

Pros and Cons of AI Robot as a Legal Subject

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Abstract— The Facebook case of shutting down Artificial Intelligence (AI), which was able to create its own language, worried many people because it had far-reaching consequences for human life, inspiring the establishment of a non-profit company Open AI which aims to avoid misuse of AI in the world. This article is based on normative legal research that refers to secondary data. Data collection, processing, and analysis are carried out qualitatively using the Miles and Huberman models. The paradox that accompanies the development of technology, especially robots with AI capabilities needs to be taken seriously by the executive, legislative, judicial and legal academics. With the ability to learn and make decisions, AI robots can decide for themselves various actions that will be taken out of their owner's control. There is a shift in the treatment of AI robots that are seen as legal objects (goods), then equated with pets, treated as legal subjects as well as humans and legal entities. While the regulation on that, is not immediately sought, so the existence of AI robots is in a grey area. The fact is that AI robots are able to develop their own communication systems that are not understood by their creators, as happened in the case of Facebook. This requires all components to reorganize human relations with God, fellow living beings and products of human creation in a set of legal and social rules for the survival of humanity itself.

Keywords: *artificial intelligence, robot, legal subject*

I. INTRODUCTION

Changes happen as a constant thing in this world. These changes include human's interactions and relationship that transform our social and cultural life. Science, technology and spiritual are some knowledge that contributes to this transformation. Humans will always want a better life, a life better than yesterday. This cycle keeps going on and on continuously. We will never know how far humans will go to achieve

this better life interactions and relationship that transform our social and cultural life. Science, technology and spiritual are some knowledge that contributes to this transformation. Humans will always want a better life, a life better than yesterday. This cycle keeps going on and on continuously. We will never know how far humans will go to achieve this better life.

In ancient times, humans believe in the cosmocentricism where the world should remain as it is. Whilst in medieval, this belief changed into theocentricism, a belief that God is the central aspect of human's life. In the modern century, this belief transforms into anthropocentric, which sees humans as the most important being in the world. In this era, a post-modern era, humans believe in logocentricism where a thing or symbol is the most important thing. Today, the important symbol of humans life can usually be seen in the clothes they wore, the gadget they use, the transportation they ride and many other forms. The corporations are using all these forms for profit, therefore, causing a hedonism society.

The Digital Revolution has begun in the late 1950s and now we have reached The Digital Revolution 4.0. This revolution shifted mechanically to digital technology in almost all industries. Human's life has changed and affected the way we communicate, study and work. One of the changes that can be easily seen is the way we obtain information. In the positive side, we can easily obtain any information needed in any forms within no time.

While the negative side that appears is the way this information was not filtered. Some information might be false and intrusted, some people might also misuse this information. With this revolution, people are

connected in many different social networks wherever their city and country are, therefore, blurring the boundaries of the physical and digital world.

Efficiency without effectiveness also becoming so common in our daily life, especially when it involves multinational corporation that believes in capitalism. The absence of effectiveness causing so much risk such as the labor problem, environmental problem, economy condition and up to the extinction of humankind. The corporation usually prefers to increase their profit and not paying attention to all the problems it caused.

The revolution also changing the social culture all around the world. Shibuya Mirai, a chatbot created by Japan was granted the official residence in Tokyo. Sophia the humanoid robot created by Hansons Robotic was granted citizenship by Saudi Arabia. These 2 cases arise some legal issues, there is no clarity on how we should treat a robot as a citizen, there is confusion on how the robot should adapt to a country's culture and the robot qualification that did not meet the legal requirement based on those countries law.

There is no explanation regarding the right and duties of Sophia. As a citizen, Sophia should have the voting right even the right to run for president. By giving the citizenship and residence permit, these 2 countries are making confusion in the culture and legal system.

In 2017, Facebook was developing AI chatbots named Alice and Bob that have the ability to negotiate. In the process, these chatbots were able to develop their own language that is not understood by their creators. Therefore Facebook shut down this project.

Based on WIPO Technology Trends 2019 Report [1] this era are allowing the discovery in AI with the increased funding and optimism about its potential. Other concerns in this digital era, especially in the Artificial Intelligent (AI) technology also delivered by some technology expert and politician.

During the speech in Moscow in 2017, the president of Russia, Vladimir Vladimirovich Putin said that AI is the future not only of Russia but of all of civilization. There are huge opportunities, but it also arises threats that are difficult to foresee. Whoever becomes the leader in this AI will become the ruler of the world. Other concerns also are given by Elon Musk, the CEO of SpaceX and Tesla. He believes the AI could be an immortal dictator from which we would never escape and AI can cause World War Three.

II. HOW AI TECHNOLOGY AFFECT LAW AS A SYSTEM

A. *Law as A System*

Based on Collins dictionary, the law is a system of rules that a society or government develops in order to deal with crime, business agreements, and social relationships. In general, the law has 4 functions: as a behavioral guide, maintaining social order, dispute resolution and as a tool of social engineering.

The existence of law helps to achieve justice in our society. Law has the ability to regulate society so it will behave properly by informing them the rules they must obey with punishment threat when disobeyed. This regulation regulating almost all aspect in the daily lives with the punishment that can be seen in several forms such as fine, community service, prison and other forms depending on each countries regulation.

Bastiat [2] believes that in our society, law plays an important part in the creation and maintenance of social order. But the law is made, by one man, or by one class of men. Because of this, the law will not be perfect therefore constant changes will be needed as we follow the trend in our society.

Kelly, Holmes and Hayward [3] said that we must be aware, however, that law as we know it is not the only means of creating order. In our society, the order is not solely dependent only on law. In society, moral and tradition also play a big role in how a culture act and response to a certain condition. The moral and tradition can also decide the social control.

The relationship between law and values are not a straightforward one. Singh [4] believes in the one hand, it is clear that many legal rules are intended to, and do, give effect to certain basic values of a society. Holmes [5] said that the life of the law has not been logic: it has been experienced. Based on the problem existed in this experience, the lawmakers were able to create new rules to prevent chaos.

B. *Artificial Intelligence and Implementation*

According to Nilsson [6], AI is the activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment. AI is the analysis of data to model some aspect of the world. Based on the Government Office for Science

[7] inferences from these models are then used to predict and anticipate possible future events.

Datatisynet [8] also informs that the development of AI has made some major advances in recent years and its potential appears to be promising: a better and more efficient public sector, new methods of climate and environmental protection, a safer society, and perhaps even a cure for cancer.

AI has been an inseparable aspect of humans' daily life. The most common example of AI implementation can be found in our pocket, the smartphone that we use on a regular basis have utilized AI technology. Smartphone with a digital assistant like Siri in iPhone and Google Assistant in Android-based phone use AI for speech recognition. Nils [6] inform that speech recognition meant that the process of converting an acoustic stream of speech input into a text representation of its component words. With this technology, the human can ask the digital assistant to open an application, write notes, make a reminder, sending messages and many more just with the voice command.

AI can also be found in the application inside the smartphone. Such as Waze or Google Maps that help human navigating route to their destination. This digital map use AI to determine distance, calculate the time needed and determining the route taken for a specific destination.

According to US Food and Drug Administration [9], AI has the potential to transform healthcare by deriving new and important insights from the vast amount of data generated by everyday healthcare. AI are taught by doctors in the hope that one day AI will help and replace the doctor.

One of the health industry company that uses AI is Babylon Health, with this technology AI will be able to diagnose human health problems by asking several questions relating to human condition and symptoms. Even though the AI is not perfect yet but one day, healthcare will be something accessible and affordable. Someone's distance and economic status will no more determine either someone get the healthcare or not.

In the law industry, companies like Law Geek and ROSS Intelligence use AI to analyse document especially the non-disclosure agreement. With AI, the analysing process will be so fast. Usually, analysing legal document by lawyers will take hours, while with AI, this process only took seconds. AI has outperformed human lawyers when reviewing legal document. The accuracy

resulted by AI reaches 100% while by human lawyers, it reached 97%. AI took 26 seconds while the human lawyers spend 51-156 minutes for one legal document.

With current technology, AI already has the ability to create law argumentation those helping lawyers do their work faster. Andrew Arruda, lawyer and the CEO of ROSS Intelligence believe that one day AI will either help lawyers do their job and so reducing the cost or even replace the lawyer with AI so everyone can afford a lawyer. With the development of AI, one day the justice will not criminalize the poor anymore.

Whittaker and Crawford [10] said that in order to better understand and track the complexities of AI systems, we need to look beyond the technology and the hype to account for the broader context of how AI is shaping and shaped by social and material forces. United Nations Activities on Artificial Intelligence [11] stated that AI can changes tasks, skills and knowledge content of jobs.

AI technology is developed and implemented in almost all industries, such as fashion, education even in the creative industry. According to the Executive Office of the President National Science and Technology Council Committee on Technology [7] AI holds the potential to be a major driver of economic growth and social progress. Only if civil society, industry, public, and government collaborate together to support the development of the technology with careful attention to its potential and to manage the risks it might cause.

C. AI Effects in Humans Life

PWC [12] stated that AI is remarkably complex and advancing quickly. AI has made humans life easier and simpler. With the help of AI, work will be done faster and more accurate. Google [13] believes the well-designed AI systems may reduce bias compared with traditional human decision-makers. Manan [14] believe technology could give advantages and also disadvantages to human. With all the benefit that we receive from AI, there is still some serious and dangerous risk that might threaten the existence of human life.

Thierer, O'Sullivan and Russell [15] define weak AI systems as not genuinely 'intelligent' in the human sense of the word. In contrast, a stronger AI system will perform competently. Until now, AI already caused damage that took humans life. In

Arizona March 2018, a self-driving car that belongs to Uber crashed and killed a pedestrian. The victim was Elaine Herzberg, 49 years old women and this became the first pedestrian fatality that involved a self-driving car. Uber was managed to escape a criminal charge because the local prosecutor decided that Uber is not at fault. The first human death caused by robot already happened in 1979, when Robert William, an assembly line worker in Ford Motor was killed. In this case, Ford Motor gave the victim's family \$10 million and there was no criminal charge.

The damaged caused by AI in these 2 cases were not seen as a crime. If these damages were caused by human, the law will categorize these as crime or negligence, there will be jail punishment involved. Paying fine after killing someone either accidentally or on purpose will be seen as an insult and degradation of human's life value. Wasitaatmaja [16] said the human relationship is built cause the need of each other with values and morals in it. The advance of AI technology will surely be affecting this relationship. Lidwina opine the changes of social culture causing human relationship becoming liquid, expand and not rely on geographic aspect only. AI exists as a part of humans relationship.

D. AI Regulation and Principles around The World

i. AI Regulation around The World

The development and studies of AI are becoming a trend in the world. With this development, the government needs to create a new regulation for this. Calo [17] stated that in California, several states, as well as the federal government, now have policies pertaining to driverless cars. In the United Kingdom, FTI Consulting [18] stated that AI policy discussions have been intensified since 2017, with independent industry reviews that the government commissioned.

Government Offices of Sweden [19] assessing that Sweden needs to push Swedish and international standard and regulations that will promote the use of AI and preventing risks. Wallace and Castro [20] stated that Europe has already made the General Data Protection Regulation that regulates European organization that uses personal data especially when the companies are developing AI.

As stated in IEEE-USA Position Statement [21], the

USA government also plan to update the intellectual property right law by shortening the lived time of patent and copyright with the invention generated by AI. Based on the United Nations Economic and Social Commission for Asia and The Pacific [22], the Japanese government already announced that they will set up an AI panel with the aim to design a road map for development and commercialization of AI. In India, Kumar [23] said that the Finance Minister in his budget speech for 2018-2019 already mandated NITI Aayog to establish the National Program on AI.

In Indonesia, there is no regulation relating to the AI that can give proper punishment when the AI are causing damages and loss. Prof. Dr. Emeliana Krisnawati, S.H., M.Si. said that law should be made first but in reality, sometimes the crimes that happen were not regulated yet. This gap can be used by other people to commit the crime with AI and then still have the ability to get away from it. Prasetyo and Barkatullah [24] said it is necessary to do legal planning that has the ability to anticipate technology development and society will bear the dangerous risk if failed.

Scherer, [25] believe there is a good reason to believe that legal mechanisms could be used to reduce the public risks that AI presents. As technology are developing so fast we can predict that AI will become more advanced in no time. Without regulation, this technology can cause chaos in social life. There will be no clarity and certainty in our legal system.

Andrews and Bilel [26] seemed today there are three kinds of behavior which need for regulation. He summarised this behavior as: human behavior, corporate behavior and algorithmic (machine learning-artificial intelligence) behavior.

Based on Personal Data Protection Commission Singapore [27] Governance frameworks around AI should be technology-neutral and light-touch so that AI technology can develop in a direction that is not hindered or distorted by prescriptive rules that are laid down prematurely. For that reason, the lawmakers should collaborate with AI expert in order to make fair law to regulate and at the same time supporting this AI technology.

ii. Artificial Intelligence Principles

In 2017, Asilomar conference was creating the 23 Asilomar Artificial Intelligence Principles that have been signed by more than 3.700 experts in AI, Robotic researchers and professional. The signatories included

Stephen Hawking, Elon Musk and many more. These principles included (2017) several aspects such as research issues, ethics and values, and longer-term issues.

The research issues in these principles contain issues such as the research goal, research funding, science-policy link, research culture, and race avoidance. In this part, there is social consideration on how AI research should be created with intelligence beneficial, constructive, transparent and healthy. Also stated the need to avoid corner-cutting on safety standards.

The ethic and values section describe principles such as safety, failure transparency, judicial transparency, responsibility, value alignment, human values, personal privacy, liberty, and privacy, shared benefit, shared prosperity, human control, non-subversion, and AI arms race. This section pointed the need to avoid an arms race with AI weapon, the decision delegation to AI should be chosen by human and the AI should be designed to match human dignity, freedoms, rights, and cultural diversity.

The longer term-issues section consists of Capability Caution: There being no consensus, we should avoid strong assumptions regarding upper limits on future AI capabilities; Importance: Advanced AI could represent a profound change in the history of life on Earth, and should be planned for and managed with commensurate care and resources; Risks: Risks posed by AI systems, especially catastrophic or existential risks, must be subject to planning and mitigation efforts commensurate with their expected impact; Recursive Self-Improvement: AI systems designed to recursively self-improve or self-replicate in a manner that could lead to rapidly increasing quality or quantity must be subject to strict safety and control measures; and Common Good: Super-intelligence should only be developed in the service of widely shared ethical ideals and for the benefit of all humanity rather than one state or organization.

Asilomar principles can be a good use as the foundation of AI regulation. The longer term-issues section can be used to predict future problems for regulation making. Even though the principles were signed by many types of research and expert, these principles do not have legal forces. So there is no punishment if there is someone that disobeyed these principles.

III. CONSIDERING AI AS A LEGAL PERSON

A. *Legal Person*

Glanville C. Williams defines a person as the substance of which rights and duties. Any being, whether a human being or not, that is so capable is a person. In a simple way, a person is the substances of which rights and duties are the attributes.

A person can be divided into 2 categories: natural person and legal person. A natural person is human, it is called natural because it is given by God and only human is a natural person. Human as a natural person supposed to be a definite legal subject. Due to the changes in social culture, some humans were seen as an object rather than a subject. It happened when humans were bought and sold as a slave. Ritchie [28] thanked the concerned citizens who realize this inhumanity and create the abolitionist movement that worked for decades and bring slavery to

an end. Nasution [29] sees the legal subject as any being based on law competent to do legal action.

Black's Law Dictionary defines a legal person as an entity given certain legal rights and duties of a human being; a being, real or imaginary, who for the purpose of legal reasoning is treated more or less as a human being. A legal person doesn't have to be real or have a physical form, as long as its existence can be proven, then it can be seen as a legal person.

A legal person exists in consideration of the law, made or created by human and have the right and duties. One of the most common examples of a legal person is a corporation. Corporation existence can be proven with a single piece of paper and can be considered as a legal person. According to Salim [30], a legal person is a collective being with certain purposes, right and duties, and organization.

B. *The Fiction Theory*

Fredrich Von Savigny famous theory, the Fiction Theory of Corporation said that corporation has existence but no real personality save that given by the law, which regards them as persons. In the legal system, we can use this theory and equate AI like corporation. AI existence can be proven in the software form and some, like humanoid, can also be proven by its robot physical

forms. When we look at the development of law, there are several things they have had a major influence such as history, culture, and logic.

As an inseparable part of humans life, AI has made a new trend in social and culture causing transborder citizenship. Schiller and Glick [31] said the concept of transborder citizenship builds on the idea of social and cultural citizenship and expands the examination of citizenship practices and claims transnationally.

By treating AI as a legal person, AI can function legally with its own right and obligation. Law will protect humankind also supporting the AI itself. However, what makes an AI could be treated as human are still vague. For example, if it comes from the ability of thinking and sensing, many existing machine or electronics are able to do the same, such as a computer or smartphone. Yet, we never consider them as citizens.

Consciousness is a thing that a human has. It could be a consideration that if an AI robot has consciousness, we could treat it as human or citizens. Freud [32] defines consciousness actually means for us the distinguishing characteristic of the psychic life, and psychology is the science of the content of consciousness. While Damasio [33] said that consciousness as the critical biological- function that allows us to know sorrow or know joy, to know suffering or know- pleasure, to sense embarrassment or pride, to grieve for lost love or lost life.

Unfortunately, it is hard to prove whether a machine has a consciousness or not. They could think and sense, but it does not guarantee that AI robots must have consciousness. Even as humans, how we can tell the others that we have consciousness. It is a thing that is hard to describe and prove. Therefore, to consider an AI robot as a legal subject, the theory of law, engineering, and psychology should be elaborated.

C. Liability

In the Black Law's Dictionary [34], liability or responsibility is interpreted as the bond between the wrongdoer and the remedy of wrong. This is the state when any being is legally obligated or accountable and enforceable by punishment. When the AI is seen as a legal person, it will be liable for negligence, fault or the crimes it committed.

The liability exists in many different types, such as

absolute liability, civil liability, current liability, fault liability, joint liability, limited liability, product liability, vicarious liability and many more. The types of liability used in each country will also be different.

i. Vicarious Liability

The vicarious liability can be used in the AI robot and human relationship. Vicarious liability is a liability that exists because of the breach of duty. The supervised party will bear the action that was conducted by the subordinate. In this liability type, the human will be the supervised party whilst the AI robot will be seen as the subordinate. The human's demand AI robot to do the task and when AI robot caused damages or loss, the human will be held responsible.

ii. Strict Liability

Strict liability is a liability type that does not depend on one party negligence or harm but this liability is based on one party duties to make sure something safe. This liability is usually applied in product liability, which a company is liable to make sure the products are safe. The AI robot can also use this liability when there are damages caused by the robot. With this liability, the company will be extra careful when producing and maintaining the quality of the robot.

There are many types of liability that can be used. The liability being use might be different in each industry. For example, an ultrahazardous AI robot that is being used in the military will be necessary to use strict liability.

IV. CONCLUSION

The implementation of AI has become so common in human daily life. AI technology has made our life simpler and easier and has become an inseparable part of human life. This technology is being used in our education, work and entertainment life.

Countries like Japan and Saudi Arabia acknowledge AI robot as part of their country and some of them as a citizen. Some person also sees AI robot as something more, in China a guy is marrying a robot, changing the definition and relationship of human. We cannot deny that AI has changed society and culture all around the world.

The law that exists and regulates society are left behind by the advanced technology. The fast development of technology especially AI result in the need for a new regulation that could protect civilization and maintain the social order. Some people see AI robot an object but with its capability to made independent decision, some people also see this robot as a subject.

There are only several countries that have AI regulation such as America, Japan, and the United Kingdom. These regulations are so limited, they have not included the crime action by AI, ways to prevent the risk and damages that might happen, how society will see this AI in the legal system and many more. While the need for AI regulation should cover all areas, it cannot be patchy. The gaps existed in the regulation will cause chaos and utilized by the party with bad intention.

It is possible and even necessary to include AI Robot as part of our legal system. With the ability to make its own decision without human supervision AI has already caused serious harm and risk that were uncontrollable. The damage that already happened, was not seen as a criminal action and the party that should be responsible also do not get the appropriate punishment.

When AI is considered as a part of our legal system, we will need to choose carefully which liability will fit perfectly on each industry. Choosing the wrong liability will harm and disadvantage to several parties. It is also important to choose the liability that will protect the consumers as the advanced technology of AI will not be understood by everyone. A fair liability that does not side the big corporation will protect society.

Each country should make the AI regulation that adjusts to their own culture. In this digital era, the AI will frequently use internationally. To prevent too many differences in the regulation, all nations should collaborate in the process of making a united framework for AI regulation.

We can utilize and develop the Asilomar Artificial Intelligence Principles to create regulation with legal forces. The need for AI regulation is an urgent matter, this regulation cannot be made in a short time. We need to consider several aspects that will be affected by this

advanced technology such as the economy and health problems. Therefore, technology expert, economist and expert in other industries should take part in this law-making process.

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