Artificial Intelligence And Legal Challenges In Indonesia

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Abstract

Law, ethics and humanity need to accompany every development of Artificial Intelligence and all applications based on Artificial Intelligence. This rapid development cannot be separated from complex legal challenges. This research aims to identify, analyze, and provide solutions to legal challenges that arise in the context of the development of Artificial Intelligence. The main focus of the issue of Artificial Intelligence on Criminal liability. Through this exploration, the research provides in-depth insight into recent legal developments, regulatory efforts, and recommendations to overcome these obstacles. As such, the research contributes to a further understanding of the legal dynamics relating to the development of AI technology and stimulates further discussion in this area.

Keyword: Artificial Intelligence, Law, Challenges.

Abstrak

Hukum, etika, dan kemanusiaan perlu mengiringi setiap perkembangan *Artificial Intelligence* dan semua aplikasi yang dibuat berdasarkan *Artificial Intelligence*. Perkembangan pesat ini tidak lepas dari tantangan - tantangan hukum yang kompleks. Penelitian ini bertujuan untuk mengidentifikasi, menganalisis, dan memberikan solusi terhadap tantangan hukum yang timbul dalam konteks pengembangan *Artificial Intelligence*. Fokus utama isu *Artificial Intelligence* terhadap pertanggungjawaban Pidana. Melalui eksplorasi ini, penelitian memberikan wawasan mendalam tentang perkembangan hukum terkini, upaya regulasi, danrekomendasi untuk mengatasi hambatan-hambatan tersebut. Dengan demikian, penelitian ini memberikan kontribusi pada pemahaman lebih lanjut tentang dinamika hukum yang berkaitan dengan pengembangan teknologi AI dan merangsang pembahasan lebih lanjut di bidang ini.

Kata Kunci: Kecerdasan Buatan, Hukum, Tantangan.

A.   **Introduction**

Law, ethics and humanity need to accompany every development of AI and all applications based on AI. New rules of law, ethics and humanity need to be rethought, dialogued and rewritten to guide humanity everywhere to take control of these technological developments, not the other way around, where AI controls humans in making important decisions. As tools, these technologies are essential, even in helping humans save lives, add value to a better life, and nurture culture and civilization.

AI technologies should also respect human dignity and human rights, rather than being used to divide people. AI should develop the quality of human life so that human control over this technology should be enhanced. Regarding the value of democracy, AI should strengthen democracy with meaningful participation. Participation should start from design that considers all interests, data that represents all groups, to the utilization of AI technology that can be used by everyone

The utilization of Artificial Intelligence (AI) technology has the potential to raise several issues. Starting from analysis errors that result in news misinformation, copyright protection, to matters relating to human values. there are six contemporary issues related to the use of AI in everyday life, namely: (1) errors or misinformation, (2) privacy or confidentiality, (3) toxicity or cyber-based threats, (4) copyright protection, (5) AI implementation bias, and (6) understanding human values.[1]

The case of Uber's Volvo XC90 autonomous car that struck a cyclist to death in Arizona in 2018 became a talking point about AI malfunctions in the automotive industry. This is not the first time this has happened, the California State Department of Motor Vehicles noted that as of March 6, 2020, there were more than 59 reports of traffic accidents involving self-driving cars. [2]

With the rapid development of AI, legal challenges arise that require deep reflection and adjustments to the existing regulatory framework. These challenges are not only technical in nature, but include dimensions that reach deep into ethics, privacy, security, and social impact. This research seeks to explore and carefully analyze the complexity of legal challenges that arise with the development of artificial intelligence technologies.

With a deep understanding of these legal challenges, it is hoped that we can build a regulatory foundation that is able to accommodate the development of artificial intelligence technology without sacrificing human values, ethics and justice. In this context, this research is an important contribution in guiding the direction of the development of artificial intelligence technology that is in line with the needs of society and the principles of law.

The problems raised in this research use normative legal research methods, which use secondary data types where the data is obtained indirectly including primary legal materials. The data obtained is then collected through documentary study data collection techniques or literature studies by collecting data based on legal materials that have been used in this study, and analyzed using qualitative data analysis techniques. As the purpose of research is one of them as a prediction. in order to provide a description of the findings that are then obtained in this study and also to find the correct conclusions and can be scientifically accounted for.

B. **Disscussion**

1. **Cybercrime and its Legal Challenges**

   Cybercrime is a serious challenge in the digital age. Cyberattacks can damage critical infrastructure, steal sensitive data, or damage the reputation of individuals and companies. Types of attacks include website hacking, malicious software (malware),

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[1] Nezar Patria, "Kurangi Risiko, Pemerintah Kaji Kebutuhan Pengaturan AI" (Direktorat Jenderal Aplikasi Informatika, 2023), https://aptika.kominfo.go.id/2023/08/kurangi-risiko-pemerintah-kaji-kebutuhan-pengaturan-ai/.

[2] Diana Lukitasari, *Adopsi Model Pertanggungjawaban Pidana Korporasi Terhadap Malfungsi Penggunaan Artificial Intelligence Di Indonesia* (Surakarta: Program Doktor Ilmu Hukum Program Pascasarjana Fakultas Hukum Universitas Sebelas Maret, 2023), Https://Digilib.Uns.Ac.Id/Dokumen/Detail/98652/Adopsi-Model-Pertanggungjawaban-Pidana-Korporasi-Terhadap-Malfungsi-Penggunaan-Artificial-Intelligence-Di-Indonesia.

DDoS (Distributed Denial of Service) attacks, and identity theft, among others. Law enforcement in cybercrime cases is often complicated as the perpetrators can operate beyond the jurisdictional boundaries of countries. Cyberpolice work to identify and pursue the perpetrators of these cybercrimes, but need strong international cooperation.[3]

2. Harmonizing Privacy Regulations and AI Development

Existing privacy regulations may need to be adjusted to accommodate the dynamics of AI development. Legal challenges arise in finding a balance between strict privacy protection and the freedom to use data to advance technological innovation. By discussing the legal challenges related to privacy in the AI era, this research is expected to provide in-depth insights into the legal framework needed to protect individuals' privacy rights as technology rapidly advances.[4]

Artificial intelligence (AI) is a branch of computer science concerned with creating machines that can perform tasks that would normally require human intelligence, such as decision making, problem solving, and speech or image recognition. The main goal of AI is to develop machines that can learn from data and experience, so as to improve their performance in a given task.[5]

Indonesia as a country has the highest number of internet users in the world, with a percentage of 64% or 174 million people using the internet in Indonesia, while the growth was 17% per year in the past year, equivalent to 25.4 million new internet users in Indonesia. There are several basic concepts that need to be known to understand more about AI, namely: Machine Learning, Deep Learning, and Neural Networks.[6]

Indonesia is welcoming the industrial era 4.0, which is a phenomenon that makes one cyber and technique automatically without using human involvement to make it happen. Indonesian society is mainly generation Z, the generation born between 1998 - 2010, who are very familiar with the internet. [7]

3. Challenges to academic and scientific authority

Artificial intelligence has several challenges for academic and scientific authorities, such as the development of effective algorithms, the development of effective learning systems, and the development of effective control systems. Based on the explanation above, artificial intelligence and legal challenges in Indonesia can be discussed in more depth by examining several aspects, such as:

1. Development of artificial intelligence in Indonesia: How artificial intelligence is developing in Indonesia, and how it can improve performance and effectiveness in industry and daily life.

2. Legal and ethical challenges: How legal and ethical challenges arise in the development and use of artificial intelligence, such as legal provisions on the use of data, legal provisions on the use of technology, and legal provisions on the use

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[3] ratna marselina rajagukguk, "hukum dan teknologi: pengaturan tata kelola perusahaan di era digital," *jurnal mahasiswa hukum* 1, no. 1 (2023): 1–15.

[4] mudha'i yunus.

[5] ismail fahmi, "ai dan tantangan bagi otoritas akademik dan keilmuan," 2023, https://www.slideshare.net/ismailfahmi3/ai-dan-tantangan-bagi-otoritas-akademik-dan-keilmuan.

[6] Jamaaluddin and Sulistyowati Indah, "Buku Ajar Kecerdasan Buatan," *Umsida Press*, 2021, 121.

[7] Jamaaluddin and Indah.

of artificial intelligence in various fields.

3. Development of learning and control systems: How to develop effective learning and control systems in the development and use of artificial intelligence, such as the development of effective learning systems and the development of effective control systems.

4. Development of effective algorithms: How to develop effective algorithms in the development and use of artificial intelligence, such as the development of effective decision-making algorithms and the development of effective problem-solving algorithms.

5. Development of effective control systems: How to develop effective control systems in the development and use of artificial intelligence, such as the development of effective control systems to control and regulate artificial intelligence machines and systems.

4. AI legal challenges to the Pancasila rule of law

Legal challenges to AI in Indonesia as a Pancasila rule of law country consist of several aspects, including the utilization of AI in law enforcement, personal data protection law, and advances in AI technology.

1. Utilization of AI in law enforcement

In the context of Pancasila, the presence of AI can bring opportunities and challenges that must be faced as a Pancasila legal state. Some people hope that AI can take a role in making decisions on law enforcement in Indonesia, this is because AI can process legal documents, conduct risk analysis, search for information, make decisions, case management, and prevent fraud.[8]

2. Personal data protection law

The development of artificial intelligence (AI) technology poses its own challenges to personal data protection law. The use of AI technology makes a number of personal data accessible, so personal data protection is a new field that is currently developing rapidly.[9]

3. Advances in AI technology

The relationship between humans and technology has reached an intimate relationship, therefore such a relationship must continue to be maintained in high criticism so that the use and development of AI in Indonesia can meet the basic needs of the general public to improve the quality of life together to realize the civilization of the nation and the world.[10]

Legal Challenges in AI Development The development of Artificial Intelligence (AI) technology has been a milestone in the evolution of technology, bringing new

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[8] Denico Doly, "Pemanfaatan Artificial Intelligence Dalam Penegakan Hukum Di Indonesia," *Info Singkat-XV-19-I-P3DI-Oktober-2023-208* 19, no. 2 (2023).

[9] Artanti Hendriyana, "Pakar Unpad Sebut AI Jadi Tantangan Dalam Hukum Perlindungan Data Pribadi," Universitas Padjadjaran, 2023, https://www.unpad.ac.id/2023/06/pakar-unpad-sebut-ai-jadi-tantangan-dalam-hukum-perlindungan-data-pribadi/.

[10] Rosa Anggelina Babys, "Filsafat Artificial Intelligence (AI) Dan Kemanfaatan Untuk Mewujudkan Indonesia Yang Berperadaban," *JURNAL ORATIO DIRECTA* 5, no. 2 (2024): 1021–42.

opportunities and fundamental changes in the way we interact with the digital world. While providing tremendous innovation, the development of AI also raises a number of legal challenges that need to be taken seriously.[11]

5. Legal challenges to AI criminal liability

Indonesia as a Pancasila state of law can be explained through several aspects that play a major role in the use of AI. Some references that can be used to explain this challenge include:

1. AI Legal Setting

    Artificial Intelligence (AI) in Indonesia is categorized as an "Electronic Agent" in Indonesian laws and regulations. This means that all legal obligations and liabilities that apply to electronic devices as electronic agents also apply to AI.[12]

2. Civil liability

    Under this construction, civil liability can be extended to include civil liability for the use of AI.[13]

3. Organization of AI

    The implementation of AI (Electronic Agent) in Indonesia can only be carried out by persons, state administrators, business entities, and the community. This means that legal liability will be borne by the electronic system organizer who organizes AI services.[14]

4. Criminal Liability of AI: Research conducted using comparative-doctrinal legal research found possible models of criminal liability for AI, namely *perpetration-by-another, natural-probable-consequence, direct liability, and corporate liability*..[15]

C. Conclusion

Legal challenges to AI criminal liability in Indonesia as a Pancasila legal state include legal arrangements, civil liability, AI implementation, and criminal liability. To overcome the legal challenges to AI in Indonesia, it is necessary to conduct further studies on the use of AI in law enforcement and legal development. In addition, it is necessary to increase resilience and criticism of the use and development of AI in Indonesia, as well as the development of AI technology that is in accordance with the principles of Pancasila and human rights.

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[11] Mudha'i Yunus, "JURNAL RENVOI : Jurnal Hukum Dan Syariah Vol 1 No. 2 January 2024."

[12] Angga Priancha Zahrasafa P Mahardika, "Pengaturan Hukum Artifical Intelligence Indonesia Saat Ini," Hukum online.com, 1AD, https://www.hukumonline.com/berita/a/pengaturan-hukum-artifical-intelligence-indonesia-saat-ini-lt608b740fb22b7/.

[13] Zahrasafa P Mahardika.

[14] Sibro Mulisi, *Argumentasi Hukum Kedudukan Kecerdasan Buatan Di Indoneisa*, *Untag Sby*, 2018.

[15] Eka Nanda Ravizki, "Criminal Liability Of Artificial Intelligence (Ai): The Legal Conceptual Study And The Regulating Challenges In Global Disruptive Technology Era," 2019, 1–100, https://etd.repository.ugm.ac.id/penelitian/detail/179596.

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