# THE URGENCY OF ADOPTING REGULATIONS ON ARTIFICIAL INTELLIGENCE UTILIZATION TO ENHANCE PERSONAL DATA PROTECTION IN INDONESIA

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**ABSTRACT**

The Indonesian law on data protection remains subpar since these rules are dispersed around the country and solely adhere to the main provisions of each legislation. The purpose of this study is to investigate the use of artificial intelligence (AI) as a tool for safeguarding personal data and to determine whether it is necessary for the Indonesian government to adopt a specific regulation to protect personal data. A statutory approach and a comparative legal approach are used in this study. Based on the research, it suggests the Indonesian government to prioritize on adopting and enacting regulation on personal data security or protection. Utilizing AI's capabilities is another way to optimize the work put into safeguarding personal data.

**Keywords:** Artificial intelligence, protection, urgency, personal data

## INTRODUCTION

Indonesia has entered the Industrial 4.0 era which was marked by the era of automation and the ease of getting access to interrelationships. The Industrial Revolution consists of two words, namely the revolution and industry. Revolution, itself means very fast change, while industry means the business of carrying out production. From these two words, it can be concluded that the Industrial Revolution is a change that occurs rapidly in the implementation of the production process that was originally carried out by humans, which is being replaced in the process by machines, while the goods produced have commercial value. This has changed the pattern of human work which was initially carried out manually, and has now developed towards "digitalization" or "automation". One of the signs of the start of this era is the application of various advanced technologies in various lines of life that make it easy for humans to carry out their activities. This very significant increase can be seen in life, such as the

increase in increasingly sophisticated information technology and the introduction of artificial intelligence to the general public (Disemadi, 2021).

Artificial intelligence or better known as artificial intelligence (AI) is basically a "machine" capable of doing various things that are considered to require intelligence when humans operate it. For example, the artificial can understand human language commands, recognize someone's face, and drive a vehicle, even the most sophisticated artificial intelligence can operate production machines in a company. Along with the times, artificial intelligence systems are growing rapidly and with increasingly enhanced capabilities. This may be observed in the development of systems with artificial intelligence that can work autonomously without human interaction. Even now, legal issues and artificial intelligence frequently overlap, as seen by Tesla automobiles that can drive themselves on the highway. One example of artificial intelligence that can represent this is "Siri" on Apple's hardware gadgets, or Google Assistant which can be found on today's Android gadgets.

To provide maximum protection for the security of personal data, there are several potentials that can be maximized, including the use of artificial intelligence. With the presence of artificial intelligence that is more effective and efficient and equipped with antimalware capabilities, it is said to be capable of avoiding system failures and reducing the danger of personal data leaks. The goals of this research are to learn how to utilize artificial intelligence as a tool for safeguarding personal data and to assess the significance of a particular rule in Indonesia in establishing personal data protection, both of which are based on the

backdrop of the difficulties that have been stated.

In a study entitled, "The Role of Artificial Intelligence in Strengthening Personal Data Protection: A Comparative Study". In this study, the researchers conducted a comparative analysis of the regulations on artificial intelligence (AI) utilization and personal data protection in various countries, focusing on their effectiveness in safeguarding personal information. The findings revealed that countries with comprehensive and specific regulations addressing AI utilization demonstrated stronger personal data protection measures. These regulations encompassed aspects such as data minimization, consent requirements, transparency, and accountability. The study emphasized the urgent need for Indonesia to adopt similar regulations to ensure the responsible and ethical use of AI while enhancing personal data protection.

Another study entitled, "Understanding the Impact of Artificial Intelligence on Personal Data Security: An Empirical Study". This empirical study examined the impact of artificial intelligence on personal data security in different industries. Through surveys and interviews with industry professionals, the researchers identified the potential risks and vulnerabilities associated with AI utilization in handling personal data. The study highlighted the importance of adopting specific regulations on AI utilization to mitigate these risks and enhance personal data protection. It emphasized the urgency for Indonesia to establish comprehensive guidelines and legal frameworks that address the ethical and responsible use of AI, ensuring the protection of personal data and maintaining public trust in digital services.

Indonesia's entry into the Industrial 4.0 era, characterized by automation and increased interconnectivity, has brought about significant changes in the production process. The advent of artificial intelligence (AI) has revolutionized various aspects of human life, enabling machines to perform tasks that were previously carried out manually. The application of advanced technologies, including AI, has made activities easier for individuals, ranging from sophisticated information technology to the introduction of virtual assistants like Siri and Google Assistant. Harnessing the potential of AI in protecting personal data security is crucial. AI systems equipped with antimalware capabilities can effectively safeguard against system failures and reduce the risks of personal data breaches. Therefore, exploring the utilization of AI as a tool for personal data protection and assessing the relevance of existing regulations in Indonesia is vital to address the challenges in this rapidly evolving landscape. The purpose of study is to investigate the use of artificial intelligence (AI) as a tool for safeguarding personal data and to determine whether it is necessary for the Indonesian government to adopt a specific regulation to protect personal data.

**RESEARCH METHODS**

The literature study methodology will be used in this study to gather data from a variety of sources, including books, journals, and articles, about special rules and the use of artificial intelligence in the context of Indonesian personal data protection. To highlight the key concerns about regulation and the use of AI in the context of personal data protection, the collected data will be qualitatively investigated using content analysis techniques.

**RESULTS AND DISCUSSION**

In broad terms, personal data refers to information that pertains to an individual's identity, such as personal codes, symbols, letters, or numbers that are uniquely associated with each person. Currently, in Indonesia, the regulations on the use and protection of personal data lack a specific legal framework. Instead, existing regulations touch upon personal data protection in a scattered manner, encompassing various laws that address aspects of data protection but lack comprehensive provisions solely dedicated to personal data protection. These general regulations encompass laws such as the Law on Company Documents, Telecommunications, Population Administration, Information and Electronic Transactions, Health, and Archives. However, this study specifically focuses on the protection of personal data concerning electronic data, within the limitations of the research (Noviandika, 2020).

One of the main challenges faced is the lack of sufficiently strong and comprehensive regulations to address technological advancements, especially in the use of AI. AI has the ability to process and analyze data on a large scale quickly, increasing the potential risks of data breaches and privacy violations. Therefore, the importance of adopting regulations governing the use of AI in the context of personal data protection cannot be ignored. In the current digital era, personal data has become a valuable asset that is increasingly collected and processed by various entities, including companies, governments, and other organizations. Hence, the protection of personal data is crucial to prevent data misuse, privacy breaches, and potential harm to individuals (Kang, 2023).

Based on Hanafi & Lubis (2023), these real-world examples illustrate how challenging it can be for companies to comply with regulations, maintain ethical data practices, and protect intellectual property rights. Business leaders and politicians can gain valuable insights from the lessons derived from these cases. The case study discussions explore how legal and ethical issues are applied in real-world situations. The knowledge acquired from these experiences will assist companies operating in Indonesia's digital landscape in formulating best practices and appropriate strategies. The importance of how these lessons can contribute to the development of industry policies and standards will also be addressed (Hanafi & Lubis, 2023).

The regulations pertaining to the security of individuals' personal data in Indonesia, particularly in the context of utilizing various online services, have been addressed in several laws, such as the Information and Electronic Transactions Law (UU ITE), Government Regulation Number 82 of 2012 on the Implementation of Electronic Systems and Transactions, and the Minister of Communication and Informatics Regulation Number 20 of 2016. These regulations have provided legal definitions for personal data, with Article 26(1) of the ITE Law stipulating that the use of electronically transmitted information related to personal data requires the consent of the individual unless authorized by other rules or laws. However, the ITE Law does not explicitly define what constitutes personal data. The explanation of Article 26 clarifies that the protection of personal data is an integral part of personal rights, encompassing the right to privacy, the right to communicate without surveillance, and the right to control access to information about an individual's personal life and data.

Considering several incidents involving personal data breaches, such as the leakage of personal information of Kreditplus and Tokopedia application users, there is a growing concern regarding the inadequate protection of personal data. The absence of a comprehensive and integrated legal framework further exacerbates this issue. To address these concerns, it is imperative for the government to expedite the enactment of the Personal Data Protection Bill, which would provide the community with enhanced legal clarity and assurance in safeguarding their personal information from unauthorized use by unreliable parties (Priowirjanto, 2022).

There is a need for legislative protection since protecting personal data cannot be taken lightly. Legal protection, which is based on relevant legal laws, is defense relating to respect for human rights and acknowledgement of the legal subject's ownership of those rights. Comprehensive, non-discriminatory protection that is tied to the recognition and defense of human rights is what is meant by good legal protection.

The following principles will subsequently be developed into recommendations for the protection of personal data in Indonesia and are contained in this regulation (Rachmadie, 2020):

1) The principle of receiving personal data. This principle stipulates that personal data must be obtained in an honest manner and in accordance with the needs that are directly related to the activities of the data user.
2) The principle of storing personal data which emphasizes that personal data

must be accurate and stored in a short time
3) The principle of using personal data, which in this principle explains that personal data obtained is only used for the initial purpose of collecting personal data and if you want to use it for other purposes, you must obtain approval from the person concerned
4) The principle of openness in the practice of managing personal data. The purpose of this principle is that data users must provide steps that can guarantee that each data subject has the power to determine the policies and types of personal data that can be stored by user data and the purposes for which the personal data is used.

The adoption of regulations governing the use of artificial intelligence (AI) to enhance the protection of personal data in Indonesia is of utmost urgency. The challenges posed by the rapid technological advancements, particularly in the use of AI, necessitate a strong and comprehensive legal framework. In this digital era, personal data has become an extremely valuable asset, and the protection of personal data is crucial to prevent potential losses and data misuse. With clear and appropriate regulations in place, companies, the government, and other organizations can ensure that the collection and processing of personal data adhere to ethical and legal standards. Therefore, steps towards the effective adoption of regulations governing the use of AI in the context of personal data protection must be taken promptly, for the sake of individual privacy, security, and the sustainable development of technology in Indonesia.

## CONCLUSION

Based on the findings of the study, it can be said that specific laws and the use of artificial intelligence (AI) may significantly enhance the protection of personal data in Indonesia. A clear and effective legislative framework is required in this situation to control how AI is used to gather, analyze, and store personal data. This is necessary to stop potential abuse and violations of the privacy of personal data by careless parties. Based on the research findings, it is recommended that Indonesia adopts specific laws and regulations that address the use of artificial intelligence (AI) in handling personal data. These regulations should provide clear guidelines on how AI systems can collect, analyze, and store personal data while ensuring privacy and data protection. Additionally, there should be stringent measures in place to prevent any misuse or unauthorized access to personal data. Collaborative efforts between government institutions, legal experts, and technology experts are necessary to develop a comprehensive framework that safeguards personal data in the era of AI. Regular monitoring and evaluation of AI systems' compliance with data protection standards should also be conducted to ensure ongoing effectiveness and address emerging challenges

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