI can be an alternative and new breakthrough as an effort to prevent and minimize violations of ethical codes such as by public auditors. In the audit process, AI is designed to collect and determine data dynamically and then process the data to detect fraud in a relatively shorter time and with a higher level of accuracy than auditors in general. However, in the audit process carried out by AI, if viewed from the law enforcement factor, it cannot be said to be a legal subject because the requirements for law enforcement factors, namely facilities and facilities, have not been fulfilled. Artificial Intelligence cannot replace the role of humans in carrying out audit actions or processes, but it strengthens its position, namely gaining benefits from technological advances, especially in the field of auditing, in order to prevent and minimize violations of the code of ethics that lead to fraud by entities.

Recommendations

1. There is nothing wrong with making AI a legal subject whose position can be equalized with legal entities. When this AI then has an equal position with a legal entity, then the supervision and empowerment regulations related to KAP must also be overhauled.
2. Create a policy regarding the limitations of AI activities in ethics, for example the audit process plus the validity of data processing results by AI. Because code of ethics fraud tends to occur in the audit process, it is

necessary to regulate legal certainty regarding the results of data processing carried out by AI. So then the auditor as an opinion maker in making his audit report cannot change the data processed by AI. Develop integrated AI system standards to fulfill AI activities such as in the audit process. This system must of course be a requirement for public auditors in providing their services.

FURTHER STUDY

The writing of this article is inseparable from the author's limitations in collecting technical data sources regarding the multi-sector implications of the development and use of AI that is able to perform the duties of public auditors to prevent violations of the code of ethics in the law enforcement sector. Ethics and Law of the Use and Development of Artificial Intelligence Technology is that the use of AI can be an alternative and a new breakthrough as an effort to prevent and minimize violations of the code of ethics such as by public auditors.In the future, the author has a new view to compare how AI cannot replace the role of humans in carrying out audit actions or processes, but strengthens its position, which is to benefit from technological advances, especially in the field of auditing, in order to prevent and minimize violations of the code of ethics that lead to fraud by entities.

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