

# THE IMPORTANT ROLE OF ARTIFICIAL INTELLIGENCE TECHNOLOGY REGULATION IN PROTECTING THE PUBLIC INTEREST

**Francisca Romana Nanik Alfiani**

*Universitas Borobudur, Indonesia  
ciscaromana@gmail.com*

## ABSTRACT

Artificial intelligence provides both good and bad. For this reason, artificial intelligence must be regulated to protect the public interest. The results of the study show that regulating artificial intelligence is not easy, very complicated, there are many challenges, moreover the development of artificial intelligence technology is very rapid while the law is slow to anticipate it. In 2022, globally there have been 37 regulations regulating artificial intelligence. From the results of the comparison of various best practices and regulations of other countries that are at the forefront in the field of artificial intelligence, such as the European Union, China, and the United States framework approach, it can be an input for the development of artificial intelligence regulations in Indonesia that ensure the responsible use of artificial intelligence, respect human values, and do not hinder the creation of an artificial intelligence development ecosystem.

**Keywords:** Artificial Intelligence, Technology Regulation, Public Interest,

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## INTRODUCTION

Artificial intelligence is a very valuable asset but can also pose a threat to data privacy and security, as artificial intelligence continues to evolve and develop its own learning. However, it is undeniable 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 communication. This dependency, of course, brings new challenges and the need for a legal framework to deal with the impact of big data, the prevention of algorithmic bias, and other risks posed by artificial intelligence (Cuquet & Fensel, 2018).

Anxiety over the risks and adverse impacts of the development and use of artificial intelligence has called on figures, CEOs of artificial intelligence technology developers, state leaders and policymakers to come together to choose the best path. They don't want to shut down technological innovation, but they also want artificial intelligence to have a good purpose. However, global views on artificial intelligence regulation still vary and the debate about the need for regulation continues to grow with the emergence of new technologies so that artificial intelligence regulations are still local. Although artificial intelligence regulation can play an important role in safeguarding the public interest, minimizing risks and creating an innovative environment that is safe and comfortable, regulating artificial intelligence is not easy, complicated and there are challenges that must be overcome and carefully managed. According to Cason Schmit, Assistant Professor of Public Health, Texas A&M University, quoted by The Conversation 2023, that "setting up artificial intelligence is not easy, very complicated. To regulate artificial intelligence well, we must first define artificial intelligence, understand the risks and benefits of artificial intelligence. Legally defining artificial intelligence is important to identify what can be subject to the law." However, in reality artificial intelligence technology is still developing so it is difficult to establish a fixed legal

definition. (Gaske, 2023) The development of artificial intelligence technology is impossible to manage, what can be regulated is the application of artificial intelligence technology in various sectors.

## **METHOD**

This article uses normative legal research, namely normative research but not only researching positivist law (Marzuki, 2010) about artificial intelligence but all aspects in regulating artificial intelligence including development, benefits and risks through comparison artificial intelligence regulations made by the European Union, the United Kingdom, the 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 are analyzed using descriptive analysis by presenting an overview of the results of this paper without providing justification for the results of this paper and then concluded.

## **RESULTS AND DISCUSSION**

### **A. Artificial Intelligence**

Until now there is no standard definition of artificial intelligence, but from various literature sources it can be concluded that artificial intelligence is the ability of a digital computer or robot controlled by a computer to perform tasks that are generally related to intelligent beings. 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 experiences. Since the development of digital computers in the 1940s, it has been shown that computers can be programmed to carry out very complex tasks, such as, for example, finding evidence for mathematical theories or playing chess very proficiently. However, despite continued advances in computer processing speed and memory capacity, no program has yet been able to match human flexibility over a wider domain or in tasks that require a lot of everyday knowledge (Kimura & Anugrah, 2024).

On the other hand, some programs have achieved the level of performance of human and professional experts in performing 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. Everything, except the simplest human behavior is thought to be derived from intelligence, while even the most complex insect behavior has never been considered an indication of intelligence. What's the difference? Consider the behavior of the burrowing wasp, *Sphex ichneumoneus*. When the female wasp returns to her burrow with food, she first keeps it in the doorway, checks for intruders inside her burrow, and only then, if the beach is clean, brings her 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 whole procedure as often as the food is moved. Intelligence that is conspicuously absent in the case of *Sphex* must include the ability to adapt to new circumstances. Artificial Intelligence was created to carry out functions, namely helping humans in doing work, minimizing errors in doing work, work automation and the application of artificial intelligence are useful for increasing effectiveness and efficiency, increasing productivity. In this digital era, the use of artificial

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intelligence is increasingly massive, such as face ID (face identification) as smartphone security, e-commerce recommendations, search engines, social media. In addition, artificial intelligence is also used for marketing (digital marketing), there is a translator feature in studying abroad and to minimize production errors, the manufacturing industry also uses artificial intelligence (Gafar, 2024).

### **B. Risks of Artificial Intelligence**

Artificial intelligence has improved the quality of human life, time and energy efficiency. However, artificial intelligence also brings risks and challenges for humans. There have been several adverse use cases of artificial intelligence and ethical concerns. The sophistication of Artificial Intelligence can operate autonomously without human intervention, Tesla vehicles that operate on highways autonomously cause fatal accidents, crashing into pedestrians. Another case happened to a Belgian citizen who claimed her husband committed suicide after talking about climate change, with an Artificial Intelligence Chatbot. (Saari & Janani, 2024) Furthermore, several cases that often occur due to the use of Artificial Intelligence in the form of changing a person's voice are often found on various Digital Platforms. Biased artificial intelligence content, racist and sexist Microsoft-published Chatbots, ChatGpt containing weaknesses and inaccuracies, deepfake videos, concerns about the accountability, fairness, autonomy, and proper functioning of artificial intelligence systems. Another very troubling and worrying thing 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. (Newman, 2023) Citing Amnesty International's report on Automated Apartheid, it noted how Israel used the Red Wolf facial recognition system to track Palestinians. Israel's actions are a violation of human rights (Strat, 2023).

In addition to the above, the use of artificial intelligence also has the impact of bias and discrimination, as the case of Amazon's automatic resume screener, which excludes female candidates, is one of the notoriously bad examples. Apple's credit card algorithm has also been accused of discriminating against women, with men receiving higher credit limits than women with equal credit qualifications. A huge impact on people's lives. A study conducted by UC Berkeley found that risk prediction tools used in healthcare, which affects millions of people in the United States each year, have considerable racial bias. At certain risk scores, black patients were significantly sicker than white patients, with privacy and security concerns, such as facial recognition technology being implemented in cities and airports across the U.S. 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 extending to various fields, such as civil, political, economic, social, and cultural rights, certainly raises ethical concerns about human slavery by man-made machines, job losses, military applications, lethal autonomous weapons, and privacy violations. The presence of intelligence has brought new challenges for humans in managing complex and high-risk technologies responsibly. Then what is the role of technological advances in regulating artificial intelligence systems for good, ethical and legal purposes in minimizing the risks posed by artificial intelligence? The role of regulation in keeping up with the development of artificial intelligence is in the spotlight.

### **C. Regulating Artificial Intelligence**

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The core of the problem in dealing with artificial intelligence technology is how to deal with the industry that designs and controls the 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, complicated and challenging. The law is always limping with the times (Het recht hinkt achter de faiten aan).

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

Considering that at this time, artificial intelligence has become an increasingly inseparable part of people's lives around the world and the regulation of artificial intelligence technology has become a fundamental need, a number of major countries in the field of artificial intelligence technology such as the United Kingdom, the United Kingdom, the United States, the European Union and China have seriously formulated rules for the development and use of artificial intelligence technology through different approaches, But all of them have the same purpose. They want to ensure that the development and use of artificial intelligence provides benefits to society and does not cause negative impacts that harm society.

The UK and the UK prefer a light touch approach, by not enacting new regulations to boost investment in the digital technology sector to make the UK an artificial intelligence superpower through the publication of several books. And is looking for ways to control artificial intelligence technology that is capable of automatically creating content. British Prime Minister Rishi Sunak has ambitions for the UK to become a leader in rulemaking for AI. Meanwhile, the United Kingdom, in March 2023, has released a set of regulatory studies known as "AI Regulation: A Pro-Innovation Approach." The study includes an approach and evaluation of the impact of regulation on Artificial Intelligence.

The United States, both in the Trump and Biden eras, despite opting for 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 bring negative impacts to society. The National Standards and Technology Agency (NIST), January 2023, has created a guide and resource on AI titled "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 related to human rights in the field of Artificial Intelligence (AI), called the "Plan for the AI Bill of Rights." This basic plan

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contains principles and suggestions for implementing AI in the United States in a more responsible way. Based on 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 to make regulations, passing nine laws, followed by Spain with five, and the Philippines with four. (Intelligence, 2023) Meanwhile, Indonesia has so far not had specific regulations on artificial intelligence.

The European Union enacts risk-based regulation, with close supervision, maintaining a balance by providing measurable flexibility for technological development and development. It is like the head is removed but the tail is still held. When the head has the potential to be problematic, the tail is pulled. Since 2021 the European Union has drafted the EU AI ACT, and it was passed by the EU 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. Banning some uses of AI because it is considered to have insurmountable risks such as social assessment systems that determine how people should act, some types of predictive policies and emotion recognition systems in schools and workplaces.

China in designing artificial intelligence technology regulations through a security approach. Regulation of artificial intelligence technology in China to secure the "core values of socialism" The development and development of technology is fully dedicated to the interests of the country's ideology. The Cyberspace Administration of China (CAC), the Authority that regulates technology in the country, in April 2023 considered new rules for AI including guidelines for the 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 benefit of their respective countries While the development of artificial intelligence technology has been global, the big legal framework is needed to be applied together around the world. For this reason, 28 countries, including figures, CEOs of artificial intelligence technology developers who attended the Summit which took place on November 1-2, 2023 in Bletchley Park not far from the City of London, agreed to discuss common rules to regulate artificial intelligence, contained in the Bletchley Declaration, which outlines a common vision to encourage safety and ethical considerations in the development and application of artificial intelligence. The basic principles agreed upon include International Cooperation; Safety Standards; Ethical AI; Transparency and Accountability; Knowledge Sharing. (Ariani et al., 2020) Through the Bletchley Declaration, the global community is determined to ensure that the direction of AI evolution is aligned with the broader 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 detailed explanation of how it is regulated and how the government can regulate the development of adaptive artificial intelligence.

#### **D. Artificial Intelligence Regulation in Indonesia**

Indonesia does not yet have specific regulations on the application of artificial intelligence technology, although since 2020, the Indonesian government has released the Indonesian National Strategy for Artificial Intelligence on ethics and policies, talent development, data ecosystems, and AI development infrastructure. However, Stranas AI is not a binding legal document, but only a national policy direction. However, Indonesia

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already has regulations relevant to the use of AI, including Law No.1 of 2024 concerning Electronic Information and Transactions (ITE Law), Law No.27 of 2022 concerning Personal Data Protection (PDP Law), Government Regulation No.71 of 2019 concerning the Implementation of Electronic Systems and Transactions (PP PSE), Regulation of the Minister of Communication and Information Technology (Permenkominfo) No.5 of 2020 concerning Private Scope Electronic System Operators (Permen PSE), and Law No. 28 of 2014 concerning Copyright (Copyright Law) and the Government of Indonesia, in December 2023 has issued Circular Letter Number 9 of 2023 concerning Artificial Intelligence Ethics. As a guideline for business actors in developing internal policies in utilizing artificial intelligence. According to the Law on the Establishment of Laws and Regulations. The Circular Letter does not fall into the category of laws and regulations and is a short-term strategy. The circular serves to provide an updated explanation of these problems to the public. Showing the government's attitude towards a certain problem. And it can be used as a basis for the direction of the formation of legal instruments in the future (Habib, 2024).

The European Union's AI ACT regulates the use of AI comprehensively and is currently one of the leading countries in artificial intelligence regulation. A special set of regulations has been issued that focus on various AI-related activities such as Generative AI, Algorithm Recommendations, and AI Innovation and Development in China. Indonesia is almost the same as Indonesia, which has separate regulations on digital technologies such as personal data protection, cybersecurity, and e-commerce. The difference is that China still chooses to issue a special law to regulate AI.

Some of the things that can be used as a reference for Indonesia are the establishment of artificial intelligence regulations in China at the national, regional, and local levels. Such as, the Sanghai AI Regulation on the Development of the AI Industry. 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.

Actually, Indonesia has a vision of artificial intelligence for the year 2020 - 2045 issued by the Agency for the Assessment and Application of Technology (BPPT) with 5 priorities on artificial intelligence and the Circular Letter of the Ministry of Communication and Information that has been discussed above, which can be a turning point in the development of special regulations on the application of artificial intelligence in Indonesia. Regulations are needed to balance the restriction 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 the intelligence regulations of other countries as a reference, just as it was when the making of the Personal Data Protection Law adopted aspects of personal data regulation in other countries by considering the Indonesian context.

Article 1 paragraph (3) of the 1945 Constitution states that the State of Indonesia is a State of Law, which is obliged to provide clear legal certainty to problems that occur and even those that will occur in society, by forming special regulations related to Artificial Intelligence. The existence of Artificial Intelligence which is only based on the Electronic

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Information and Transaction Law and its derivative regulations is inappropriate. Fence M. Wantu said, "Laws without the value of legal certainty will lose their meaning because they are no longer used as a code of conduct for society." (Wantu, 2007) In the Theory of Responsive Law, it is stated that when the environment has undergone development, the law must be rearranged to protect the regulatory authority itself and its integrity in application in society. (Nonet & Selznick, 2010) However, the establishment of Indonesia's artificial intelligence regulations cannot be achieved by the government alone, collaboration is needed by involving legislative, executive, and judicial institutions, together with the community, the telecommunications community, and the academic industry.

### **CONCLUSION**

Although there have been many activities to develop artificial intelligence regulations around the world, still the conditions for the development of artificial intelligence technology which is moving very rapidly cannot be predicted with certainty considering that the regulation of artificial intelligence is still local while artificial intelligence technology is global and when dealing with the borders of countries, cultures, and governments, there is always an element of subjectivity. For this reason, the Bletchley Declaration agreed upon by the leaders of 28 countries, figures, and CEOs of artificial intelligence developers, must be observed, followed up and detailed and used as a reference that binds countries of artificial intelligence developers and users without exception. Intelligent and progressive Artificial Intelligence regulations are needed to ensure the protection of user data privacy and security, encourage transparency, and avoid bias in artificial intelligence algorithms. Regulations must also prevent security risks such as the spread of false information, protect human rights, and include ethical aspects, social and economic impacts, security with intergovernmental cooperation, periodic updates and audits with public involvement. And ensuring that artificial intelligence provides maximum benefits without harming human interests and societal values. The need to establish an innovative and responsive regulatory institution that functions as an auditor and supervisor to mitigate risks without hindering investment and innovation, including being responsible for the development of standards of conduct and their enforcement.

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