

PERSONAL DATA PROTECTION IN THE PROVISION OF ARTIFICIAL INTELLIGENCE VOICE GENERATOR AND DEEPPFAKE APPLICATIONS IN INDONESIA

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Abstract

Nowadays, the development of AI has brought miracles, including the existence of applications that can imitate a person's voice and face. For example, former President Jokowi whose voice is used as if singing a song. There is even a video of former President Jokowi giving a speech in Chinese, even though in fact he never sang a song or gave a speech. This can apparently be done through an AI application using a person's voice and facial image. Even though after the issuance of Law No. 27 of 2022 concerning Personal Data Protection (UUPDP), a person's voice and image are included in personal data in the form of biometrics. Then today, the development of technology in the digital era has made it common to use portraits to use AI Voice Generators and Deepfakes without permission. Deepfake itself is an image and video produced by Artificial Intelligence as if it were real. The PDP Law itself prohibits the use of a person's biometric data. For this reason, it is necessary to research the legal protection of personal data in the form of voices that are changed using AI Voice Generators or faces into Deepfake form. In addition, the use of personal data is very high, for example to attract buyers on digital platforms by creating deepfakes using portraits taken randomly on the Internet without the consent of the owner of the personal data.

Keywords: *Personal Data Protection, Artificial Intelligence (AI), Voice Generator and Deepfake*

INTRODUCTION

In 2022, the Indonesian Government took steps to provide protection for personal data by issuing Law No. 27 of 2022 concerning Personal Data Protection ("PDP Law"). This is because personal data is a human right that is a basic right that needs to be protected. In addition, the rapid use of technology-based personal data has encouraged the issuance of the PDP Law. Where before the enactment of the PDP Law, Indonesia had basically regulated the protection of personal data in several laws and regulations. For example, regarding patients through the health law, immigration data through Law No. 6 of 2011 concerning Immigration and others. Then today the development of technology including artificial intelligence has brought about extraordinary changes and impacts so that it can facilitate work in everyday life. However, as with the benefits provided, the development of artificial intelligence also has negative impacts. Among them are privacy issues in the form of violations of the use of other people's personal data. This is because Artificial Intelligence is trained using a large set of data that could potentially contain the user's personal data. The use of AI technology in collecting and analyzing personal data increases the risks related to the privacy of its users.

Artificial Intelligence/AI or Artificial Intelligence itself is a program that engineers human intelligence to be applied to machine devices or computer systems. AI is created with the aim that computers have the ability to think, learn, and act like humans. Among the various types of AI that have been developed, one of them is an application that requires personal data in the form of a person's facial image (deepfake) or voice. For this reason, the use of AI has the potential to violate other people's personal data. Where recently the public was shocked by the AI voice generator application that can make the voice of singer Jung Kook BTS who is a Korean singer as if singing the song Raisa, an Indonesian singer. There is even content that displays a voice similar to President Jokowi singing the song 'asmalibrasi' which is a song sung by Soegi Bornean. Of course, in creating the AI result content, the content creators used data in the form of Joong Kook's voice and President Jokowi to produce the song. To minimize the implementation of AI activities, the Ministry of Communication and Information issued a

regulation in the form of Circular Letter No. 9 of 2023 as a guideline in the implementation of Artificial Intelligence. For this reason, further research is needed regarding the rules for using a person's personal data in the form of voice and facial images in the implementation of AI Voice Generator and Deepfake and what steps the government should take to realize the implementation of effective AI applications so that it can prevent customers, especially in the use of personal data.

LITERATURE REVIEW

Personal Data Protection

Personal data protection is part of human rights related to individual privacy. In Law No. 27 of 2022 concerning Personal Data Protection (UU PDP), personal data includes general and specific information, including biometric data such as voice and facial images. According to Zainuddin Ali (2014), legal protection of personal data is crucial in the digital era because this information can easily be misused through technology. This protection includes the process of collecting, storing, and using personal data by third parties. Sutera Disemadi Day (2022) emphasizes the urgency of strict regulation in the context of AI, because this technology allows for massive exploitation of personal data. Without strong regulation and law enforcement, personal data can be manipulated for certain interests, including commercial and political.

Artificial Intelligence (AI)

Artificial Intelligence (AI) is a technology that imitates human thinking ability through machines or systems. In the legal context, AI raises new challenges because this system can learn and make decisions autonomously by processing large amounts of data, including personal data. Mikelsten et al. (2020) stated that AI has the potential to accelerate innovation in various sectors, but also increases the risk of ethical and legal violations. In the case of AI Voice Generator and Deepfake applications, the system uses voice recordings and facial images to create content that looks real. This raises legal issues related to data usage permissions, identity authentication, and potential public manipulation. Therefore, the regulation of this technology must be in line with the principles of prudence, ethics, and protection of individual rights.

Voice Generator and Deepfake

Voice Generator applications use human voice datasets to generate synthetic audio, while Deepfake manipulates a person's face and voice in a video. According to Dini Listiyani (2024), this technology has created a very realistic illusion and can mislead the public. In many cases, the use of biometric data to generate this content is not accompanied by permission from the data owner. This phenomenon requires specific regulations because deepfake content has the potential to damage reputation, mislead public opinion, and violate privacy. Articles 65 and 67 of the PDP Law state that the use of personal data without permission can be subject to criminal sanctions. However, in practice, supervision and law enforcement of this technology are still very limited.

METHOD

This study uses a descriptive method with a normative legal approach. The normative legal approach is used to examine legal issues based on laws and regulations, legal doctrines, and applicable legal principles. This approach is appropriate because the main focus of the study is to analyze the regulation and legal protection of the use of personal data in the form of voice and face in artificial intelligence applications such as Voice Generator and Deepfake. The data sources used in this study are secondary data, consisting of primary legal materials such as Law No. 27 of 2022 concerning Personal Data Protection (PDP Law), implementing regulations such as Circular Letter No. 9 of 2023 from the Ministry of Communication and Information, as well as secondary legal materials such as literature, journals, news, and relevant online sources. Data collection techniques were carried out through library research, while data analysis was carried out qualitatively, namely by interpreting legal provisions and linking them to legal phenomena that occur in the use of AI technology, to gain an in-depth understanding of personal data protection in the context of Voice Generator and Deepfake applications.

RESULTS AND DISCUSSION

Product Standards in the Implementation of Artificial Intelligence for Personal Data Protection

1. Artificial Intelligence Application Product Standards

That the parties involved in the collection, disclosure and use of other people's personal data related to artificial intelligence applications associated with the Implementation of Artificial Intelligence are the Organizers

and their Users. Artificial Intelligence organizers are required to follow the business activity standards and product standards set by the Minister. This is as regulated in Article 1 of the Regulation of the Minister of Communication and Information No. 3 of 2021 concerning Business Activity Standards and Product Standards in the Implementation of Risk-Based Business Licensing, Postal Sector, Telecommunications, and Electronic Transaction Systems ("Permenkominfo No.3/2021").

Furthermore, related to the Artificial Intelligence-Based Programming Business Standards included in the KBLI Code 62015 which is an Artificial Intelligence-Based Programming Activity. Where the scope of the business is artificial intelligence-based programming activities including consultations followed by analysis and programming that utilize artificial intelligence technology including subsets of artificial intelligence such as machine learning, natural language processing, expert systems, and other artificial intelligence subsets. Then regarding the standards, namely with special business requirements, including:

- a. carry out artificial intelligence-based programming activities in accordance with statutory regulations.
- b. create and implement internal company policies regarding data and internal ethics of artificial intelligence.
- c. publish innovation and technological development to the public through activities, demonstrations, or methods that can be accessed by the public while paying attention to aspects of privacy and legality of information.
- d. Periodic reporting of business activities every 1 (one) year to the Director General of Informatics Applications.

Based on the explanation above, there are standards in the business of organizing artificial intelligence, including having to carry out programming activities in accordance with the provisions of the law, implementing internal policies regarding data and internal ethics of artificial intelligence, and paying attention to aspects of privacy and legality of information. However, in fact, after this regulation was issued, there were still artificial intelligence business actors who ignored these standards, including by making products in the form of applications that can imitate voices, and there were even voice generator applications that were openly specifically designed to imitate the voices of certain people, including President Jokowi, who was also a victim of deepfake. Of course, this not only violates ethics but also threatens the protection of personal data.

To make it easier to understand, here are some examples of the use of AI Voice Generator and Deepfake, reported from the source google.com, as follows:

Figure 1 AI Voice Generator



Figure 2 Deepfake



In addition, the use of voice generators and deepfakes in Indonesia only went viral in October 2023, one of which was President Jokowi who went viral giving a speech in Chinese. Even though at that time Permenkominfo No.3/2021 and the PDP Law had been issued. Therefore, in order for the implementation of AI to be ethical and protect personal data, the Minister of Communication and Information issued SE No.9/2023. However, as previously explained, the Circular Letter is not included in the hierarchy of legislation so that it cannot yet provide

strict sanctions. This is in line with the opinion of the Deputy Minister of Communication and Information, Reza Patria, who stated that the issuance of SE No.9/2023 had not yet provided sanctions.

2. Personal Data Protection Policy for the Implementation of Artificial Intelligence by Application Users

In Indonesia, the use of AI is increasingly in demand, where based on a Populix survey, almost half or 45% of workers and entrepreneurs in Indonesia use AI applications. In using AI, not all users understand personal data and the risk of violations. Many AI users include voice generators and deepfakes. Most AI users only use it for fun, but it is often used by content creators to make a profit. Of course, regarding this, education needs to be carried out by application makers as organizers of information systems to Electronic System Users. Associated with the application of artificial intelligence as a product of the Electronic System Organizer, then based on Article 8 paragraph (1) letter j of Law No. 8 of 1999 concerning Consumer Protection, business actors are required to include information and/or instructions for use of goods in Indonesian in accordance with applicable laws and regulations. In relation to violations of this article, criminal penalties may be imposed as stipulated in Article 62 paragraph (1) of the Consumer Protection Law with a maximum criminal penalty of 5 years or a maximum fine of IDR 2 billion.

This means that there is an obligation from the Electronic System Organizer of AI Voice Generator and Deepfake Intelligence to provide a user guide so as not to commit acts that are contrary to laws and regulations, including using other people's personal data. However, in practice, there is no information and/or instructions for using goods in the artificial intelligence voice generator and deepfake applications. In fact, both are paid products that need to be ensured for their use so that the Electronic System Organizer needs to provide education on its application so that users know that using other people's data in the form of voices and facial images violates the PDP Law. Where prohibitions or restrictions on the distribution of illegal content generally apply differently in each country. In relation to this, in addition to issuing standards for artificial intelligence programming efforts, the government also needs to issue regulations that require electronic system organizers to include procedures and prohibitions on the use of artificial intelligence so as not to violate personal data protection.

CONCLUSION

- a. Steps that should be taken by the Government in protecting personal data related to the implementation of artificial intelligence voice generators and deepfakes need to issue comprehensive regulations regarding the protection of personal data related to artificial intelligence. For this reason, it is necessary to issue binding regulations and have strict sanctions if violated regarding the use of personal data related to artificial intelligence as implementing regulations for Law No. 27 of 2022 concerning Personal Data Protection. Where Circular Letter No. 9 of 2023 is not sufficient to regulate the protection of personal data related to Artificial Intelligence. This is because the Circular Letter is not included in the hierarchy of laws and regulations so it does not regulate sanctions.
- b. That in fact the Personal Data Protection regulation still does not answer the challenges of the development of Artificial Intelligence. Where it has not explicitly regulated the responsibility of Electronic System Organizers to ensure that the use of their applications does not conflict with laws and regulations. This has an impact on the ignorance of users of artificial intelligence applications that the use of biometric data such as voice and facial images without the owner's consent can be classified as a violation of the use of personal data. For this reason, the government not only sets business standards, but can issue policies that require electronic system organizers to include procedures and limitations on the use of artificial intelligence that contain a prohibition on the use of other people's personal data without permission.

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