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Legal Policy on Artificial Intelligent (AI): Study Comparative from Global Practices

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ABSTRACT

AI development and its ever-growing practical use require changes in legal regulation, such as the need to restructure the legal system. Due to the absence of guidance concerning AI's behavior from legislation, lawmakers must review the existing legal framework and adapt it to the changing needs of society. As an example, In Europe, in 2012, the European Commission initiated a RoboLaw Project with the main objective of investigating how emerging technologies in the field of bio-robotics (including AI) bear on the national and European legal systems. Then how about Indonesia? the discussions about AI and its influence on the law in Indonesia have not developed yet. It is also clear that Indonesia does not have any legal rules that discuss the existence of these smart robots. Therefore, there is an urgency to respond to the development of new technology in the world (especially in Indonesia) and to know the progress that has been made by other countries in welcoming the era of artificial intelligence. The result revealed that the governments in all-round the world faced similar challenges in conceptualizing criminal liability for AI crimes. They decided to focus on making legal policy regarding AI which can monitor the safety and fairness of AI, and adapt regulatory frameworks to encourage innovation while protecting the public

Keywords: Legal policy, artificial intelligent, global practices

Introduction

For some moment presently, Artificial Intelligence (AI) has been the topic of extensive and worthwhile debate in the international sphere and the majority of countries around the world (AI Now Report, 2018). Concerns about AI are shared by states and international organizations, as well as non-state actors from academia, corporations, enterprises, and industry, as well as civil society. This discussion includes AI's technological, economic, and sociopolitical aspects, as well as the ethical and legal issues that it raises (Carrillo, 2020). It is certainly not a surprise that technological innovation in the legal field has garnered a lot of attention. Consider the guillotine, which was invented by the French 18th-century Freemason Joseph-Ignace Guillotin. When it was first used in the Netherlands in 1812 and regarded as a humane technology because it guaranteed an instant and painless death. Then there's a recent technological innovation that has gotten a lot of attention: the self-driving car: *Tesla*, which can follow basic traffic rules on its own and is thus an example of normware, an artificial system with embedded norms (Verheij, 2020).

AI advancement and increasing practical application necessitate changes in legal regulation, such as the need to restructure the legal system. Due to the lack of legislative guidance on AI behavior, lawmakers must review the existing legal framework and adapt it to the changing needs of society. In Europe, for example, the European Commission launched the RoboLaw Project in 2012 to investigate how emerging technologies in the field of bio-robotics (including AI) impact national and European legal systems. What about Indonesia? In Indonesia, discussions about AI and its impact on law have yet to develop.

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As conveyed by Indonesia's President, Joko Widodo, on November 1-4, 2018, at the opening of the Indonesia Science Expo (ISE) event, the development of Artificial Intelligence is a new challenge that must be faced due to its various impacts. President Joko Widodo expressed his concern about the threats posed by the development of new technologies at the event (Harususilo, 2022). In addition to President Joko Widodo's concerns, state regulation in the face of the development of Artificial Intelligence is a very complex challenge that must be carefully prepared. At the workshop "Artificial Intelligence for Economic Growth and Social Good in the Digital Era," Semuel A. Pangerapan, Director General of Informatics Applications of the Ministry of Communication and Informatics of the Republic of Indonesia, stated that "the application of Artificial Intelligence can be exemplified in several developed countries as a special basic consideration in the development of regulations and policies (Yusuf, 2020).

According to this statement, the Indonesian government requires policies and regulations that can adapt to current technological developments, specifically Artificial Intelligence. According to this statement, the Indonesian government requires policies and regulations that can adapt to current technological developments, specifically Artificial Intelligence. Even "Law Number 19 of 2016 Concerning Amendments to Law Number 11 of 2008 Concerning Electronic Information and Transactions" ("Law 19/2016"), one of the legal domains regulating various new legal actions in the field of technology, must be updated to regulate Artificial Intelligence, which has become prevalent in social life (Jaya & Goh, 2021).

It is also clear that Indonesia has no legal rules governing the existence of these intelligent robots. As a result, there is an urgent need to respond to the development of new technology in the world (particularly in Indonesia) and to learn about the progress made by other countries in welcoming the era of artificial intelligence. The findings revealed that governments all over the world faced similar difficulties in conceptualizing criminal liability for AI crimes. They decided to concentrate on developing AI legal policy that can monitor the safety and fairness of AI, as well as adapt regulatory frameworks to encourage innovation while protecting the public.

Material and Methods

The type of research used in the present research is doctrinal-comparative legal research. Doctrinal legal research as conceived in the legal research domain is research ‘about’ what the prevailing state of legal doctrine, legal rule, or legal principle is (Vibhute & Aynalem, 2009). It is research that provides a systematic exposition of the rules governing a particular legal category, analyses the relationship between rules, explains areas of difficulty, and, perhaps, predicts future developments (Pearce, 2010). Hence, this research takes one or more legal propositions, principles, rules, or doctrines as a starting point and focus of his study. The comparative methodology can provide an extra dimension to research outcomes. This methodology is used in a variety of disciplines – education, political science, and, of course, law. The comparison may not be the focus of the research but it forms part of the international legal context. However, it is important to approach the comparison to achieve more than a mere description, or a simple chronicling of sameness and difference (Pearch, 2010).

This present research conducts library research to obtain a secondary source of law (authorities). Secondary authorities are raw materials that are used to explain, interpret, develop, locate, or update the primary authorities (Mershki & Dunn, 2002). Secondary data is also defined as the data which have been interpreted and recorded (Walliman, 2019). Within doctrinal legal research, the primary source of law is the materials used as bases to make up the legal rules that govern our society (Walliman, 2019). This research uses a qualitative method of data analysis. This research uses the qualitative method of data analysis because the information gathered is non-numerical data, therefore, it shall be analyzed by using the interpretative method.

Results and Discussion

AI: A Study Comparative from Global Practices

AI applications will profoundly impact societies in low- and middle-income countries (LMICs), both positively and negatively (Stone et al., 2016). Like most new technologies, AI also has the potential to exacerbate existing problems and create new ones. The technology can also be harnessed to promote "negative" social outcomes such as enabling unethical and criminal activity. Hence, it is important to understand the challenges in conceptualizing criminal liability for AI crimes around the world.

Europe

In 2012, the European Commission initiated a RoboLaw Project (full title: Regulating Emerging Robotic Technologies in Europe: Robotics Facing Law and Ethics) (Palmerini (2012) with the main objective of investigating how emerging technologies in the field of bio-robotics (including AI) bore on the national and European legal systems, challenging traditional legal categories and qualifications, posing risks to fundamental rights and freedoms that had to be considered, and more generally demanding a regulatory ground on which they could be developed and eventually launched.

The project aimed to outline a comprehensive analysis of the current state-of-the-art regulation about robotics in different legal systems, to understand whether new regulation was needed or whether the problems posed by robotic technologies could be handled within the framework of the existing laws (Palmerini, 2012).

The most important outcome of RoboLaw was a final report containing the "Guidelines on Regulating Robotics," which was presented on 22 September 2014. For all of the foregoing, the question "could Artificial Intelligence become a legal person" is still only theoretical from today's perspective. Although the EU-driven RoboLaw project promoted the development of guidelines governing the operation of robotics—including AI, the EU argued that AI had no legal personality. Therefore, in litigation for damages, AI may not be recognized as an entity eligible for the compensation of damages.

Regarding the liability issue, the Guidelines on Regulating Robotics realized that ultimately, robots' autonomy raised the question of their nature in the light of the existing legal categories – of whether they should be regarded as natural persons, legal persons, animals, or objects – or whether a new category should be created, with its specific features and implications as regards the attribution of rights and duties, including liability for damage (Committee on Legal Affairs European Parliament 2014-2019). Thus, under the current legal framework, robots cannot be held liable per se for acts or omissions that cause damage to third parties. Hence, the existing rules on liability cover cases where the cause of the robot's act or omission can be traced back to a specific human agent such as the manufacturer/corporation and/or the user/operator. Therefore, those perpetrators could be held strictly liable for acts or omissions of a robot.

In addition, Guidelines on Regulating Robotics considered that whatever legal solution it applies to robots' liability in cases other than those of property damage, the future legislative instrument should provide for the application of strict liability as a rule, thus requiring only proof that damage has occurred and the establishment of a causal link between the harmful behavior of the robot and the damage suffered by the injured party. Here, it can be concluded that Europe prefers to use robots' civil liability.

Accordingly, Europe still develops in-depth research and strategy regarding AI. The number of resources required to stay abreast of the latest AI developments cannot be met by a single Member State in Europe, creating a clear rationale for EU intervention. Starting in 2017, AI research has benefited from strong political support which is based on the transformational power of these technologies for businesses and societies. Some countries have laid down AI-specific and comprehensive AI strategies (e.g. China, the UK, France), some are integrating AI technologies within national technology or digital roadmaps (e.g. Denmark, Australia), while

others have focused on developing national AI R&D strategy (US). Regardless of the approach pursued, it emerges that countries are engaged in a sort of AI race that aims at achieving AI leadership.

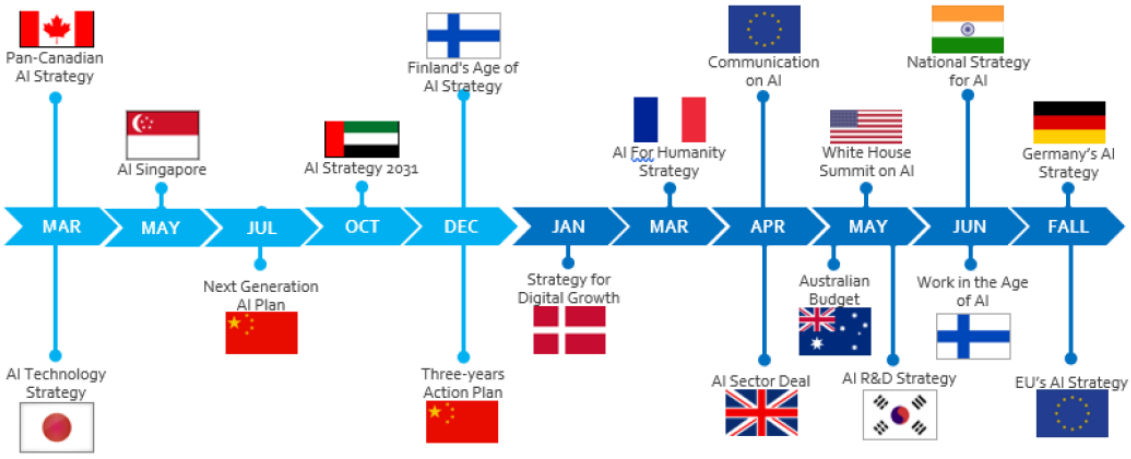

Figure 1. Countries' support of AI (2017 and 2018) (Tim Dutton, 2018)

America

As a contribution toward preparing the United States (U.S.) for a future in which Artificial Intelligence (AI) plays a growing role, the Executive Office of the President, National Science and Technology Council Committee on Technology held a research called "Preparing for The Future of Artificial Intelligence". This research focused on a survey regarding the current state of AI, its existing and potential applications, and the questions that are raised for society and public policy by progress in AI. Based on that research, it can be seen that in general, the approach to regulation of AI-enabled products to protect public safety should be informed by an assessment of the aspects of risk that the addition of AI may reduce, alongside the aspects of risk that it may increase. Hence, it can be concluded that the U.S. Government as policymakers should do whatever it takes to make AI comply with public safety and market fairness.

The first research was "Autonomous Vehicles and Aircraft", this research is very concerned about specific AI that may be able to disrupt the existing regulation. It can be concluded that this research is only initial research aimed to understand what AI is and the potential risk in regulating AI. The second research was prepared by the National Science and Technology Council, Networking and Information Technology Research and Development Subcommittee, namely "The National Artificial Intelligence Research and Development Strategic Plan (The AI R&D)". This research was the further research or supplementary research from previous research mentioned before. This National Artificial Intelligence R&D Strategic Plan established a set of objectives for Federally-funded AI research, both research occurring within the government as well as Federally-funded research occurring outside of the government, such as in academia. The ultimate goal of this research was to produce new AI knowledge and technologies that provided a range of positive benefits to society while minimizing the negative impacts.

Accordingly, this research is limited in discussing AI liability. The AI R&D Strategic Plan also does not set policy on regulation nor does it explore the broader concerns about the liability of AI. This AI R&D Strategic Plan is only a basic study to make recommendations on how AI can safely be used for significant benefit to all members of society, including increased economic prosperity, improved quality of life, and strengthened national security.

In addition, there is a similar research report that discusses AI benefits to all members of society, especially in the economy. This research report is called "Artificial Intelligence,

Automation" (Office of Science and Technology Policy). This research further investigated the effects of AI-driven automation on the U.S. job market and economy and outlines recommended policy responses. In the development of AI regulations, recently, rather than regulating AI liability, the U.S. government instead have focused more on regulating artificial intelligence in the sense of national security. U.S. National Defense Strategy, released in January 2018, identified artificial intelligence as one of the key technologies that will "ensure [the United States] will be able to fight and win the wars of the future" ((U.S. Government, Department of Défense, 2018).

This document focused on how to make policy or regulation options on the development and fielding of Lethal Autonomous Weapons Systems (LAWS), which might use AI to select and engage targets. Since 2014, the United States has participated in international discussions of LAWS at the United Nations (UN) Convention on Certain Conventional Weapons (CCW). Approximately 25 state parties have called for a treaty banning "fully autonomous weapon systems" due to ethical considerations, while others have called for formal regulations or political declarations ((Artificial Intelligence and National Security, 2019).

Asian

Some Asian countries are more prepared for an AI-driven economy than others; economies also differ in terms of the resilience of governments and societies to changes brought about by AI. The Asia Business Council developed a framework Asian Index of Artificial Intelligence to better understand where Asian economies stand in terms of their preparedness for and resilience to AI-led changes (Pau et al., 2017).

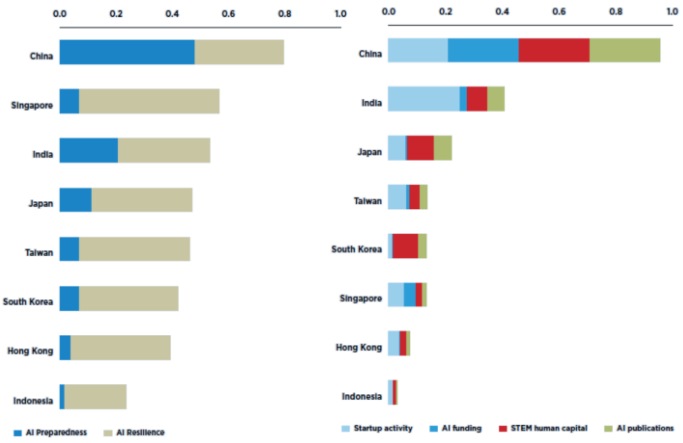

Figure 2. Asian Index of Artificial Intelligence (AI) 2017

Based on the data above, it can be seen that China governments in the Asia-Pacific region have been at the forefront of developing and implementing innovative policies and strategies for AI development. In July 2017, China published a comprehensive AI development policy with the overarching goal to make the country "the front-runner and global innovation center in AI" by 2030. China's government embodied the policy regarding AI through Beijing's AI policy called "The Next Generation Artificial Intelligence Development Plan" (Lee et al., 2017).

From that document, we can see that China government's approach to AI regulation will play an essential role in navigating the unique risks of AI technology, including risk scenarios involving artificial general intelligence and misuse of AI as outlined by experts in recent years. The Chinese government outlined plans for AI safety measures for the first time in the State Council's AI plan (Ding, 2018). Accordingly, recent China's AI policy has emphasized promoting AI technological development and industrial applications and has not given due attention to such issues as ethics and security regulation. Hence, China government still has not yet had any specific regulations

regarding AI liability. What China has is still in the big plan, yet it hasn't discussed how to respond to the trend of AI as a disruptive technology.

Besides China, Japan's government is known as a developed country in Asia that has innovative policies and strategies for AI development. Although Japan lags behind China and India in terms of private-sector efforts in developing AI but has recently announced a government plan to build the world's fastest supercomputer to help spark deep learning research (Hamada, 2016).

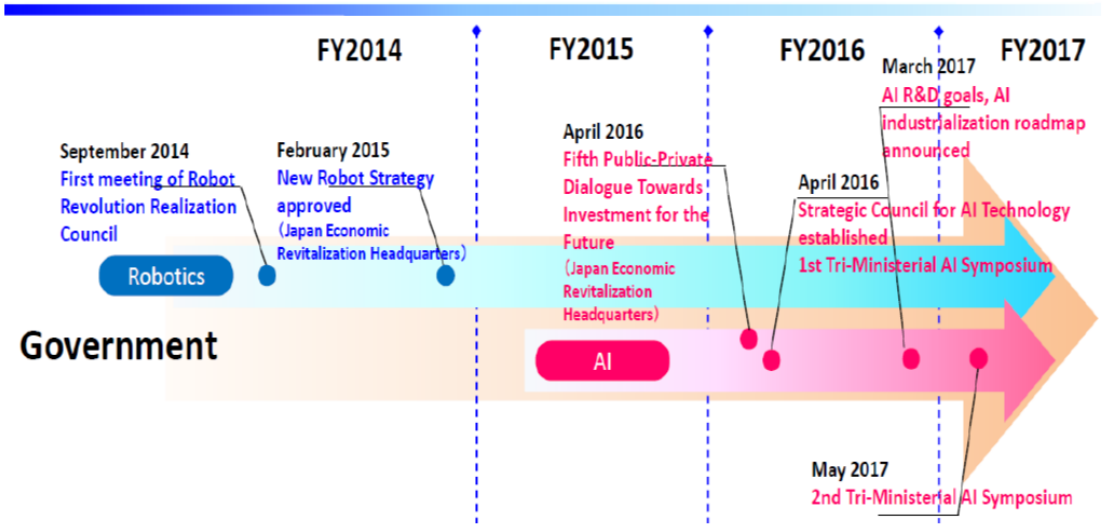

Figure 3. Japanese Government Activities on Robotics and AI

Based on the figure above, it can be seen that Japan has the most in-depth legal strategy out of the selected economies to confront the increasing presence of robots, called "Japan's New Robot Strategy," published in 2015. This strategy outlines everything from Japan's current status as a robotics superpower to a five-year plan that addresses policies on the global standardization of robotics, the establishment of a "Robot Revolution Initiative," and the implementation of robot regulatory reform, among other areas. Furthermore, Japan also plans to develop a new legal framework, which will protect individual and business copyrights for creative assets made by AI (Hamada, 2016).

Conclusion

Based on the explanation of the challenges in conceptualizing the regulation of AI in several regions above, it can be concluded that AI will have far-reaching consequences throughout the region and across the globe. Regarding liability, as AI is organized to directly affect the world, even physically, liability for harms caused by AI will increase in salience. The focus will be to find the liability of the human actor even when liability is better located on AI itself for reasons of the feasibility of AI personhood. Governments all around the world have several roles to play and have necessary oversight. It should monitor the safety and fairness of applications as they develop, and adapt regulatory frameworks to encourage innovation while protecting the public. So, the ubiquity and transformative potential of AI will inevitably push AI regulation to the forefront of policymakers' agendas. Aiming to ensure safety and minimizing the risk of harm at the expense of innovation in a particular field.

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