

MANUS SUPRA MACHINA: LEGALITY AND ETHICAL CONCERNS OF ARTIFICIAL INTELLIGENCE AID TO PRACTICE LAW

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Abstrak: Mencapai masa di mana maraknya teknologi modern, Artificial Intelligence bukan merupakan suatu hal yang asing di berbagai sektor, seperti sektor legal. Namun, di tengah perkembangan pesatnya Artificial Intelligence dan prediksi bahwa Artificial Intelligence akan menjadi lebih marak di masa depan, masih belum adanya suatu dasar hukum yang pasti pada tingkat internasional maupun tingkat regional yang mengaturnya. Hal tersebut merupakan suatu hal yang perlu ditanggapi secara kritis dikarenakan meskipun belum adanya landasan hukum yang jelas, terdapat pula beberapa isu terkait etika penggunaannya. Artikel ini akan mencoba untuk memahami dan menganalisa Langkah-langkah yang tepat untuk diambil kedepannya oleh para stakeholders untuk menyelesaikan masalah mengenai ketiadaannya suatu dasar hukum tentang Artificial Intelligence serta wawasan terkait aspek lainnya yang tidak kalah penting untuk memastikan masa depan yang baik dari penggunaan beretika dari Artificial Intelligence secara umum maupun penggunaannya dalam sektor hukum.

Kata Kunci: Artificial Intelligence, Kerangka hukum, Etika, dan Penggunaan

Abstract: Reaching the age of modern technology, Artificial Intelligence is no stranger to several sectors of business, such as the legal sector. However, despite its growing popularity and predicted growing demand, there is still no specific international nor any prominent and concrete regulatory framework for the utilization of Artificial Intelligence, especially for its use within the legal sector. This is a concerning matter as despite the growing Artificial Intelligence usage, there is also the severe issue of it's unethical use. This article will attempt to comprehend and analyze further steps to be taken by stakeholders to solve the emptiness left by the non-existent legal framework for Artificial Intelligence as well as provide an insight on other aspects relevant to ensure future ethical use of the Artificial Intelligence generally and also within the legal sector.

Keywords: Artificial Intelligence, Legal Framework, Ethics, and Utility.

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A. INTRODUCTION

1. Background

As revolutions occur from time to time, the advancing human societies are constantly plagued with growing concerns and the desire to refurbish and modernize their tools and technology as a mechanism to ensure survival and ease the conducts of doing business. The solution for such concerns and desire, in turn, is a God-given right inherently owned by humans that is nestled inside the human cranium that is capable of strategic thinking and problem solving, this gift is what society calls as human intelligence. However, reaching the prime age of the 4.0 Industrial Revolution, this period of time is the perfect example of human intelligence put to work so that future works can be done without it, where the use of modern smart technology such as Artificial Intelligence is of no foreign element.

Artificial Intelligence is a system that studies its surrounding environment to be able to obtain a conclusion or a perception of a particular issue within the environment and calculate a necessary action to be taken that might maximize its chances of achieving a goal to resolve the targeted issue¹. Artificial Intelligence is also often viewed as a discipline that is in search of ways to build machines that could do the thinking for humans². Countless industries and services are starting to invest in bringing Artificial Intelligence into their offices with the objectives to make execution of tasks and transactions more efficient and less time consuming. This includes the recent introduction of Artificial Intelligence into the legal sector, where Artificial Intelligence is utilized to do daily tasks, such as counting billable hours of legal counsels in respects to a project that is handled by law firms and providing legal insights for clients – that normally those within the legal profession consider part of their job description³. The involvement of Artificial Intelligence systems within the legal sector comes with the primary purpose to benefit key players within the legal sector such as law firms, other forms of entities and individuals within it as the direct assistance of Artificial Intelligence systems to legal tasks could increase the efficiency and ease of doing tasks, which would in turn boost productivity⁴.

¹ Poole, Mackworth, and Goebel, *Computational Intelligence: A Logical Approach* (New York: Oxford University Press, 1998), 1.

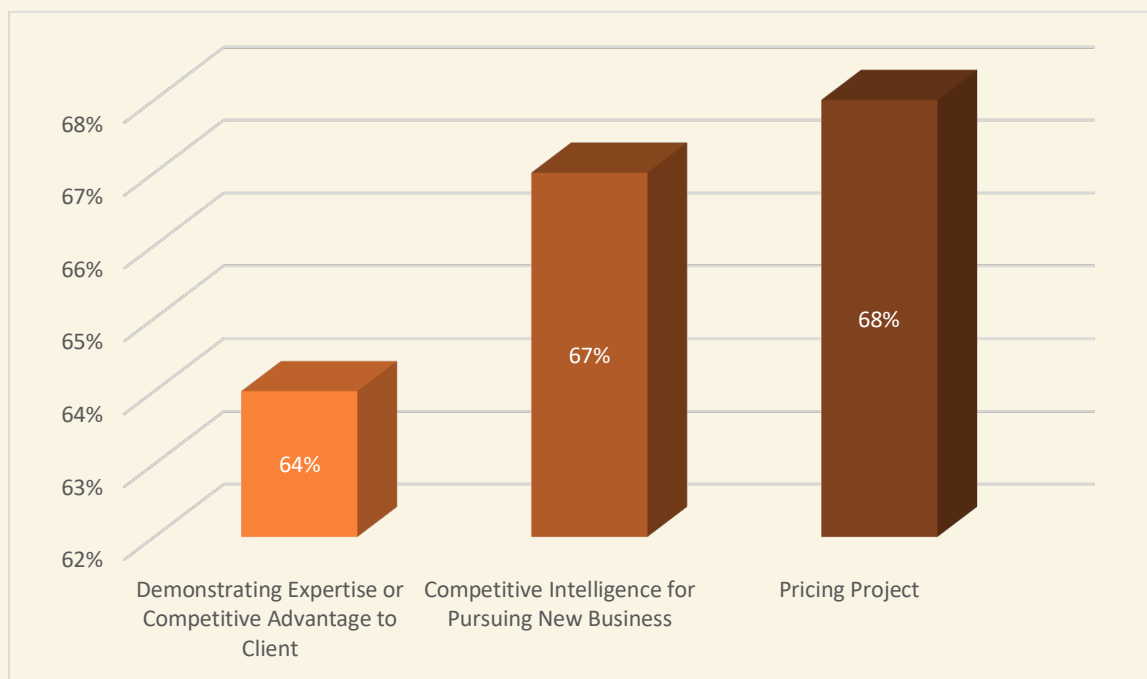
² Steven Goldberg, "Artificial Intelligence and the Essence of Humanity," in *Culture Clash: Law and Science in America* (New York: NYU Press, 1994), 151.

³ Mordor Intelligence, "AI Software Market in Legal Industry – Growth, Trends, Covid-19 Impact, and Forecasts (2021 – 2026)," 2020, Accessed through: <https://www.mordorintelligence.com/industry-reports/ai-software-market-in-legal-industry>

⁴ Andrew Clark, "Information Technology in Legal Services," *Journal of Law and Society* 19, No. 1 (1992), 15.

Graph 1.1

Global Major Usage Cases of AI Software in the Legal Industry in 2019 (%)



Source: LexisNexis Legal Analytics Study (2020)

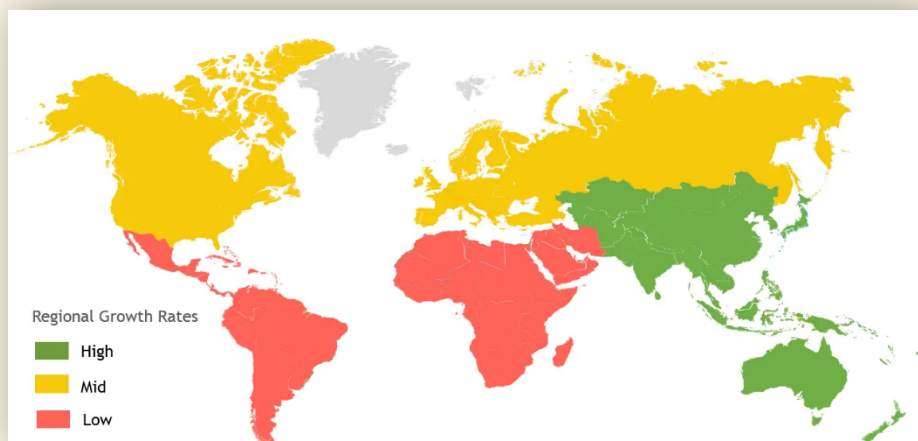
The growing global presence of Artificial Intelligence as a part of technology in the legal industry is proven to have provided a positive impact that eases the burden of legal practice⁵. As demonstrated in the data above, as provided by LexisNexis, acquiring Artificial Intelligence is also a part of being ahead and establishing presence within the competitive environment of the legal industry – where 64% of global use of Artificial Intelligence within the legal industry is allocated to demonstrate expertise or competitive advantage to clients and 67% of global use of the software in the industry is to provide competitive intelligence for pursuing new businesses⁶.

⁵ Cary G. Debessonnet and George R. Cross. "An Artificial Intelligence Application In The Law: Cclips, A Computer Program That Processes Legal Information." *High Technology Law Journal* 1, No. 2 (1986), 329.

⁶ Mordor Intelligence, *loc. cit.*

Illustration 1.1

AI Software Market in Legal Industry – Growth Rate by Region (2020 – 2025)



Source: Mordor Intelligence (2021)

The widespread recognition for Artificial Intelligence utility is ever growing since the recognition of its functioning benefits and presence are spreading globally. As predicted by Mordor Intelligence, the legal industry within the Asian-Australian region would experience a high growth-rate for the AI market⁷.

As readers have come to understand the existence of Artificial Intelligence in several sectors, especially within the legal sector – it is necessary to comprehend that the Artificial Intelligence in question acts as a procedural support system that has begun to resemble and think like a seasoned legal practitioner⁸ - meaning, that these Artificial Intelligence systems are designed and enabled to replicate the legal performance with a magnitude similar to those produced from human intelligence⁹, in which it is based off from the formalized representation of legal knowledge and the reconstruction of the typical legal problem-solving procedures¹⁰. However, as society is more concerned with commercializing Artificial Intelligence and the practicalities surrounding it, the issue of whether utilizing Artificial Intelligence is legal or not is often eclipsed, which led to a number of important questions that should be addressed and tackled remained unanswered – these unanswered questions often lead to problems regarding ethical use. The issue concerning ethics of the modern technology has been a growing concern often correlated to the capacity of having sufficient technological

⁷ *Ibid.*

⁸ Clark, *op. cit.*, 15-16.

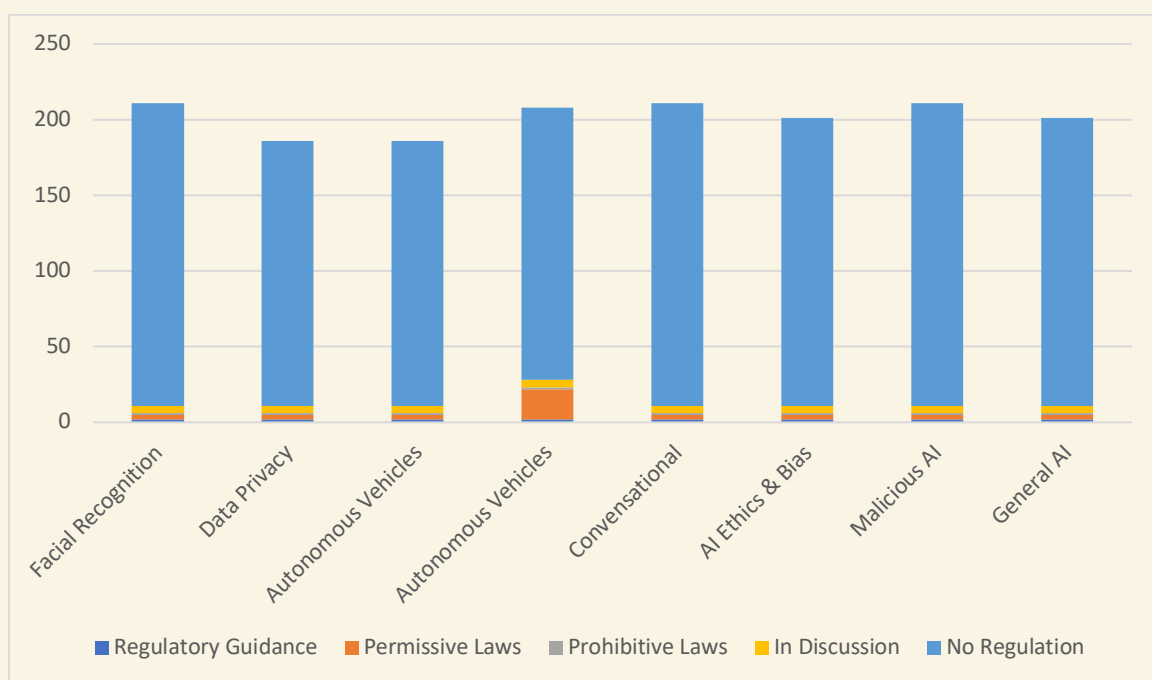
⁹ Debessonnet and Cross, *op. cit.*, 330.

¹⁰ Clark, *op. cit.*, 16.

literacy¹¹, where it is needed to maintain a conscious control over the man-made system and use it without jeopardizing any societal morals and create any social hazards that is capable of demanding legal consequences in return. Hence, to avoid any undesirable outcomes of utilizing Artificial Intelligence in sectors, the existence of a legal framework – which in essence is enacted to provide grounds and limiting thresholds for actions – is of utmost importance.

Illustration 2.1

Country and Regional AI Laws and Regulation



Source: Cognilytica (2020)

Despite growing global ethical concerns and questions regarding the legality of Artificial Intelligence that is parallel to the fast-paced growth of the global adoption of the Artificial Intelligence system, there are still a plethora of regulatory legal gaps concerning Artificial Intelligence and its surrounding relevant aspects such as ethics. As demonstrated in the data above from Cognilytica in 2020¹², out of all existing countries in the world, there are no regulations regarding Artificial Intelligence ethics (while also acknowledging that there are several countries that are still discussing the enactment of such regulations).

¹¹ International Technology Education Association, *Standards for Technological Literacy: Content for the Study of Technology (3 ed.)*, (Reston: ITEA, 2000) ISBN 1-887101-02-0.

¹² Forbes, “AI Laws are Coming”, 2020, Accessed through: <https://www.forbes.com/sites/cognitiveworld/2020/02/20/ai-laws-are-coming/?sh=45fdf654a2b4>

Additionally, an ethic guideline for Artificial Intelligence is necessary because of the standards set during the creation of Artificial Intelligence itself. In which, the common standard is that autonomy-promoting is ensured, and liberal use is protected. The common threshold for Artificial Intelligence is that it should guarantee the individual's data's privacy and that it should not harm an individual's ability to determine and to make choices – in short, the system should not control and manipulate individuals¹³.

Lastly, to further provide an illustration of why such regulation is certainly necessary, this writer shall also provide an example of one of the threats in the ethical utilization of Artificial Intelligence – malicious software (hereinafter referred to as “malware”). Malware could be planted into the Artificial Intelligence system to collect data and create data breach. When the Artificial Intelligence is utilized to gather data and information from a person, a malware, unknowingly, could steal the data gathered by the Artificial Intelligence and give it to the third-party operation the Artificial Intelligence. Imagine the possibility of when Artificial Intelligence is utilized to gather data during a legal aid consultation, all of the client's data is recorded but at the same time the malware that exists within the Artificial Intelligence could transfer the data to another third party, whereas there is a further possibility of the stolen data to be misused and sold¹⁴, and in respect to this matter, the individual who willingly gave his or her data to the Artificial Intelligence system could suffer substantial loss over the breach of data privacy.

Therefore, as elaborated above, this article attempts to study and analyze the necessary and urgent measures to take in terms of regulating Artificial Intelligence and eventually safeguarding the ethical use of AI in sectors, in order to answer a more specific question of legality and ethics of Artificial Intelligence in the legal sector.

B. ANALYSIS

1. Providing Thresholds and Increasing Knowledge for Artificial Intelligence Use

a. *The Recent Advancement of Regulatory Framework for Utility of Artificial Intelligence*

As previously discussed, readers would have to come to the comprehension that there is a limited number of regulations regarding the use of Artificial

¹³ Ryan, Mark and Brnd Carsten Stahl, “Artificial Intelligence Ethics Guidelines for Developers and Users: Clarifying Their Content and Normative Implications,” *Journal of Information, Communication and Ethics in Society* 19, No. 1 (2020): 61-86. doi:10.1108/jices-12-2019-0138.

¹⁴ Donovan Typhano Rachmadie, “Regulasi Penyimpangan Artificial Intelligence Pada Tindak Pidana Malware Berdasarkan Undang-Undang Republik Indonesia Nomor 19 Tahun 2016,” *Recidive* 9, No. 2, (May 2020): 131-132.

Intelligence and the ethics behind Artificial Intelligence. Although there are no concrete regulations for Artificial Intelligence, there have been several advancements to regulate Artificial Intelligence on an international level. For example, in May 2019, The Organisation for Economic Co-operation and Development (hereinafter referred to as “OECD”) has released The OECD Principles on Artificial Intelligence, which aims to promote Artificial Intelligence use that is trustworthy and democratic values¹⁵. Furthermore, this international focus on Artificial Intelligence has led to several regions and its governing bodies to initiate a facilitated and collaborative effort to create a strategy and enact a policy or a regulatory framework for Artificial Intelligence use. The European Commission (hereinafter referred to as “EU Commission”) in turn, has initiated a Declaration of Cooperation – in which, signatories comprise of both European Union and non-European Union countries – a declaration where all signatories agreed to participate in a joint cooperation to “ensure an adequate legal and ethical framework, building on EU fundamental rights and values, including privacy and protections of personal data, as well as principles such as transparency and accountability”¹⁶.

These aforementioned principles of Artificial Intelligence, are to this date, used as a “soft law” to regulate Artificial Intelligence use, whereas it is comprehensively elaborated within the G20 Artificial Intelligence Principles¹⁷, these principles include: 1) “inclusive growth, sustainable development and well-being”; 2) “human-centered values and fairness”; 3) “transparency and explainability”; 4) “robustness, security and safety”; and 5) “accountability”.

Additionally, the Artificial Intelligence principles are poured into several national strategies as implemented by governmental bodies such as the EU Commission’s Artificial Intelligence Watch, Council of Europe’s Artificial Intelligence Initiatives, and the Canadian Institute for Advanced Research to name a few. that have been considered to further advance efforts of Artificial Intelligence regulations. Based on the strategies that have been taken, could be divided into two categories¹⁸, namely:

¹⁵ Organisation for Economic Co-operation and Development, “State of Implementation of the OECD AI Principles: Insights from National AI Policies,” *OECD Digital Economy Papers*, No. 311. (2021) ISSN: 20716826.

¹⁶ NiFhaolain, Hines and Nallur, “Assessing the Appetite for Trustworthiness and the Regulation of Artificial Intelligence in Europe,” *Proceedings of the 28th Irish Conference on Artificial Intelligence and Cognitive Science*, Vol. 2771 (2020): 133-144.

¹⁷ Annex 1 of G20 Ministerial Statement on Trade and Digital Economy, 2019, accessed through: <https://www.mofa.go.jp/files/000486596.pdf>

¹⁸ NiFhaolain, Hines and Nallur, *loc.cit.*

1) Expressing the intention of adopting an ethical, trustworthy, and legal Artificial Intelligence through National Government

The role of government is important to secure the importance of having Artificial Intelligence regulations enacted. Whereas, the Government should have the tasks of initiating laws and regulations related to trustworthy Artificial Intelligence and ethics as a standalone and focused area. Furthermore, the Government should also consider international cooperation to advance the international effort of securing the use of Artificial Intelligence, this is done not only to improve foreign relations in partaking an international and mutual responsibility between countries, but also to secure an inward investment for the Artificial Intelligence sector in the respective country. Lastly, the government should form a National body for Artificial Intelligence, which would have the task of evaluating the ethical use of Artificial Intelligence within the respective country.

2) Applying tools for implementing ethical Artificial Intelligence

Aside from the involvement of a national government to enforce Artificial Intelligence ethics, there are also several instruments that necessary to be possessed for a country which operates Artificial Intelligence. These instruments include the certification or standards for Artificial Intelligence as well as specific Artificial Intelligence laws and regulations.

Thus, as there is still more progress to be made concerning the enactment of an international legally binding regulatory framework for Artificial Intelligence and its ethics, and as countries still need to enact more specific laws regarding Artificial Intelligence, countries should be more focused and invested in joint efforts to secure an end product of a thorough and comprehensive legal framework for Artificial Intelligence use. Furthermore, the takeaway from recent studies and findings regarding the regulatory framework for Artificial Intelligence is that national strategies should be set in plan in order to further provide legal grounds for Artificial Intelligence operation within a country, in order to prevent unwanted legal gaps and loopholes – whereas not only does it comprise of general clauses for the utility of Artificial Intelligence, but there also has to be a separate regulatory framework for the use of Artificial Intelligence that concerns a specific sector. Hence, the enactment of a specific Artificial Intelligence regulation dictating its use within the legal sector should be explored and pursued.

b. Efforts in Increasing Ethical Technological Literacy

As an implementation of the G20 Artificial Intelligence principles, one of the courses of action recommended for policy was for national governments to be invested in the research and development of Artificial Intelligence systems, which specifically includes the act of developing Artificial Intelligence Research and Development (hereinafter referred to as “R&D”) strategies and plans¹⁹. Artificial Intelligence R&D is needed to gain a comprehensive perspective on the technology of Artificial systems, as well as to improve the relevant skills and infrastructure to set a coherent future for the utility of Artificial Intelligence.

Additionally, another course of action relevant to this discussion is the recommendation of building human capacity and preparing for labor market transformation²⁰. This recommendation includes the objective of creating a tech-savvy society, that is capable of controlling Artificial Intelligence – in which, it relates with having technological literacy²¹.

The concept of technological literacy could be defined as a general understanding of technology as possessed by individuals within society, whereas the understanding of such may not be of a comprehensive level, but at the least is of sufficient level so that individuals could cope and function well within a technology-dependent environment where a fast-paced technological development is the norm²².

Furthermore, as technological literacy is comprehended, this eventually demonstrates that the role of maintaining, controlling and upholding ethics in Artificial Intelligence is not only the responsibility of a national government, but it is nonetheless a two-way street that is also the responsibility of other stakeholders such as the society and the individuals within it that would partake in the optimum use of the Artificial Intelligence on a daily basis. By having substantial and practical knowledge of Artificial Intelligence, one would understand how to operate it and the understanding of what to use it for – ultimately, individual users would be able include their moral imperatives in utilizing Artificial Intelligence.

Hence, the key takes from having comprehension of technological literacy is that as there is a rapid advancement of technology surrounding and shaping

¹⁹ Annex 1 of G20 Ministerial Statement on Trade and Digital Economy, 2019, accessed through: <https://www.mofa.go.jp/files/000486596.pdf>

²⁰ *Ibid.*

²¹ William, “Technological Literacy: A Multiliteracies Approach for Democracy,” *International Journal of Technology and Design Education* 19, No. 3 (August 2009): 237-254.

²² National Academy of Engineering and National Research Council, *Tech Tally: Approaches to Assessing Technological Literacy* (Washington DC: The National Academies Press, 2006), 32.

society, understanding how technology works is a desirable skill. However, what is even more desirable is having the right moral compass and ethics to utilize technology. Thus, society, especially practitioners and even in the context of the legal field, legal practitioners, must also be well equipped with the hard skill of technology operation and management and well informed of the ethics of using modern technology such as Artificial Intelligence.

C. CONCLUSION

To sum up everything that has been stated so far, the international and subsequently, regional efforts done to enact a regulatory framework to combat unethical use of Artificial Intelligence is far from finished nor it is nearing its end. Ideally, a concrete international framework should have been enacted so that it could in turn, act as a reference for regional frameworks that regulates Artificial Intelligence. There are approaches to be tested and measures to be taken to formulate a proper, calculated strategy to fill the void of legal uncertainty concerning the utility and ethics of Artificial Intelligence and not just rely on the existing *lex generalis* to make interpretations to solve the problem of the legality and ethical use of Artificial Intelligence. Therefore, as society is still dependent on making its own interpretation as a result of the harmonization between current existing laws and the practical use of modern technology²³ – that in this case is always ahead of the law – conducting efforts to speed the process of formulating a proper and decent regulatory framework should be of the utmost priority. After all, it would be an irony if legal personnel were to use Artificial Intelligence – an object of uncertain legal grounds – as a tool capable of aiding in tasks such as formulating a legal opinion or reviewing legal contracts. The important lesson to be learned is *manus supra machina* (where man is superior or above to machines, also translatable to ‘hand over the machine’), and not the reverse.

The author would also like to provide several suggestions that could be taken by stakeholders (country and its citizens) regarding the issue of legality and ethical use of Artificial Intelligence. The following are solutions that could be opted for by stakeholders, in which these solutions comprise of:

²³ “Theory of Convergence of Law” – is a conceptual and theoretical understanding concerning the convergence of several variables of technology, economy, and law in respect to human relations and the society in an age of digital information. Danrivanto Budhijanto, *Teori Hukum Konvergensi* (Bandung: Refika Aditama, 2014) ISBN 978-602-794-859-4.

1. Support Artificial Intelligence R&D and formulate a proper strategic policy

All stakeholders should play their respective parts to voice relevant concerns and advocate for Artificial Intelligence Laws to be enacted, so that the current legal gaps and uncertainty could eventually be tackled under a step-by-step strategic approach. Furthermore, stakeholders could also consider in providing administrative procedures such as the obligation to obtain licensing or an acknowledged standard of certification for Artificial Intelligence systems to further provide clear thresholds to the proposed Artificial Intelligence law. National governments should also support the international effort of formulating a strategic Artificial Intelligence policy by joining an international cooperation or be critically active in international forums.

Thus, once the enactment of a international legal framework for Artificial Intelligence and once it has been successfully implemented into national frameworks, there should also be further implementing regulations concerning Artificial Intelligence, especially further regulations that specifies the use for Artificial Intelligence in respect to a specific sector. Thus, if the activity of Artificial Intelligence is present within the legal sector, the government should also enact an implementing regulation for the ethical utility of Artificial Intelligence within the legal sector.

2. Invest in technological literacy

Since this is already the age of digital technology, where digital literacy should be a necessity (while in reality, several parts of the world, including the author's country of origin, digital literacy is a luxury and a privilege that is not easily accessible for the public), all stakeholders should partake in investing time, equipment and resources to educate, advocate and integrate technological literacy to further equip and enrich society, experts and practitioners within sectors of business (taking the example of legal practitioners such as corporate lawyers or notaries within the legal field) with the necessary practical skills to further increase the quality of human resources in these modern times, keeping in mind, that quality does not only involve hard skills that are relevant and practical, but also of ethical nature.

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