

THE IMPORTANT ROLE OF ARTIFICIAL INTELLIGENCE REGULATION IN PROTECTING PUBLIC INTEREST

Francisca Romana Nanik Alfiani¹, Faisal Santiago²

Universitas Borobudur, Indonesia

E-mail: ciscaromana@gmail.com1, faisalsantiago@borobudur.ac.id2

KEYWORDS	ABSTRACT
Artificial Intelligence	Artificial intelligence provides both good and evil. For this reason, artificial
Regulation, Public	intelligence must be regulated to protect the public interest. The research
Interest	results show that regulating artificial intelligence is not easy, it is very
	complicated, and there are many challenges, especially as the development
	of artificial intelligence technology is very rapid while the law is slow to
	anticipate it. By 2022, globally, there will be 37 regulations governing
	artificial intelligence. From the results of the comparison of various best
	practices and regulations from other countries leading in the field of
	artificial intelligence, such as the European Union, China, and the United
	States framework approach, it can be used as input for developing artificial
	intelligence regulations in Indonesia that guarantee the use of artificial
	intelligence responsibly, respecting values. humanity, and does not hinder
	the creation of an artificial intelligence development ecosystem.

INTRODUCTION

Artificial intelligence is a very valuable asset but can also pose a threat to privacy and data security because it continues to evolve and develop its own learning. However, it cannot be denied that society is increasingly dependent on artificial intelligence to solve complex and high-risk problems in various sectors such as health (patient diagnosis), financial services, education, trade, defense, security, information, and communications. This dependency, of course, brings new challenges and the need for a legal framework to deal with the impact of big data, preventing algorithm bias, and other risks posed by artificial intelligence. Concerns about the risks and negative impacts of the development and use of artificial intelligence have called on leaders, CEOs of artificial intelligence technology developers, state leaders, and policymakers to begin to gather to choose the best path. They don't want to kill technological innovation, but they also want artificial intelligence to serve a good purpose. However, global views on artificial intelligence regulation still vary, and the debate about the need for regulation continues to grow along with the emergence of new technologies, so artificial intelligence regulation is still local.

Although regulation of artificial intelligence can play an important role in safeguarding the public interest, minimizing risks, and creating a safe and comfortable innovative environment, regulating artificial intelligence is not easy; it is complicated, and there are challenges that must be overcome and circumvented carefully. According to Cason Schmit, Assistant Professor of Public Health, Texas A&M University, quoted by The Conversation 2023, "setting up artificial intelligence is not easy; it is very complicated. To regulate artificial intelligence well, we must first define and understand the risks and benefits of artificial intelligence. Defining artificial intelligence legally is important in order to identify what matters may be subject to the law." However, in reality, artificial intelligence technology is still developing, so it is difficult to establish a fixed legal definition. It is impossible to regulate the development of artificial intelligence technology; what can be regulated is the application of artificial intelligence technology in various sectors.

METHOD RESEARCH

This article uses normative legal research, namely normative research, but not only examines positivist law, regarding artificial intelligence but also all aspects of regulating artificial intelligence, including development, benefits, and risks, through a comparison of artificial intelligence regulations made by the European Union, United Kingdom, United States, and China. global agreements, primary legal materials in the form of laws and regulations related to the discussion in this article, and secondary legal materials in the form of journals, books, opinions, and news, all of which were analyzed using descriptive analysis by presenting an overview of the results of this article without providing justification for the results of the article. This and the following are concluded.

RESULTS AND DISCUSSION

Artificial Intelligence

Up to now, there has been no standard definition of artificial intelligence, but from various literary sources, it can be concluded that artificial intelligence is the ability of digital computers or robots controlled by computers to carry out tasks generally associated with intelligent creatures. The term is often applied to systems development projects endowed with characteristics of human intellectual processes, such as the ability to think, find meaning, generalize, or learn from past experience. Since the development of digital computers in the 1940s, it has been demonstrated that computers can be programmed to carry out very complex tasks, such as, for example, finding proofs for mathematical theories or playing chess very skillfully. However, despite continued advances in computer processing speed and memory capacity, no program has yet been able to match human flexibility in broader domains or in tasks that require a lot of everyday knowledge. On the other hand, some programs have reached the level of performance of human experts and professionals in performing certain specific tasks, so artificial intelligence in this limited sense is found in applications as diverse as medical diagnosis, computer search engines, and speech or handwriting recognition. All but the simplest human behavior is ascribed to intelligence, while even the most complex insect behavior has never been considered indicative of intelligence. What is the difference?

Consider the behavior of the digger wasp, Sphex ichneumoneus. When a female wasp returns to her burrow with food, she first deposits it in the doorway, checks for intruders inside her burrow, and only then, if the coast is clear, takes the food inside. The true nature of the wasp's instinctive behavior is revealed if the food is moved a few inches from the entrance to its burrow while it is inside; when it emerges, it will repeat the entire procedure as often as the food is moved. The intelligence that is conspicuously absent in Sphex's case must include the ability to adapt to new circumstances (Indonesia Itu Concern Forum-Forum Penggait Indonesia Itu, 2013).

Artificial intelligence was created to carry out functions, namely assisting humans in doing work, minimizing errors in doing work, automating work, and applying artificial intelligence to increase effectiveness and efficiency and productivity. In this digital era, the use of artificial intelligence is increasingly massive, such as face ID (facial identification), smartphone security, e-commerce recommendations, search engines, and social media. Apart from that, artificial intelligence is also used for marketing (digital marketing), there is a translation feature for studying abroad, and to minimize production errors, the manufacturing industry also uses artificial intelligence (GreatNusa, 2023).

Artificial Intelligence Risks

Artificial intelligence has improved the quality of human life, efficiency of time, and energy. But artificial intelligence also brings risks and challenges for humans. There have been several cases of the use of artificial intelligence that have had adverse impacts and raised ethical concerns. The sophistication of artificial intelligence allows it to operate autonomously without human intervention. Tesla vehicles operating on the highway independently have caused fatal accidents, hitting pedestrians. Another case happened to a Belgian citizen who stated that her husband committed suicide after talking about climate change with an artificial intelligence chatbot (Giovani Dio Prasasti, 2023).

Furthermore, several cases that often occur due to the use of artificial intelligence include changing a person's voice, which is often found on various digital platforms. Biased artificial intelligence content that is racist and sexist Microsoft-published chatbots, ChatGpt containing flaws and inaccuracies, Deepfake videos, and concerns about accountability, fairness, autonomy, and the proper functioning of artificial intelligence systems. Another thing that is very disturbing and worrying is the use of artificial intelligence in the Israeli-Palestinian war, which poses a terrible threat in the form of state violence based on artificial intelligence algorithms (Marissa Newman, 2023). Quoting Amnesty International's Report on Automated Apartheid, it notes how Israel uses the Red Wolf facial recognition system to track Palestinians. Israel's actions constitute a violation of human rights (Amnesty International, 2023). A part, from the above mentioned, the use of artificial intelligence also has the impact of bias and discrimination, as the case of Amazon's automatic resume filter, which excluded female candidates, is one notorious example. Apple's credit card algorithm has also been accused of discriminating against women, with men receiving higher credit limits than women with equivalent credit qualifications.

A huge impact on people's lives. A study conducted by UC Berkeley found that risk prediction tools used in healthcare, which affect millions of people in the United States each year, have considerable racial bias. On a given risk score, black patients were significantly sicker than white patients. Privacy and security concerns, such as facial recognition technology being deployed in cities and airports across the US, As a result of privacy concerns, many cities, including Oakland, San Francisco, and Brookline, have implemented bans on the technology.

The influence of the use of artificial intelligence that extends to various fields, such as civil rights, politics, economics, society, and culture, certainly raises ethical concerns about

human enslavement by man-made machines, job loss, military applications, lethal autonomous weapons, and invasion of privacy. The presence of intelligence has brought new challenges for humans in managing complex and high-risk technologies responsibly. So what is the role of technological progress in regulating artificial intelligence systems for good, ethical, and legal purposes and minimizing the risks posed by artificial intelligence? The role of regulation in keeping pace with the development of artificial intelligence is in the spotlight.

Regulating artificial intelligence

The main problem in dealing with artificial intelligence technology is how to deal with the industry that designs and controls this technology, therefore there must be adequate regulations for them and how to deal with the industry that designs and controls this technology, therefore there must be adequate regulations for them. As Susskind said, "how important it is to regulate and regulate digital technology to minimize its negative excesses" (Susskind, 2022) However, in reality regulating artificial intelligence technology is not easy, it is complicated and there are challenges. The law always staggers with the times (Het recht hinkt achter de faiten aan).

According to (Wheeler, 2023) there are three main challenges to regulating artificial intelligence. First, speed. Adapting regulations to the extraordinary speed of AI development requires agile regulation to prevent negative impacts related to privacy, market concentration, user manipulation, and the spread of disinformation. Second, determine the material that needs to be regulated. Regulation of artificial intelligence must take into account the complexity of this technology and distinguish between different risks and uses. This involves three threshold areas: addressing abuse of legacy models, addressing ongoing digital abuse, and addressing the impact of artificial intelligence itself. A risk-based approach with a focus on duty of care, transparency, safety, and responsibility is the recommended solution. Third, identify who regulates it and how it is implemented. In the digital era, industry innovators often set the rules. This raises questions about who should create a regulatory policy for AI and how it should be implemented.

Considering that at this time, artificial intelligence has become an increasingly inseparable part of people's lives throughout the world and regulation of artificial intelligence technology has become a fundamental need, a number of large countries in the field of artificial intelligence technology, such as England, the United Kingdom, the United States, the European Union, and China, Seriously, they have formulated rules for the development and use of artificial intelligence technology through different approaches, but they all have the same aim.

They want to ensure that the development and use of artificial intelligence provide benefits to society and do not cause negative impacts that are detrimental to society. England and the United Kingdom prefer a light touch approach by not enforcing new regulations to boost investment in the digital technology sector and make Britain an artificial intelligence superpower through the publication of several books. And is looking for ways to control artificial intelligence technology that can create content automatically. The British Prime Minister, Rishi Sunak, aims for the UK to be a leader in making rules for AI. Meanwhile, the United Kingdom, in March 2023, released a set of regulatory studies known as "AI Regulation: A Pro-Innovation Approach." This study includes an approach and evaluation of the impact of regulations on artificial intelligence. The United States, in both the Trump and Biden eras, despite choosing a light touch approach, has taken significant steps in regulating artificial intelligence. The United States has established rules for the use of AI in government agencies called the "Blueprint for an AI Bill of Rights." to ensure that AI does not have a negative impact on society. The National Agency for Standards and Technology (NIST), January 2023, has created guidance and resources on AI entitled "Artificial Intelligence Risk Management Framework (AI RMF 1.0)" to ensure transparency in its development. The White House, through the Office of Science and Technology Policy, has also released a basic plan regarding human rights in the field of artificial intelligence (AI), called the "Plan for an AI Bill of Rights." The basic plan contains principles and suggestions for implementing AI in the United States in a more responsible manner. According to the AI Index Annual Report 2023 published by Stanford University, 37 bills related to artificial intelligence were passed into law globally in 2022. The United States led the push for regulation with nine bills, followed by Spain with five bills and the Philippines with four laws (University, 2023). Meanwhile, Indonesia so far does not have specific regulations regarding artificial intelligence.

The European Union enforces risk-based regulations with strict supervision, maintaining a balance by providing measurable freedom for technological development. It's like the head is removed, but the tail is still held. When the head is potentially problematic, then the tail is pulled. Since 2021, the European Union has designed the EU AI ACT, which was ratified by the European Union Parliament in December 2023. AI ACT was created to protect democracy, the rule of law, and fundamental rights such as freedom of expression, while at the same time encouraging investment and innovation. Prohibits some uses of AI because they are considered to have insurmountable risks, such as social scoring systems that determine how people should act, some types of predictive policing, and emotion recognition systems in schools and workplaces.

Meanwhile, China is designing artificial intelligence technology regulations through a security approach. Regulation of artificial intelligence technology in China to safeguard "the basic values of socialism" The development of technology is completely dedicated to the interests of state ideology. The Cyberspace Administration of China (CAC) is the authority that regulates technology in the country. In April 2023, it will consider new rules for AI, including guidelines for research, development, and use of AI in the public and private sectors.

Artificial intelligence regulations that have been made by a number of countries are still local and for the interests of their respective countries, while the development of artificial intelligence technology has become global, requiring a big legal framework to be implemented jointly throughout the world. For this reason, 28 countries, including figures and CEOs of artificial intelligence technology developers who attended the High Level Conference, which took place November 1–2, 2023, at Bletchley Park, not far from the City of London, agreed to discuss joint rules for regulating artificial intelligence, which are contained in the Declaration Bletchey, which outlines a shared vision to encourage safety and ethical considerations in the development and application of artificial intelligence. The basic principles agreed upon include international cooperation, security standards, ethical AI, transparency and accountability, and sharing knowledge (Declaration, 2023). Through the Bletchley Declaration, the global community committed to ensuring that the course of AI evolution is aligned with the greater

good of humanity. This is a momentum for collaborative efforts in building a global framework to ensure useful intelligence and mitigate risks that arise. However, until now, there has been no further detailed explanation regarding how it is regulated and how the government can regulate the development of adaptive artificial intelligence.

Regulation of Artificial Intelligence in Indonesia

Indonesia does not yet have specific regulations for the application of artificial intelligence technology, although since 2020, the Indonesian government has released the Indonesian National Artificial Intelligence Strategy regarding ethics and policy, talent development, data ecosystems, and AI development infrastructure. However, the AI National Strategy is not a binding legal document but only a national policy direction. However, Indonesia already has regulations relevant to the use of AI, including Law No. 1 of 2024 concerning Electronic Information and Transactions (UU ITE), Law No. 27 of 2022 concerning Personal Data Protection (UU PDP), PP No. 71 of 2019 concerning Implementation of Electronic Systems and Transactions (PP PSE), Regulation of the Minister of Communication and Information Number. 5 of 2020 concerning Implementation of Private Scope Electronic Systems (Permen PSE), as well as Law No. 28 of 2014 concerning Copyright (Copyright Law) and In December 2023, the Indonesian government issued Circular Letter Number 9 of 2023 concerning the ethics of artificial intelligence as a guide for business actors in developing internal policies for utilizing artificial intelligence. According to the Law on the Establishment of Legislative Regulations, The Circular does not fall into the category of statutory regulations and is a short-term strategy. Circulars function to provide the latest explanation regarding these problems to the public. Shows the government's attitude towards a particular problem. And it can be used as a basis for the direction of forming legal instruments in the future (Fachry Hasani Habib, 2024).

The European Union AI ACT regulates the use of AI comprehensively and is currently one of the leading countries in artificial intelligence regulation. A series of special regulations have been issued in China that focus on various AI-related activities such as generative AI, algorithm recommendation, and AI innovation and development. Indonesia is almost the same as Indonesia, which has separate regulations regarding digital technology such as personal data protection, cyber security, and e-commerce. The difference is that China still chooses to issue special laws to regulate artificial intelligence.

Several things that can be used as a reference for Indonesia include the establishment of artificial intelligence regulations in China at the national, regional, and local levels. Such as the Sanghai AI Regulation on AI Industry Development. This regulatory approach at the local level aims to balance the importance of regulation and innovation in AI development, which of course provides flexibility and encouragement for AI development at the local level. In fact, Indonesia has a vision regarding artificial intelligence for 2020–2045 issued by the Agency for the Assessment and Application of Technology (BPPT) with five priorities regarding artificial intelligence and the Circular Letter of the Ministry of Communication and Information discussed above, which could be a turning point in regulatory development specifically regarding the application of artificial intelligence in Indonesia. Regulations are needed to balance restrictions on and legal use of artificial intelligence technology while maintaining flexibility to encourage innovation in the development of the AI industry in Indonesia. Binding

regulations can encourage legal certainty for developers and users. One approach that the Indonesian government can take is to use other countries' intelligence regulations as a reference, just as when drafting the Personal Data Protection Law, it adopted aspects of personal data regulations in other countries by considering the Indonesian context.

Article 1 paragraph (3) of the 1945 Constitution states that the Indonesian State is a State of Law, which is obliged to provide clear legal certainty regarding problems that occur and even those that will occur in society by establishing special regulations related to artificial intelligence. The existence of artificial intelligence, which is only based on the Information and Electronic Transactions Law and its derivative regulations, is inappropriate. Fence M. Wantu said, "Laws without the value of legal certainty will lose meaning because they will no longer serve as guidelines for behavior in society."(Wantu, 2007) In Responsive Legal Theory, it is stated that when the environment has experienced development, the law must be reorganized in order to protect the authority of the regulations themselves and the integrity of their application in society (Nonet & Selznick, 2019). However, the formation of Indonesian artificial intelligence regulations cannot be achieved only by the government; it requires collaboration involving the legislative, executive, and judicial institutions, together with the community, the telecommunications community, and the world of academic industry.

CONCLUSION

Even though there have been many activities in developing artificial intelligence regulations throughout the world, the conditions for the development of artificial intelligence technology, which are moving very rapidly, cannot be predicted with certainty considering that artificial intelligence regulations are still local while artificial intelligence technology is global, and when dealing with national borders, culture, and government, there is always an element of subjectivity. For this reason, the Bletchley Declaration, which was agreed upon by the heads of 28 countries, figures, and CEOs of artificial intelligence developers, must be adhered to, followed up on, detailed, and used as a binding reference for countries developing and using artificial intelligence without exception.

Smart and progressive artificial intelligence regulation is needed to ensure the protection of user data privacy and security, promote transparency, and avoid bias in artificial intelligence algorithms. Regulations must also prevent security risks such as the spread of false information, protect human rights, cover ethical aspects, social and economic impacts, and security with intergovernmental cooperation, and carry out regular updates and audits involving the public. And ensuring that artificial intelligence provides maximum benefits without harming human interests or societal values. And ensuring that artificial intelligence provides maximum benefits without harming human interests or societal values.

There is a need to form an innovative and responsive regulatory institution that functions as an auditor and supervisor to mitigate risks without hampering investment and innovation, including being responsible for developing standards of behavior and enforcing them.

REFERENCES

Amnesty International. (2023). Israel/OPT: Israeli authorities are using facial recognitiontechnologytoentrenchapartheid.AmnestyInternational.https://www.amnesty.org/en/latest/news/2023/05/israel-opt-israeli-authorities-are-

using-facial-recognition-technology-to-entrench-apartheid/

- Declaration, B. (2023). *The Bletchley Declaration by Countries Attending the AI Safety Summit,* 1-2 *November* 2023. AI Safety Submmit. https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchleydeclaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2november-2023
- Fachry Hasani Habib. (2024). *Menakar Prospek Pengaturan Artificial Intelligence di Indonesia*. Hukum Online. https://www.hukumonline.com/berita/a/menakar-prospek-pengaturan-artificial-intelligence-di-indonesia-lt6613c94285e9b/
- Giovani Dio Prasasti. (2023). *Chatbot AI Dituding Terlibat Kasus Bunuh Diri Pria di Belgia*. Liputan 6. https://www.liputan6.com/tekno/read/5264750/chatbot-ai-dituding-terlibat-kasus-bunuh-diri-pria-di-belgia
- GreatNusa. (2023). Artificial Intelligence: Pengertian, Fungsi, Manfaat dan Penerapannya dalam Dunia Digital. GreatNusa. https://greatnusa.com/artikel/artificial-intelligence-adalah/
- Indonesia itu concern forum-forum penggait indonesia itu. (2013). Linkedin.Com. https://id.linkedin.com/company/indonesia-itu-concern-forum
- Marissa Newman. (2023). Israel Quietly Embeds AI Systems in Deadly Military Operations. Bloomberg. https://www.bloomberg.com/news/articles/2023-07-16/israel-using-aisystems-to-plan-deadly-military-operations?embedded-checkout=true
- Nonet, P., & Selznick, P. (2019). Hukum responsif. Nusamedia.
- Susskind, J. (2022). *The digital republic: on freedom and democracy in the 21st century*. Bloomsbury publishing.
- University, S. (2023). *Measuring trends in Artificial Intelligence*. Standford University. https://aiindex.stanford.edu/ai-index-report-2023/
- Wantu, F. M. (2007). Antinomi dalam penegakan hukum oleh hakim. *Mimbar Hukum-Fakultas Hukum Universitas Gadjah Mada*, 19(3).
- Wheeler, T. (2023). *The three challenges of AI regulation*. Brokings. https://www.brookings.edu/articles/the-three-challenges-of-ai-regulation/

Copyright holders:

Francisca Romana Nanik Alfiani¹, Faisal Santiago² (2024) First publication right: JoSS - Journal of Social Science



This article is licensed under a Creative Commons Attribution-ShareAlike 4.0 International