

Research Article

# AI Exploitation in Social-Media Against Public Figure: Indonesian Legal Perspectives

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#### Abstract

Background: In the wake of burgeoning technological advancements globally, humanity is compelled to continuously adapt and innovate. Among these innovations, Artificial Intelligence (AI) stands out as a particularly groundbreaking development. However, the absence of a comprehensive legal framework has led to deviations in AI usage that detrimentally impact individuals, such as the unauthorized use of public figures' likenesses for parody or replication of their voices.

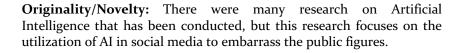
**Methodology:** The research employs a statutory approach, analyzing the norms and rules applicable in Indonesia.

**Objectives:** The study aims to investigate the misuse of AI against public figures in social media content within the context of Indonesian legislation.

**Findings:** The findings reveal that the regulation of AI falls within the scope of the Electronic Information and Transactions Law. Moreover, the use of AI is monitored by the National Cyber and Crypto Agency, and the Indonesian National Police also has a dedicated cyber division to handle electronic and digital cases. Protection for public figures harmed by the use of their personal data in AI is provided under the Personal Data Protection Law. Such misuse may also constitute defamation under the Indonesian Criminal Code. This study underscores the necessity of a robust legal framework to address the challenges posed by AI in the realm of social media, particularly regarding the rights and protection of public figures in Indonesia.

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## Introduction

Globally, societal dynamics and human civilization have undergone transformation as a consequence of information and communication technology. Simultaneously, the evolution of information technology has accelerated social change. While information technology serves to advance human well-being, progress, and civilization, it also poses serious risks to humanity.<sup>1</sup>

The advancement of fourth industrial revolution technology has significantly transformed daily life. However, alongside its benefits, technological progress often brings forth risks and concerns. An exemplar is Artificial Intelligence (AI), a technology presently being developed and utilized across various scientific domains, including law.<sup>2</sup>

Artificial Intelligence, also referred to as AI, is a technology that has been in existence for a considerable period and has had a significant impact on daily life. According to Russell and Norvig, AI is a computational program that enables machines to perform tasks associated with human intelligence, such as decision-making, problem-solving, and predictions. AI is also known as External Intelligence due to its nearly comparable level of intelligence to humans.<sup>3</sup>

The development of AI systems is rapidly advancing, exhibiting increasingly sophisticated capabilities as time progresses. This is evident in the evolution of AI systems capable of functioning autonomously, without human interaction.<sup>4</sup> In fact, AI's relevance to legal issues is increasingly apparent, as exemplified by autonomous Tesla vehicles capable of

<sup>1</sup> Raéf Bahrini and Alaa Qaffas, "Impact of Information and Communication Technology on Economic Growth: Evidence from Developing Countries," *Economies* 7, no. 1 (February 11, 2019): 21, https://doi.org/10.3390/economies7010021.

<sup>&</sup>lt;sup>2</sup> Tae Kyung Sung, "Industry 4.0: A Korea Perspective," *Technological Forecasting and Social Change* 132 (2018): 40–45, https://doi.org/10.1016/j.techfore.2017.11.005.

<sup>&</sup>lt;sup>3</sup> Rubens Lacerda Queiroz et al., "AI from Concrete to Abstract: Demystifying Artificial Intelligence to the General Public," *AI & SOCIETY* 36, no. 3 (2021): 877–93, https://doi.org/10.1007/s00146-021-01151-x.

<sup>&</sup>lt;sup>4</sup> Qiongfeng Shi et al., "Progress in Wearable Electronics/Photonics—Moving toward the Era of Artificial Intelligence and Internet of Things," *InfoMat* 2, no. 6 (2020): 1131–62, https://doi.org/10.1002/inf2.12122.

navigating highways.<sup>5</sup> A notable incident in Indonesia highlighted the use of AI in social media, where key public figures were humorously depicted engaging in atypical activities like singing and dancing. These representations, created with strikingly similar facial expressions, body gestures, and voices, were spread across platforms like TikTok and Instagram. Essentially, AI possesses decision-making capabilities akin to those of normal humans, supported by its development in three key methodologies: Fuzzy Logic (FL), Evolutionary Computing (EC), and Machine Learning (ML).<sup>6</sup>

The significance of AI can be illustrated through the example of Farmlogs, a program that furnishes farmers with critical data regarding weather and soil, in addition to monitoring crop growth for enhanced yields, thereby streamlining agriculture in the United States. In various nations, AI is utilized to augment readiness for disaster management, criminal prevention, and environmental planning. Furthermore, as we verge on entering an era of accelerated industrial and technological revolution, the imperative of comprehending AI is underscored. The ambit of AI in the realm of artificial intelligence encompasses domains such as Expert Systems, Speech Recognition, Robotics, and Neural Networks. Each of these disciplines demonstrates the multifaceted potential of AI to replicate, assist, and advance human capabilities in diverse sectors, underlining its pivotal role in contemporary technological advancements. 8

Currently, AI is classified as an "Electronic Agent" under Indonesian regulations due to its capacity to automate information processing. A device or electronic system designed to take action on specific electronic information automatically organized by humans is defined as an "Electronic Agent" in Article 1 of the Information and Electronic Transactions Law (ITE Law).

The Indonesia Information and Electronic Transactions Law, stipulates that only individuals, government officials, commercial entities, and the public are permitted to use AI in the country. This indicates that providers of electronic systems coordinating AI services would be held accountable for any legal obligations arising from its use.<sup>10</sup>

<sup>5</sup> Mica R Endsley, "Supporting Human-AI Teams:Transparency, Explainability, and Situation Awareness," *Computers in Human Behavior* 140 (2023): 107574, https://doi.org/10.1016/j.chb.2022.107574.

<sup>7</sup> Meghna Raj et al., "A Survey on the Role of Internet of Things for Adopting and Promoting Agriculture 4.0," *Journal of Network and Computer Applications* 187 (2021): 103107, https://doi.org/10.1016/j.jnca.2021.103107.

<sup>&</sup>lt;sup>6</sup> Arofi Kurniawan et al., "Integrating Artificial Intelligence and Adult Dental Age Estimation in Forensic Identification: A Literature Review," *World Journal of Advanced Research and Reviews* 21, no. 2 (March 27, 2024): 1374–79, https://doi.org/10.30574/wjarr.2024.21.2.0605.

<sup>&</sup>lt;sup>8</sup> Lavanya Sharma and Pradeep Kumar Garg, *Artificial Intelligence: Technologies, Applications, and Challenges*, First edition (Boca Raton London New York: CRC Press, 2022), files/1831/Sharma and Garg - 2022 - Artificial intelligence technologies, application.pdf.

<sup>&</sup>lt;sup>9</sup> Arfah Habib Saragih et al., "The Potential of an Artificial Intelligence (AI) Application for the Tax Administration System's Modernization: The Case of Indonesia," *Artificial Intelligence and Law* 31, no. 3 (May 2, 2023): 491–514, https://doi.org/10.1007/s10506-022-09321-y.

<sup>&</sup>lt;sup>10</sup> Yusriadi Yusriadi et al., "Implementation of Artificial Intelligence in Indonesia," *International Journal of Data and Network Science* 7, no. 1 (2023): 283–94, https://doi.org/10.5267/j.ijdns.2022.10.005.

The Information and Electronic Transactions Law is further elaborated through its implementing regulation, Government Regulation No. 71 of 2019 on the Operation of Electronic Systems and Transactions. This regulation specifically delineates the boundaries of obligations and responsibilities for providers of Electronic Agents. It includes provisions for features that allow users to modify information during ongoing transactions, thereby offering a more dynamic and responsive framework for electronic transactions and the use of AI in Indonesia.

Electronic agents are subject to a range of regulations, including requirements to maintain data confidentiality, manage users' personal data, ensure user privacy, and communicate information about the systems they operate in a manner that does not harm users. However, it is noted that numerous electronic agents neglect these obligations. Such disregard raises concerns about the efficacy of regulatory frameworks and the enforcement mechanisms in place to ensure compliance with these critical requirements.<sup>11</sup>

Several countries, including the European Union, China, Brazil, Canada, and South Korea, have made efforts to exert control over such smart technologies. These nations have addressed issues like the use of similar services, such as content moderation, ensuring the rights of individuals impacted by the systems, classifying levels of risk, and anticipating governance measures for companies that provide or operate AI systems.<sup>12</sup>

When accessing social media platforms such as TikTok, Instagram, Facebook, and the like, AI is extensively employed to portray prominent figures or public figures, particularly in Indonesia, including the president, government officials, and celebrities.<sup>13</sup> This phenomenon necessitates constraints, as public figures hold significant importance, possessing their respective authority or talents. Relying solely on the existing ITE Law is deemed inadequate, given its frequent characterization as a law with numerous vague provisions. Therefore, there is a need for a *lex specialis*, a specific legal framework, dedicated to regulating AI, considering the potential threat AI poses to human entities.<sup>14</sup>

The government urgently needs to establish new regulations to control AI to prevent it from threatening human existence. This is crucial considering that AI is a technology that

<sup>&</sup>lt;sup>11</sup> Andhika Nugraha Utama, Prama Tusta Kesuma, and Rio Maulana Hidayat, "Analisis Hukum Terhadap Upaya Pencegahan Kasus Deepfake Porn Dan Pendidikan Kesadaran Publik Di Lingkungan Digital," *Jurnal Pendidikan Tambusai* 7, no. 3 (2023): 26179–88, https://doi.org/https://doi.org/10.31004/jptam.v7i3.10815.

<sup>&</sup>lt;sup>12</sup> Dirk A Zetzsche et al., "Regulating a Revolution: From Regulatory Sandboxes to Smart Regulation," SSRN Electronic Journal, 2017, https://doi.org/10.2139/ssrn.3018534.

<sup>&</sup>lt;sup>13</sup> Raymond Blanton and Darlene Carbajal, "Not a Girl, Not Yet a Woman: A Critical Case Study on Social Media, Deception, and Lil Miquela," in *Research Anthology on Usage, Identity, and Impact of Social Media on Society and Culture*, ed. Information Resources Management Association (IGI Global, 2022), 894–909, https://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-6684-6307-9.cho47.

<sup>&</sup>lt;sup>14</sup> Nathalie A Smuha et al., "How the EU Can Achieve Legally Trustworthy AI: A Response to the European Commission's Proposal for an Artificial Intelligence Act," *SSRN Electronic Journal*, 2021, https://doi.org/10.2139/ssrn.3899991.

can surpass human intelligence through continuous training and could pose a significant threat if not appropriately limited or regulated.<sup>15</sup>

President Joko Widodo has officially ratified Presidential Regulation No. 53 of 2017 on the National Cyber and Crypto Agency (BSSN), which is currently tasked with overseeing the cyber sector. According to the regulation, BSSN is a non-ministerial government institution accountable to the President through the minister responsible for coordinating political, legal, and security affairs. The Cabinet Secretariat explains that BSSN's responsibility is to ensure the success of cyber security implementation by coordinating all aspects related to cybersecurity. This encompasses activities such as detecting cyber-attacks or incidents, monitoring, mitigation, recovery, and evaluation. According to the Ministry of Communication and Information, BSSN serves as the coordinating body for all activities related to cybersecurity.<sup>16</sup>

## Research Method

The research adopts a juridical-normative methodological framework. In other words, the analysis adheres to a legalistic perspective that emphasizes the existing legal norms and their theoretical underpinnings. To further strengthen this approach, the researcher employs a statute approach that entails a meticulous examination of the relevant legislations which form the core subject matter of this study. The data for this inquiry is derived exclusively from secondary sources, primarily through a comprehensive review of pertinent legal materials.

# Artificial Intelligence in the Social Media Content

The term "Artificial Intelligence" has recently garnered substantial popularity as it represents a double-edged sword capable of both aiding humans in executing functions and tasks typically requiring human cognition and posing threats by potentially replacing them.<sup>17</sup> Since the term "AI" was first coined in 1956, it has undergone various definitions.<sup>18</sup> To initiate, we can succinctly state that AI is the capability of machines to perform tasks that conventionally necessitate human-like understanding. Secondly, AI represents the application of advanced technology wherein machines exhibit human cognitive functions

<sup>15</sup> Yuchen Jiang et al., "Quo Vadis Artificial Intelligence?," *Discover Artificial Intelligence* 2, no. 1 (2022): 4, https://doi.org/10.1007/s44163-022-00022-8.

<sup>&</sup>lt;sup>16</sup> Sarah Safira Aulianisa and Indirwan Indirwan, "Critical Review of the Urgency of Strengthening the Implementation of Cyber Security and Resilience in Indonesia," *Lex Scientia Law Review* 4, no. 1 (2020): 33–48, https://doi.org/10.15294/lesrev.v4i1.38197.

<sup>&</sup>lt;sup>17</sup> Bertalan Meskó, Gergely Hetényi, and Zsuzsanna Győrffy, "Will Artificial Intelligence Solve the Human Resource Crisis in Healthcare?," *BMC Health Services Research* 18, no. 1 (2018): 545, https://doi.org/10.1186/s12913-018-3359-4.

<sup>&</sup>lt;sup>18</sup> Christian Hugo Hoffmann, "Is AI Intelligent? An Assessment of Artificial Intelligence, 70 Years After Turing," *Technology in Society* 68 (February 2022): 101893, https://doi.org/10.1016/j.techsoc.2022.101893.

such as learning, analysis, and problem-solving. Thirdly, AI is a conglomerate of sophisticated technologies enabling machines to sense, comprehend, act, and learn.

Artificial Intelligence fundamentally refers to a "machine" that, when controlled by humans, has the capacity to execute various tasks traditionally deemed to require intelligence. For instance, AI can comprehend human language commands, recognize individual faces, operate vehicles, and even manage manufacturing machinery in companies.

The implementation of AI in content creation is gaining traction and becoming a trend. The AI topic remains relevant today due to the multitude of trends generated and shared on social media. For instance, using AI technology to mimic the vocal sounds of local or foreign artists or public figures is highly popular on the TikTok social media platform. Public figures, whose lives are constantly absorbed by the public, provide a subject that is both enduring and debatable. Actions of public figures, whether positive or negative, will always be a subject of broad societal discourse. However, public figures would not be recognized if they did not contribute to the country.<sup>19</sup>

The issue identified within social media following analysis is the increasing prevalence of AI technology, leading to legal challenges associated with the misuse of AI technology on social media. One prominent problem is the widespread use of public figures' faces or biometrics as entertainment purposes, which can be detrimental to the individuals involved since such content is created without their consent. According to Article 26(1) of ITE Law, "The use of any information through electronic media involving personal data must be done with the consent of the person concerned, unless otherwise stipulated by laws and regulations."

However, due to the convenience offered by AI, electronic agents often neglect obtaining consent from public figures, even though this can be detrimental to them. It is crucial to advocate for ensuring that the use of AI by electronic agents complies with existing regulations.<sup>20</sup>

## Social Media and Social Media Content

Social media, encompassing blogs, social networking sites, wikis, forums, and virtual worlds, enables users to interact, share, and create information easily online. The three most widely used types of social media are blogs, social networking sites, and wikis. From

<sup>19</sup> Vanessa K. Bittner, "Dialectic Icons: Controversial Public Figures as Emotional Catalysts in Contentious Political Discourse," *Emotions and Society* 5, no. 3 (November 2023): 257–76, https://doi.org/10.1332/263169021X16824558710337.

<sup>&</sup>lt;sup>20</sup> Ron Iphofen and Mihalis Kritikos, "Regulating Artificial Intelligence and Robotics: Ethics by Design in A Digital Society," *Contemporary Social Science* 16, no. 2 (March 15, 2021): 170–84, https://doi.org/10.1080/21582041.2018.1563803.

different perspectives, social media is an online platform that fosters social interaction, utilizing web-based technology to transform communication into interactive discourse.

Furthermore, Indonesian Publisher Association (IKAPI) asserts that the concept of content involves the organization of material visible on a webpage or in media. As an added value element of media, this term is utilized to identify and measure various formats and genres of information. Therefore, it can be said that content is the manner in which information is presented. It can take the form of entertainment, news, or other information presented in its original form through content media, such as articles, videos, audio files, and other multimedia types uploaded online for easy access.

Positive and negative content can be found on social media; regrettably, the prevalence of negative content often overshadows that of positive content. Despite the quality of cyberspace media being discernible through social media, which possesses unique characteristics not found in other forms of cyber media. The Indonesian society has the potential to develop the ideas regarding beneficial social media content, particularly with an educational content.<sup>21</sup>

Content creation involves the production of various forms of media, such as text, images, photographs, videos, audio files, or a combination of two or more different media types. These materials are tailored for media platforms, particularly online venues like YouTube, WordPress, Blogger, Snapchat, Instagram, and TikTok. The structure and design of material presented on a webpage is referred to as 'content'.

Based on Article 5, ITE Law, Personal Data Subjects have the right to obtain information about the clarity of identity, legal basis, purposes of the request and use of Personal Data, as well as the accountability of the parties. There are rights and obligations that can be applied when using social media and creating content on social media. Therefore, when creating information for social media, one must be mindful of the rights of others.

Due to the abundance of facial photos and videos of public figures on social media, electronic agents find it increasingly facile to access these images or electronic documents. However, it should be noted that the images or electronic documents of public figures are subject to copyright, hence cannot be used arbitrarily.

# **Public Figure**

The term "public figure" originates from English and, when translated, refers to someone widely recognized by the public. In Indonesia, those associated with roles such as tribal leaders, traditional leaders, or government officials are often referred to as "tokoh" or figures. Meanwhile, individuals appearing as actors, artists, or singers on the screen are commonly considered public figures. "Figur" is defined as form, appearance, and character,

<sup>21</sup> Melina A. Throuvala et al., "Perceived Challenges and Online Harms from Social Media Use on a Severity Continuum: A Qualitative Psychological Stakeholder Perspective," *International Journal of Environmental Research and Public Health* 18, no. 6 (March 20, 2021): 3227, https://doi.org/10.3390/ijerph18063227.

while "publik" is defined as the general public. Therefore, if the term "tokoh publik" is used, it can be interpreted as an individual known to the general public. Certainly, there are public figures in our national life who deserve to be regarded as idols.<sup>22</sup>

National leaders, including the President, former presidents who have led the country, and heads of other state institutions, are considered public figures. Additionally, there are renowned figures not involved in the political sphere, such as religious leaders, spiritual figures, or those respected by society. The most crucial factor for becoming a public figure is upholding moral, ethical, and consistent behavior.<sup>23</sup> Furthermore, a public figure plays a significant role in national affairs and the well-being of the nation. This is what makes a public figure associated as an idol and role model for the wider society.<sup>24</sup>

Should a Public Figure find objectionable content created using Artificial Intelligence technology, they are entitled to seek legal certainty in accordance with the regulations set forth in Government Regulation No. 71 of 2019 on the Implementation of Electronic Systems and Transactions, specifically in Article 15(1), which mandates that Electronic System Operators ensure their systems do not contain Electronic Information and/or Electronic Documents prohibited under the law.

In Paragraph (2) of the same Article states, "Electronic System Providers are obliged to ensure that their Electronic Systems do not facilitate the dissemination of Electronic Information and/or Electronic Documents that are prohibited in accordance with legislative provisions."

Based on this legal framework, public figures who feel aggrieved or harmed by an electronic document created by an electronic agent can exercise their right to request content removal in accordance with the principle of the "right to erasure". In addition to removal from social media platforms, these individuals may also request the deletion of the content from search engines.

# The Legal Regulation of AI in Indonesia in Relation to Social Media and Social Media Content

The utilization of AI filters, such as AI Lenses or AI Manga Filters, also gained popularity in its time. In Indonesia, video materials generated by AI, accompanied by entertaining and humorous songs, eventually garnered popularity. People were intrigued to experiment with AI due to its ability to transform images or videos into animations, offering numerous

<sup>&</sup>lt;sup>22</sup> Rizqi Fitrianti and April Laksana, "Public Opinion on The Postponing the 2024 Election on Twitter Social Media by Online Media of Koran Tempo," *Legal Brief* 11, no. 3 (2022): 1705–13, https://doi.org/https://doi.org/10.35335/legal.v1ii3.365.

<sup>&</sup>lt;sup>23</sup> Alfred Archer and Benjamin Matheson, *Honouring and Admiring the Immoral* (New York: Routledge, 2021), https://doi.org/10.4324/9780367810153.

<sup>&</sup>lt;sup>24</sup> Fadlan Agustina Firdaus, Aliva Diva Kamila, and Arina Faila Saufa, "Digital Literacy: How Generation Z's Made a Choice Decision Based on Celebrities' Opinions in Social Media," *Literatify: Trends in Library Developments*, 2023, 162–74, https://doi.org/https://doi.org/10.24252/literatify.vi.42713.

versions. The unique originality produced by AI when processing photos encouraged users to explore endlessly, including using famous individuals as subjects.<sup>25</sup>

Article 1(4) of the ITE Law stipulates that an Electronic Document encompasses any form of Electronic Information created, forwarded, transmitted, received, or stored in analog, digital, electromagnetic, optical, or similar forms, which can be viewed, displayed, and/or heard via a Computer or Electronic System. This includes, but is not limited to, writings, sounds, images, maps, designs, photographs, letters, symbols, numbers, and the like. Consequently, any edited forms utilizing public figures' images, such as facial photos, or those edited into video formats or effects that are easily created, then distributed and received by the general populace, fall under this definition.

Just as with AI-generated voice imitation content, which has gained popularity through parody videos, one such example includes imitations of the voice of Indonesia's President, Joko Widodo. In these contents, there are instances where the voice of Mr. Joko Widodo is artificially synthesized to appear as if he is singing, and in some cases, there are videos showing activities such as dancing accompanied by music.<sup>26</sup>

In Law No. 27 of 2022 on Personal Data Protection, Article 5 stipulates that "Personal data subjects have the right to know their identity clearly, what legal interests are protected, why their personal data is requested and used, and who is responsible for such decisions." Based on this law, the author outlines that before electronic agents use AI to create content featuring public figures, there should be communication between the electronic agents and the public figures. This communication should clarify the identity, the legal interests needed by the electronic agents, and the purpose of data usage. After the public figures agree, the content can then be uploaded to social media.

However, even after communication between the electronic agent and the public figure, the possibility of disputes between the two parties still exists. If, in the future, the public figure aggrieved, then based on ITE Law, Article 26(4) states, "Every Electronic System Operator is obliged to provide a mechanism for the deletion of Electronic Information and/or Electronic Documents that are no longer relevant in accordance with the provisions of the legislation."

The implementation of principles in the use of AI creates new areas of concern in social media. Given the extensive benefits of AI, it is imperative to apply a principle of caution to

<sup>25</sup> Kevin Kuck, "Generative Artificial Intelligence: A Double-Edged Sword," in 2023 World Engineering Education Forum - Global Engineering Deans Council (WEEF-GEDC) (IEEE, 2023), 1–10, https://doi.org/10.1109/WEEF-GEDC59520.2023.10343638.

Mateusz Łabuz and Christopher Nehring, "On the Way to Deep Fake Democracy? Deep Fakes in Election Campaigns in 2023," *European Political Science*, April 26, 2024, https://doi.org/10.1057/s41304-024-00482-9.

prevent it from backfiring on its users. The ease of using AI, coupled with the rapid spread of social media content, can have a massive impact on those who are adversely affected.<sup>27</sup>

Due to numerous deviations in the use of AI on social media, government oversight is necessary to ensure legal certainty.<sup>28</sup> This supervision serves as a control mechanism to ensure that the development of AI in social media remains within the legal framework and does not deviate from the prevailing moral norms in Indonesia.

In the Indonesian regulations, oversight regarding deviations in content on social media is carried out by the Indonesian National Police, assisted by authorized government agencies or institutions.<sup>29</sup> However, electronic system providers must also prepare repressive measures to address deviations on social media. In Government Regulation No. 71 of 2019, Article 18 explains that electronic system providers must provide a feature for the removal of irrelevant electronic documents.

The feature provided by electronic organizers can serve as an initial step for public figures if they aggrieved to content created using AI. However, if this feature fails to resolve the issue, there is an alternative mechanism, which involves litigation by the public figure for violations in the processing of personal data, where the public figure is entitled to receive compensation.

According to the author's analysis, there are certain flaws in the current mechanism for content deletion available on social media platforms. Public figures are unable to directly delete social media content that features their likeness, as the existing mechanism only allows for reporting the content to the electronic organizer, indicating its violation. Consequently, the authority to remove such content resides solely with the electronic organizer.

Public figures possess the 'right to erasure', which entails the removal of social media content or electronic documents as a form of protection if they feel aggrieved. However, according to Government Regulation No. 71 of 2019 on the Operation of Electronic Systems and Transactions, Article 17(1), the deletion of irrelevant Electronic Information and/or Electronic Documents, including their removal from search engine listings (right to delisting) as referred to in Article 15(2) letter b, is conducted based on a court decision.

The request for the determination of deletion can be submitted by the owner of personal data. The court determination process follows criminal procedural law, placing the responsibility on electronic system operators regarding published social media content.

<sup>27</sup> Luciano Floridi and Josh Cowls, "A Unified Framework of Five Principles for AI in Society," in *Machine Learning and the City* (Wiley, 2022), 535–45, https://doi.org/10.1002/9781119815075.ch45.

Nathalie A. Smuha, "From a 'Race to AI' to a 'Race to AI Regulation': Regulatory Competition for Artificial Intelligence," *Law, Innovation and Technology* 13, no. 1 (January 2, 2021): 57–84, https://doi.org/10.1080/17579961.2021.1898300.

<sup>&</sup>lt;sup>29</sup> Edi Saputra Hasibuan, "The Role of Indonesian Police Through 'Cyber Patrol' in Preserving and Maintaining Cyber Room Security," *International Journal of Social Service and Research* 2, no. 8 (August 29, 2022): 722–28, https://doi.org/10.46799/ijssr.v2i8.146.

This constitutes the final step that the owner of personal data can undertake.<sup>30</sup> However, making the deletion of social media content a reality becomes a challenging endeavor in this context. The court determination process is time-consuming and requires a significant understanding of the law, posing a burden on public figures.

The Directorate of Cyber Security Operations in Deputy II has the responsibility to coordinate, formulate, and implement technical policies in the field of cyber security operations, in accordance with the Head of BSSN Regulation No. 6 of 2021 on the Organization and Work Procedures of BSSN. The National Cyber Incident Response Team, tasked with executing this mission, is managed by the Directorate of Cyber Security Operations and receives cyber complaint services from the Cyber Contact Center. Without waiting for the case to be completed through the judicial process, the perpetrator's account will be deleted if proven guilty.

Information and Communication Technology (ICT) is utilized in various aspects of life, including social, economic, legal, organizational, health, education, cultural, governmental, security, and defense fields. Cybersecurity has emerged as a global priority due to the rapid proliferation of ICT, directly correlating with the risks and complexities of its misuse.<sup>31</sup> To provide guidance for all stakeholders in national cybersecurity and facilitate the creation and development of cybersecurity policies within their respective institutions, the National Cyber and Crypto Agency (BSSN) has formulated the Indonesian Cybersecurity Strategy. Principles such as sovereignty, self-reliance, security, collaboration, and adaptability underlie the development of the national cybersecurity plan.<sup>32</sup>

# **Legal Protection**

Due to the law's extensive components and features, there is no adequate description of law in reality. Definitions provided by many experts persist as rules and boundaries for studying the law, even though there is no clear description of what the meaning of law is. Utrecht attempts to establish boundaries that function as a guide for those wishing to study legal science, although in reality, it is impossible to fully limit what law is. According to Utrecht, society must adhere to a set of laws (commands and prohibitions) that regulate the order of the community.

According to Hans Kelsen, law is a set of rules that govern how people should behave.<sup>33</sup> Therefore, law is not dependent on a single rule, but rather on a cohesive collection of rules

<sup>&</sup>lt;sup>30</sup> Heribertus Untung Setyardi, "Indonesian Legal Readiness: Regulation of Right to Be Forgotten in Relation to Big Data," *Jurnal Kewarganegaraan* 7, no. 1 (2023): 1068–79.

<sup>&</sup>lt;sup>31</sup> Shipra Pandey et al., "Cyber Security Risks in Globalized Supply Chains: Conceptual Framework," *Journal of Global Operations and Strategic Sourcing* 13, no. 1 (January 13, 2020): 103–28, https://doi.org/10.1108/JGOSS-05-2019-0042.

<sup>&</sup>lt;sup>32</sup> Rizki Desiana and Sri Cempaka Prima, "Cyber Security Policy in Indonesian Shipping Safety," *Journal of Maritime Studies and National Integration* 5, no. 2 (2022): 109–17.

<sup>&</sup>lt;sup>33</sup> Hans Kelsen, "What Is the Pure Theory of Law?," in *Law and Morality* (Routledge, 2017), 101–8.

that can be understood as a system; consequently, it is impossible to comprehend law if one focuses solely on a single rule.

Moreover, the legal protection proposed by Satjipto Raharjo aims to uphold human rights that have been violated by others while providing access to the community to obtain other fundamental rights.<sup>34</sup> Meanwhile, C.S.T. Kansil states that legal protection refers to various legal efforts that law enforcement officials must undertake to provide a sense of security from disturbances and various threats from any party, both mentally and physically.<sup>35</sup>

The concept of legal protection is inherent in all legal systems. Legal protection essentially has two types: preventive and punitive. Preventive legal protection, as the name suggests, focuses on averting dangers. For government actions based on discretionary power, preventive legal protection is crucial as it encourages the government to be cautious in decision-making. Forms of preventive legal protection include precautionary measures to ensure that crimes do not occur and to establish limits on how duties should be fulfilled. Repressive legal protection is used to resolve conflicts that arise after a violation has occurred. This protection serves as the last line of defense in terms of punishment for committed crimes.<sup>36</sup>

# Legal Protection for Public Figures Who Become "Objects" of Social Media Content in Indonesia

Legal protection essentially consists of two types, namely preventive and repressive. Preventive legal protection, as the name suggests, focuses on averting dangers. For government actions based on discretionary power, preventive legal protection is crucial as it encourages the government to exercise caution in decision-making. To prevent crimes and set limits on the fulfillment of duties, legal regulations incorporate a form of preventive legal protection.<sup>37</sup> The goal of repressive legal protection is to resolve conflicts that arise due to violations. Sanctions against committed offenses constitute this protection, serving as the last line of defense.

The characteristics of AI in automating information processing render it akin to an "Electronic Agent" under Indonesian legislation. Currently, AI is treated as an electronic agent there. An electronic system device, designed to automatically perform actions on

<sup>34</sup> Ria Wierma Putri et al., "Indonesia's Democracy and Constitution: Reflecting Human Rights Based on Pancasila," *Journal of Law and Policy Transformation* 7, no. 2 (January 1, 2023): 100, https://doi.org/10.37253/jlpt.v7i2.7235.

<sup>&</sup>lt;sup>35</sup> Puspita Ratnasari, "Legal Protection of the Rights of Suspects in Criminal Case Investigation Process in Human Rights Perspective," *International Journal of Social Science And Human Research* 05, no. 11 (November 19, 2022), https://doi.org/10.47191/ijsshr/v5-i11-31.

<sup>&</sup>lt;sup>36</sup> Raimo Lahti, "The Origin and Development of Quasi-Criminal Enforcement Mechanisms in Europe: Nordic Perspective," in *Criminal and Quasi-Criminal Enforcement Mechanisms in Europe* (Hart Publishing, 2022), 11–24, https://doi.org/10.5040/9781509932894.ch-001.

<sup>&</sup>lt;sup>37</sup> Tamara Tulich, "Critical Reflections on Preventive Justice," in *Regulating Preventive Justice* (Routledge, 2017), 2–22.

specific Electronic Information organized by humans, is referred to as an "Electronic Agent" in Article 1 of the ITE Law.<sup>38</sup> This indicates that AI device creators are responsible for fulfilling all legal responsibilities and obligations associated with an Electronic Agent.

Currently, public figures or celebrities in Indonesia are highly susceptible to being parodied for mere entertainment purposes. It is crucial to recognize that these individuals often have significant achievements and contribute to Indonesia's international reputation. Therefore, it is essential to protect these public figures to maintain their image. This protection is imperative because, regardless of the circumstances, public figures are individuals whose personal data, dignity, and reputation must be safeguarded.<sup>39</sup>

Drawing upon the discussion of copyright protection for AI in the current digital era, it aligns with Article 1, paragraph (3) of the Indonesian 1945 Constitution, which firmly states that Indonesia is a state based on the rule of law. In Indonesia, the rule of law takes the form of a democratic legal state, in accordance with the foundational principles laid down by the nation's founders. These principles prioritize justice and the objective of creating general welfare as the highest goals of a legal state. Additionally, the Indonesian 1945 Constitution asserts in Article 28D(1), that every person has the right to be recognized and to receive equal legal protection and assurance in the eyes of the law. This constitutional framework underpins the need for equitable legal protection in the realm of AI and digital copyrights, ensuring that all entities, including those affected by AI developments, are accorded fair and consistent legal treatment.

The Indonesian Civil Code draws an analogy between the relationship of AI and its operators, and that between pet owners and their pets. This comparison arises from the fact that autonomous AI requires data inputs and programming to function, placing it under the management of the operator or system owner. Artificial Intelligence, as a computational program, enables robots to emulate human intelligence. Consequently, if actions of AI cause harm to others, the operator or owner of the system may be held accountable.<sup>40</sup>

Artificial Intelligence capable of functioning in a manner akin to human intelligence indirectly fulfills the criteria to be considered a legal subject similar to humans. The intelligence exhibited by AI in answering questions, executing instructions, making judgments, and performing other human-like actions is contingent upon human intervention in the form of data input into a knowledge base comprising facts, theories, thoughts, and the interrelationships among them. This legal perspective underscores the

<sup>&</sup>lt;sup>38</sup> Angga Priancha et al., "Rethinking 'Electronic Agent' Terminology in the Law on Electronic Information and Transaction from the Perspective of Indonesian Lastgeving Law," *Mimbar Hukum* 34, no. 2 (December 24, 2022): 378–402, https://doi.org/10.22146/mh.v34i2.3864.

<sup>&</sup>lt;sup>39</sup> Yanti Dwi Astuti and Mohammad Zamroni, "Your Finger, Your Tiger: Netiquette Violations of the Microcelebrity Parody Content on Social Media," *Mediator: Jurnal Komunikasi* 15, no. 2 (January 3, 2023): 186–97, https://doi.org/10.29313/mediator.v15i2.10322.

<sup>&</sup>lt;sup>40</sup> Wolfgang Ertel, *Introduction to Artificial Intelligence* (Springer, 2018).

responsibilities of AI operators and the necessity of careful management and oversight of AI systems.<sup>41</sup>

AI can still be categorized as a worker because it executes human commands, even though it is not legally recognized as a legal subject. It is evident that the concept of AI as a tool has led to the definition of humans as substitutes for responsibility.<sup>42</sup> Since AI is not acknowledged as a legal subject (whether an individual or a legal entity), humans take on the role of substitute responsibility.

This is due to the fact that current positive criminal law provisions do not explicitly regulate the existence of substitute responsibility, either openly or tacitly. As substitute responsibility conflicts with the principle of *Actus Non Facit Reum Nisi Mens Sit Rea*, or "no punishment without a guilty act," the application of this concept remains questionable. A psychological condition and a special relationship between mental state and actions performed are referred to as culpability.<sup>43</sup>

Considering the rapid advancement of technology and information that enables almost everything to be facilitated through AI, the absence of regulations concerning AI's liability and its status as a legal subject in Indonesia could serve as a critical consideration for the evolution of progressive law in the future. The "Developmental Legal Theory" proposed by Mochtar Kusumaatmadja, which underscores the role of law as a catalyst for legal progress leading society towards advancement, reinforces the urgency of the need for such regulation. This theory advocates for a legal framework that not only adapts to but also anticipates and guides technological advancements, ensuring that legal systems remain relevant and effective in the face of rapidly evolving AI technologies.<sup>44</sup>

Legal protection for public figures currently exists in Article 310(3) of the Indonesian Criminal Code (KUHP), which states, "If it is done in writing or with illustrations that are broadcast, exhibited, or posted in public, it is threatened with written defamation punishable by imprisonment for up to one year and four months or a fine of up to four thousand five hundred rupiahs."

In general, the protection of photographic works is governed under Article 40(1) of Law No. 28 of 2014 on Copyright (Copyright Law). Copyright protection for photographic works can be implemented in two ways: preventively and repressively. Preventive protection is provided by the government to prevent copyright infringement through the registration of

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<sup>&</sup>lt;sup>41</sup> Ertel.

<sup>&</sup>lt;sup>42</sup> Ming-Hui Huang and Roland T. Rust, "Artificial Intelligence in Service," *Journal of Service Research* 21, no. 2 (May 5, 2018): 155–72, https://doi.org/10.1177/1094670517752459.

<sup>&</sup>lt;sup>43</sup> Kumar Apurv, "Mens Rea of a Criminal-A Short Review," *International Journal of Advanced Research and Interdisciplinary Scientific Endeavours* 1, no. 7 (2024): 146–48, https://doi.org/https://doi.org/10.61359/IJARISE2434.

<sup>&</sup>lt;sup>44</sup> M. Zulfa Aulia, "Hukum Pembangunan Dari Mochtar Kusuma-Atmadja: Mengarahkan Pembangunan Atau Mengabdi Pada Pembangunan?," *Undang: Jurnal Hukum* 1, no. 2 (March 11, 2019): 363–92, https://doi.org/10.22437/ujh.1.2.363-392.

copyrights. Repressive protection is offered by the government to resolve disputes in the event of copyright infringement on photographic works by filing lawsuits in the Commercial Court.

The rights held by a creator consist of Economic Rights and Moral Rights. Economic Rights are governed from Article 8 to Article 11 of the Copyright Law, while Moral Rights are regulated under Article 5(1) of the same law. Anyone who exercises the economic rights of a creation belonging to another person is required to obtain permission from the Creator or the Copyright Holder. It is prohibited for anyone, without the permission of the Creator or the Copyright Holder, to engage in the Acquisition and/or Commercial Use of a creation. In Indonesia, cases related to content that parodies public figures using AI technology are often derived from photographs of faces or entire bodies, as exemplified by instances parodying President Jokowi singing and dancing in a lifelike manner.

The matter is also discussed in Law No. 27 of 2022 on Personal Data Protection, Article 4(2) letter b, which addresses biometric data as specific personal data. Generally, biometrics can be defined as a study of measurable biological characteristics. This data is typically used to analyze the physical and behavioral aspects of humans to create authentication through personal data identification. Biometric data includes voice, fingerprints, face, iris, walking style, DNA, signature, retina reading, hand and finger geometry. This is indeed relevant to cases involving public figures.

Given that information and communication technology is used in many aspects of life - including social, economic, legal, organizational, health, education, cultural, governance, security, and defense - cybersecurity has emerged as a global priority. The rapid increase in the use of information and communication technology is directly correlated with the risks and complexities associated with its misuse.<sup>45</sup>

To provide guidance to all stakeholders in national cybersecurity for formulating and developing cybersecurity policies within their institutions, BSSN has created the Indonesian Cybersecurity Strategy. The fundamental principles of the nation and state's existence, namely: Sovereignty, Independence, Security, Togetherness, and Adaptability, guide the development of national cybersecurity policies.<sup>46</sup>

Furthermore, the term "Cyber Police" also refers to a task force or team known as the Cyber Crime Directorate (Dittipidsiber), responsible for enforcing the law against cybercrime in Indonesia and operating under the auspices of the Criminal Investigation Agency of the Indonesian National Police (Bareskrim Polri).<sup>47</sup> It is worth noting that the National Cyber

<sup>&</sup>lt;sup>45</sup> Mai Trinh Nguyen and Minh Quang Tran, "Balancing Security and Privacy in the Digital Age: An In-Depth Analysis of Legal and Regulatory Frameworks Impacting Cybersecurity Practices," *International Journal of Intelligent Automation and Computing* 6, no. 5 (2023): 1–12.

INGOLF PERNICE, "Global Cybersecurity Governance: A Constitutionalist Analysis," *Global Constitutionalism* 7, no. 1 (March 22, 2018): 112–41, https://doi.org/10.1017/S2045381718000023.

<sup>&</sup>lt;sup>47</sup> Widya Setiabudi Sumadinata, "Cybercrime and Global Security Threats: A Challenge in International Law," *Russian Law Journal* 11, no. 3 (2023): 438–44.

and Crypto Agency (BSSN) and the Cyber Police have different objectives. While Dittipidsiber is an organization enforcing the law related to crimes and illegal activities that occur in the online world, BSSN is an agency overseeing cybersecurity regulations. Cyber Police primarily focus on two broad categories of cybercrimes, namely:<sup>48</sup>

- Computer crime, which involves the use of a computer as the primary tool in criminal operations, such as hacking, digital data manipulation, web phishing, and disruptions/attacks on digital security systems; and
- 2) Computer-related crime, which involves the use of a computer as an auxiliary tool in the commission of crimes.

According to criminology experts Jewkes and Yar, computer-related crimes can be likened to "old wine in a new bottle," generally referring to all real-world crimes that are given a "new life" in the digital realm. <sup>49</sup> The dissemination of pornography, online gambling, spreading fake news, defamation, and hate speech are some examples of computer-related crimes.

According to Article 5(1) of Law No. 2 of 2002 on the State Police of the Republic of Indonesia, which explains that the State Police of the Republic of Indonesia is a state instrument that plays a role in maintaining public order and security, enforcing the law, and providing protection, guidance, and services to the public for the preservation of domestic security.

Therefore, legal protection for public figures can be carried out in several ways: firstly, through reporting features provided by electronic organizers; secondly, through lawsuits and claims for compensation to the judiciary; and thirdly, through requests for the determination of content removal submitted by public figures.

The legal protection instruments available are sufficient to ensure legal certainty for public figures. Public figures can report instances of electronic organizers' misconduct to the police, which will then be investigated by the cyber police unit or through other institutions specified by the law, such as BSSN.

### Conclusion

To date, the legal protection afforded to public figures in Indonesia by the National Police (Polri) and the BSSN in the realm of cyber law enforcement is perceived as insufficiently effective in safeguarding the image of public figures. This is primarily due to the absence of specific regulations or laws governing AI, resulting in a legal vacuum concerning AI

<sup>&</sup>lt;sup>48</sup> Rd. Yudi Anton Rikmadani et al., "Legislative Ratio of Strengthening State Cyber and Cryptography Agencies in Law Enforcement: A Perspective of Legal System Theory," *Indonesian Journal of Advanced Research* 3, no. 8 (August 30, 2024): 1347–68, https://doi.org/10.55927/ijar.v3i8.11106.

<sup>&</sup>lt;sup>49</sup> K. Jaishankar, "Cyber Victimology: A New Sub-Discipline of the Twenty-First Century Victimology," in *An International Perspective on Contemporary Developments in Victimology* (Cham: Springer International Publishing, 2020), 3–19, https://doi.org/10.1007/978-3-030-41622-5\_1.

regulation. The general public's limited understanding of AI technology, including mechanisms for reporting, relevant authorities, and available actions, exacerbates this issue. Legal protection for public figures can be pursued through several means: utilizing reporting features provided by electronic service providers, filing lawsuits and seeking compensation through judicial institutions, and requesting content removal via official appeals. The current legal protection instruments are deemed adequate for ensuring legal certainty for public figures. They can report electronic service deviations to the police for further investigation by cyber police units or other designated institutions under the law, such as the BSSN. According to the Electronic Information and Transactions Law, an entity creating AI is referred to as an electronic agent. This law stipulates that AI operations (Electronic Agents) in Indonesia can only be conducted by individuals, state administrators, businesses, and the community, meaning that legal responsibility falls on the electronic system operators providing AI services. The use of AI in social media requires consent from public figures whose biometric data is involved in the content, as it pertains to the handling of personal biometric data.

## **Conflict of Interest**

There are no relevant financial or non-financial competing interests to report.

## **Author(s) Contribution**

Author contribution: Author initiated the research ideas, instrument construction, data collection, analysis, and draft writing

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