

## CRIMINAL LIABILITY FOR DATA LEAKS CAUSED BY ARTIFICIAL INTELLIGENCE IN PROVIDING LEGAL CONSULTATION

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### Abstract

This study aims to analyze criminal liability for data leaks caused by AI in legal consulting services. Artificial Intelligence that can think and act like a human automatically has the potential to leak data in legal consulting services when a system error occurs. Indonesia's positional law that regulates technology and data protection has not sufficiently accommodated the actions caused by Artificial Intelligence as accountable acts. This type of research is normative legal research, with a legislative approach and a conceptual approach. The technique of collecting legal materials uses literature study with descriptive analysis techniques. The results of this study show that in Indonesian criminal law, criminal liability for data leaks caused by Artificial Intelligence is still not accommodated in existing regulations. The Personal Data Protection Law and the Electronic Information and Transaction Law have not explicitly regulated criminal liability for data leakage crimes caused by AI. As a result, the actions of AI that caused data leaks cannot be accounted for. With the existence of a substitute criminal liability model (vicarious liability), it can be adopted as AI accountability with the burden of criminal liability being delegated to the AI organizer or operator itself. However, this regulation related to accountability needs to be accommodated in the provisions of Indonesian criminal law, especially the regulation in the Personal Data Protection Law.

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### Introduction

Today's technological developments have brought significant changes in human life. The development of technology affects human lifestyles, ranging from behavior, and habits to ways of working. Technologies that are developing rapidly and influencing the way people work are Artificial Intelligence called AI (Bucher et al., 2024). A computer scientist named John

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McCarthy, defined AI as a branch of computer science to develop intelligent machines or Intelligence Machines (McCarthy, 1996). AI technology can obtain, process, and present information. In addition, AI also has the intellectual ability to imitate or perform actions like humans through computer machines. AI is operated through a computer and then the computer machine will be made smart and imitate the function of the human brain, be it language, thought, knowledge, reasoning, problem-solving, or decision-making so that AI can do human work (Rich & Knight, 1996).

In its development, AI has 3 (three) levels, including Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI), and Artificial Super Intelligence (ASI) (Venture, 2020). ANI is a form of weak AI that has low abilities so that humans must be assisted in its work process, then AGI is a form of strong AI that has abilities comparable to humans so that it can work fully autonomously without human assistance, while ASI is a form of AI that is deliberately created to surpass human capabilities and replace human work (Pabubung, 2023). The evolution of AI has now begun to move on to Artificial General Intelligence (AGI) where AI continues to be developed by technology experts to have the ability to do various fields of work (Goertzel, 2022).

The development of AI technology has now penetrated the industrial world, where the use of AI aims to improve services and reduce costs. No exception in the field of law, the use of AI technology is often referred to as legaltech namely the application of artificial intelligence-based technology to legal consulting services to provide efficient services at a low cost (Kurniawijaya et al., 2021). (Kurniawijaya et al., 2021). In Indonesia, AI technology is starting to be used in legal consulting services, such as the platform LIA (Legal Intelligence Assistant) i.e. a chatbot developed by hukumonline.com to assist the public in accessing legal consulting services (Harryarsana, 2022). According to a survey conducted by Thomson Reuters, 70% of legal professionals believe that AI will have a significant impact on the legal industry in the next few years (Berson, 2023). This is evidenced by the GPT-4 AI model which was declared to have passed the Advocate Professional Exam (UPA) in the Uniform Bar Examination with a score of 297 (Kurban & Şahin, 2024). An Anthropic AI named Claude also successfully passed a legal exam with the ability to answer questions and draw credible recommendations on how to change intellectual property laws (Kwatra & Kaushik, 2024).

The existence of AI as a technology that has abilities comparable to humans is likened to a double-edged sword. Behind the convenience and advantages provided by AI, there is a bad side that AI may cause when the use of this technology is not followed by human skills in operating it. AI has the potential to pose risks and challenges to human work because of AI's ability to operate independently based on data and algorithms, AI can act beyond predictions that cause losses to humans. Like a chatbot with models open source which is freely accessed by the public who work in an IT's full of Bartholomew (Mecacci et al., 2024). When a chatbot is used in legal consulting services occurs error system unexpectedly, of course, it will harm users of the AI-based legal consulting service. This can have an impact on confidential data leaks. Databases in AI systems work mysteriously with certain patterns, where the data that enters AI systems tends to be difficult to predict and cannot be guaranteed to be always safe (Yang et al., 2024). The potential problems posed by AI in the form of threats to privacy result in a person's data being easily collected and transferred from the AI system to another party without the knowledge of the data owner (Ye et al., 2024). Cases of data leaks due to the use of ChatGPT AI have occurred in companies that integrate ChatGPT into their operational flows, data leaks caused by AI in the form of email accounts, bank card details, crypto wallet information, and company browsing history, Group-IB stated most of them Log which contains a ChatGPT

account that has been hacked using Malware dangerous to steal this information (Muhamad, 2023).

The sophistication of AI technology integrated into legal consulting services helps advocates in providing legal consulting services to the public at a more affordable cost (Murray, 2023). However, the legal problems caused by the application of AI technology are also unavoidable. Data leakage is a fairly serious legal issue because it relates to personal data which is everyone's asset so it is crucial to protect. Misuse of personal data is a violation of the law that causes a person to be held legally accountable and even criminally liable. Data leaks caused by this technology can be sourced from the capacity of AI itself, which requires a large number of databases to increase its intelligence, while the use of data by AI systems will tend to be difficult to account for and difficult to predict because of the mysterious working patterns of AI based on databases and algorithms stored in the system. AI can threaten the existence of personal data from clients if there is an accidental data leak. The analysis of data generated by AI is not always guaranteed to be accurate, AI can produce biased and discriminatory conclusions, and even cyber-attacks make AI systems potentially experience information theft.

Based on the introduction as described above, the author is interested in further research on criminal liability for data leaks caused by AI in legal consulting services. This study aims to find out how criminal liability from data leaks caused by AI is applied in legal consulting services by advocates. Considering that regulations related to technology such as Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Information and Electronic Transactions are not enough to accommodate the crime of data leakage caused by AI as an act that can be accounted for, the inadequacy of this norm can cause legal uncertainty related to criminal liability, especially in AI which is capable of causing personal data leakage.

## **Research Method**

Research methods are an important element in conducting legal research. Sugiyono argues that the research method is a scientific method or procedure that aims to obtain data with certain uses and purposes (Sugiyono, 2014). Based on the subject of the research and the type of problem, this study uses a type of normative legal research, namely the process of finding a legal rule, legal principles, and legal doctrines to answer an issue faced (Marzuki, 2017). This research will analyze Indonesia's positive law about data leaks caused by AI technology in legal consulting services. Meanwhile, the research approach is to answer the formulation of problems related to the legal issues discussed, namely, the legislative approach and the conceptual approach. The legislative approach means studying all rules related to legal issues until they can find the ratio of a regulation (Marzuki, 2017). The conceptual approach is an approach that proceeds from the views or doctrines that have developed in legal science so that by studying these doctrines, researchers will find ideas that give birth to legal understandings, legal concepts, and principles that are relevant to the issues at hand (Marzuki, 2017).

## **Results and Discussions**

### **Legal Regulation of the Use of Artificial Intelligence by Advocates in Legal Consulting Services**

Efforts to formulate regulations related to the use and utilization of AI continue to be carried out to date. Several countries have implemented national strategies and regulatory frameworks related to AI development, including Indonesia. At this time, Indonesia already has a National Strategy for Artificial Intelligence, called Stranas KA with a focus on the development

and application of AI (Rahmatika, 2022). As a new technology, the use of AI certainly requires governance so that it can be applied safely and productively. In Stranas KA, it is stated that AI development in Indonesia focuses on five areas, including health, bureaucratic reform, education and research, food security, and mobility and smart cities. The development of AI in Indonesia is based on the principles of the G20. The principles of AI policy in Indonesia include:

1. Oriented to the benefit of human beings  
This principle adopts the concept of trustworthy AI formulated by the European Commission, where to be able to realize this principle there are requirements to implement responsible AI, namely placing humans as supervisors, improving technical robustness and security, data governance and privacy, transparency, social and environmental welfare, as well as diversity, non-discrimination, and justice;
2. Breathing the values of Pancasila  
With this principle, the development of AI must refer to Pancasila as the basis of the state;
3. Reliable, secure, open, and accountable  
The development of AI is aimed at creating public trust and can be accounted for so that it meets the elements of security. AI systems must be open so that their development can be known by the government and the public;
4. Synergy between policymakers  
The synergy between the government, the community, and business actors in AI development is urgently needed to increase research on AI so that it is expected to grow AI innovation in Indonesia; and
5. Application of the principles of Law Number 11 of 2019 concerning the National System of Science and Technology

The principles contained in the provisions of this law include the principles of faith, devotion, divinity, humanity, justice, benefit, security, transparency, accessibility, and state sovereignty (Harryarsana, 2022). In the context of providing legal consulting services through the use of AI technology-based technology, the Advocate Law and the Indonesian Advocate Code of Ethics do not emphasize that the means of providing legal services can be carried out based on technology. The Advocate Law only affirms that "Legal services are services provided by advocates in the form of providing legal advice, legal assistance, exercising power, representing, accompanying, defending, and carrying out other legal actions for the client's legal interests" (Undang-Undang Nomor 18 Tahun 2003 Tentang Advokat, n.d.).

In the Press Release of the Ministry of Law and Human Rights of the Republic of Indonesia in 2022 related to part two of legal consultation, the provision of legal services in the form of legal consultation can be carried out by advocates face-to-face or through electronic means (Usman, 2022). Several related regulations have implemented online legal consultation services through electronic media such as Padang Panjang Mayor Regulation Number 16 of 2018 concerning Guidelines for Online Legal Consultation Services. The regulation shows that the availability of adequate legal information is an urgent need for the public to realize and improve public understanding of law, therefore the provision of legal services in the form of legal consultation has begun to be carried out based on electronic media. The 1945 Constitution of the Republic of Indonesia also guarantees the right of everyone to develop and benefit from science and technology. Based on the provisions stipulated in Article 28C paragraph (1) of the 1945 Constitution of the Republic of Indonesia, everyone has the right to be able to develop themselves and benefit from science and technology, art and culture to improve their quality of life. This indicates that everyone, including an advocate, has the right to benefit from technological developments such as the technology that is currently developing rapidly, namely AI to provide legal consulting services.

### **Criminal Liability for Data Leakage Caused by *Artificial Intelligence* According to Criminal Law**

Criminal liability for actions caused by AI is an issue that concerns every country to formulate regulations regarding artificial intelligence (Haleyi, 2013). This is based on the nature of AI that can operate independently (autonomously) to a certain degree. Its nature, which allows it to commit criminal acts and harm humans, makes AI accountability very crucial to formulate.

Criminal liability is a form of liability that determines whether a criminal act can be held accountable (Saleh, 1982). Indonesia adheres to a dualistic view where the conditions for imposing a criminal sentence on the maker are required first to prove the existence of a criminal act, only after which the guilt is proven (Santosa, 2012). Based on the elements of criminal liability that concern the perpetrator of a criminal act, there is a criminal act committed. The main element of criminal liability determines that it cannot be held accountable if it does not commit a contrary act. According to Roeslan Saleh, between criminal acts and criminal liability, there is a relationship between each other (Erdianto Effendi, 2014). Whether a person who commits a criminal act can then be held accountable depends on whether the person's actions are at fault or not. Guilt is an element and even an absolute requirement to hold criminals accountable, because for the Indonesian people the principle of no crime without guilt (*Actus Non-Facit Reum Nisi Mens Sit Rea*). Based on this doctrine, two conditions must be met to be able to impose a criminal offense, namely, there is a prohibited outward act (*News Reus*) and an evil attitude (*mens rea*). Error (*mens rea*) is not solely seen as an evil mental attitude, even if one is honest or one's actions are done with a pure and morally correct consciousness of the soul according to the law. *Mens rea* can be shaped by Intentionality; Frivolity; and Forgetfulness or lack of caution (Szasz, 1998).

If the AI act that causes data leakage in legal consulting services is associated with Indonesian criminal law, then it can be said that the outward act (*News Reus*) has been fulfilled as an unlawful act that is contrary to the law. Law Number 27 of 2022 concerning Personal Data Protection contains criminal acts of data leakage and responding to crimes related to theft, taking, disclosure, and falsification of personal data. In Article 65 Paragraph (2) it is said that "Everyone is prohibited from unlawfully disclosing personal data that does not belong to them" (Undang-Undang Nomor 27 Tahun 2022 Tentang Perlindungan Data Pribadi, n.d.). So based on this element of accountability, AI has fulfilled the elements of *News Reus*.

Furthermore, the element of criminal liability is the error (*mens rea*). Based on the teachings of error, mistakes can be intentional (*Dolus*), frivolity negligence, or forgetfulness (*culpa*). The condition for an intentional error is to know or be called *Willens* and *wills* or is called *Wetens* (Utoyo & Afriani, 2020). This means that a person is said to have deliberately committed a criminal act if he knows and wants the act. Meanwhile, the condition of forgetfulness is caused by someone being negligent, not expecting or predicting that an act will happen.

Regarding the teaching of error in the concept of criminal liability, it focuses on the actions caused by AI, considering that in Indonesia's positive law, the principle of no crime without fault applies. If it is associated with the concept of criminal liability which emphasizes *mens rea* as a condition for being accountable for a criminal act, then the actions committed by AI related to the element of error, of course, must be measured from the ability to be responsible determined by the factor of reason (*Willens*) and the factor of will (*wetens*) possessed by AI. The element of *Willens en wetens* does not apply to people who do not have consciousness such as crazy people, or people under the influence of drugs or alcohol so that they cannot be held accountable. In terms of knowledge, of course, AI as a technology with a certain level of

intelligence meets the element of willens in mens rea. However, related to the wetness element, it will certainly be difficult to prove that there is a fault in AI, because AI does not have the awareness, desire, or will like humans to make good or evil moral judgments, so it is difficult to judge the evil intentions of the actions done.

In addition, the Indonesian state does not recognize AI as a legal subject in criminal law. This is based on the provisions of Law Number 1 of 1946 concerning the Criminal Code which only recognizes humans and legal entities (corporations) as legal subjects. Several formulations of criminal acts in the Criminal Code show the power to think as a condition for the subject of the criminal act, as well as the form of sanctions contained in the Criminal Code in the form of imprisonment, imprisonment, and fines can only be carried out by humans as legal subjects. The legal status of AI in the framework of Indonesian criminal law can be seen from the interpretation of the ITE Law which explains that electronic agents are devices of electronic systems that are made to take actions against certain information systems automatically (Harryarsana, 2022). The same characteristics are also found in AI, namely as a device or technology with a certain intelligence that is operated by humans to be able to act automatically. Therefore, based on positive law in Indonesia, the legal status of AI has not been recognized as a legal subject but only as an object. So when measured from the ability to be responsible for an act caused by AI, Indonesian criminal law has not been able to delegate a legal responsibility for an act of data leakage caused by AI.

### **Application of *Vicarious Liability* for Data Leaks Caused by Artificial Intelligence in Legal Consulting Services**

As a regulation that specifically regulates personal data, the Personal Data Protection Law does contain criminal acts of data leakage and responds to crimes related to theft, taking disclosure, and falsification of personal data. However, this law does not contain cases of crimes against personal data in the digital era carried out by a technology such as AI. As a special rule (*lex specialis*), the Personal Data Protection Law needs to accommodate crimes or data leaks committed by AI and add criminal liability related to personal data leakage caused by technology. In addition, considering the concept of criminal liability, emphasis is placed on fulfilling mens rea, While mens rea is not found in AI because of difficulties in determining intentions or wills, the concept of criminal liability that refers to the doctrine of error cannot be applied to AI.

The advancement in the field of technology has influenced the development of criminal law. The emergence of new dimensional crimes through AI technology that can leak data poses problems in criminal law, especially in the field of criminal liability. The development of this increasingly complex crime has led to conditions where the model of criminal accountability without fault needs to be applied. One of the models of criminal liability without fault is substitute criminal liability (*Vicarious Liability*). This concept has been regulated in Article 37 Letter B of the Criminal Code which states that "If it is determined by law, everyone can be held accountable for criminal acts committed by others" (Undang-Undang Nomor 1 Tahun 2023 Tentang Kitab Undang-Undang Hukum Pidana, n.d.). In substitute criminal liability, even if a person does not commit a criminal act himself and there is no mistake, he can still be held accountable by fulfilling two conditions, namely:

1. There must be an employment relationship such as the relationship between the employer and the employee, and
2. Criminal acts committed by employees or workers must be related to or still within the scope of work (Erdianto Effendi, 2014).

The concept of substitute criminal liability is a form of exemption from the principle of no criminal without fault. This concept has been regulated in the provisions of the National

Criminal Code and can be applied to data leakage cases caused by AI. The prohibition of disseminating personal data illegally has been regulated in Article 65 Paragraph (2) of the Personal Data Protection Law. In this regard, if AI as a data dissemination actor cannot be charged with the provisions of the Personal Data Protection Law, then with this concept, responsibility for data leaks carried out by AI should be delegated to legal consulting service providers or AI providers. Related to the relationship between advocates and AI in the provision of legal consulting services, it is assumed to be a relationship of assistance or assistance in doing work (Putra, 2021). Advocates as providers of legal services based on AI technology can be equated with electronic system operators as stipulated in Government Regulation Number 71 of 2019. Therefore, when there is a leak of personal data caused by AI in legal consulting services through AI technology (Murray, 2023), this concept can be applied to impose accountability for actions taken by AI to advocates as legal consulting service providers (Al-Busaidi et al., 2024).

## Conclusion

Criminal liability for data leaks caused by AI is still not accommodated in current regulations. Indonesia's positive law still has several weaknesses related to crimes caused by AI. The substance in Law Number 27 of 2022 concerning Personal Data Protection and Law Number 19 of 2016 concerning Information and Electronic Transactions only regulates technology used as an instrument of crime such as data theft, hacking, wiretapping, and information dissemination. Therefore, if AI cannot stop the commands given by humans, then take actions beyond its control that are detrimental or there is a *system error* and damage to AI that causes losses such as data leaks, then the burden of responsibility for these actions cannot be imposed on AI. This is based on the elements of criminal liability, including the existence of *actus reus* and *mens rea*, the ability to be responsible, and the absence of excuses that are not fulfilled by AI as the perpetrator of a criminal act. This is also evidenced by Indonesia's positive law which does not recognize AI as a legal subject. The existence of advances in the field of technology has influenced the development of criminal law, especially in the field of criminal liability. The increasingly complex development of crime in the digital era has led to conditions where a no-fault criminal liability model needs to be implemented. One of the models of criminal liability without fault is *vicarious liability*. This concept has been regulated in the provisions of Article 37 letter b of the Criminal Code. *Vicarious liability* requires the existence of an employment relationship such as the relationship between the employer and the employee, and the criminal act committed is still within the scope of work. With this concept of accountability, of course, responsibility for data leaks carried out by AI should be delegated to legal consulting service providers or AI operators. The concept of alternative criminal liability can be adopted as criminal liability for actions caused by AI in the future. The existence of the concept of substitute criminal liability formulated in the Criminal Code, it is hoped that the Personal Data Protection Law can be reformulated by adding a prohibition on organizing or operating technology that can cause data leaks, either due to *system errors* or the failure of the organizer to protect data from personal data leakage. In addition, it is necessary to add criminal provisions for AI actions that cause data leaks as an act that can be accounted for by adopting this concept. For this reason, it is hoped that the laws that are made will still consider the conditions of technological development and advancement so that the existing legal system will be more responsive and anticipatory to potential crimes, damages, and losses caused by AI.

## Bibliography

- Al-Busaidi, A. S., Raman, R., Hughes, L., Albashrawi, M. A., Malik, T., Dwivedi, Y. K., Al-Alawi, T., AlRizeiqi, M., Davies, G., Fenwick, M., Gupta, P., Gurple, S., Hooda, A., Jurcys, P., Lim, D., Lucchi, N., Misra, T., Raman, R., Shirish, A., & Walton, P. (2024). Redefining boundaries in innovation and knowledge domains: Investigating the impact of generative artificial intelligence on copyright and intellectual property rights. *Journal of Innovation & Knowledge*, 9(4), 100630. <https://doi.org/10.1016/j.jik.2024.100630>
- Berson, S. (2023). *AI for Lawyers Guide: Is AI the Future of the Legal Industry*. Grow Law Firm. <https://growlawfirm.com/blog/ai-for-lawyers-guide>
- Bucher, A., Blazek, E. S., & Symons, C. T. (2024). How are Machine Learning and Artificial Intelligence Used in Digital Behavior Change Interventions? A Scoping Review. *Mayo Clinic Proceedings: Digital Health*, 2(3), 375–404. <https://doi.org/10.1016/j.mcpdig.2024.05.007>
- Erdianto Effendi. (2014). *Hukum Pidana Indonesia Suatu Pengantar* (Kedua). PT Refika Aditama.
- Goertzel, B. (with Iklé, M., & Potapov, A.). (2022). *Artificial General Intelligence: 14th International Conference, AGI 2021, Palo Alto, CA, USA, October 15-18, 2021, Proceedings*. Springer International Publishing AG.
- Halevi, G. (Ed.). (2013). *When robots kill: Artificial intelligence under criminal law*. Northeastern University Press.
- Harryarsana, I. G. K. B. (2022). *Artificial Intelligence konsep, potensi masalah, hingga pertanggungjawaban pidana* (Pertama). PT RajaGrafindo Persada.
- Kurban, C. F., & Şahin, M. (2024). Navigating the Landscape of AI Chatbots. In C. F. Kurban & M. Şahin, *The Impact of ChatGPT on Higher Education* (pp. 7–27). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83797-647-820241002>
- Kurniawijaya, A., Yudityastri, A., & Zuama, A. P. C. (2021). Pendayagunaan Artificial Intelligence Dalam Perancangan Kontrak Serta Dampaknya Bagi Sektor Hukum di Indonesia. *Khatulistiwa Law Review*, 2(1).
- Kwatra, S., & Kaushik, B. (2024). *Generative Ai With Amazon Bedrock: Build, scale, and secure generative AI applications using Amazon Bedrock*. Packt Publishing Ltd.
- Marzuki, P. M. (2017). *Penelitian Hukum: Edisi Revisi*. Prenada Media.
- McCarthy, J. (1996). *Defending ai research: A collection of essays and reviews*. CSLI Publications.
- Mecacci, G., Amoroso, D., Cavalcante Siebert, L., Abbink, D., van den Hoven, J., & Santoni, F. (Eds.). (2024). *Research Handbook on Meaningful Human Control of Artificial Intelligence Systems*. Edward Elgar Publishing.
- Muhamad, N. (2023). *Data Pengguna ChatGPT Bocor di "Dark Web", Indonesia Masuk Daftar Kebocoran 10 Besar*. Databoks. <https://databoks.katadata.co.id/datapublish/2023/07/04/data-pengguna-chatgpt-bocor-di-dark-web-indonesia-masuk-daftar-kebocoran-10-besar>
- Murray, M. D. (2023). Artificial Intelligence and the Practice of Law Part 1: Lawyers Must be Professional and Responsible Supervisors of AI. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4478588>
- Pabubung, M. R. (2023). Era Kecerdasan Buatan dan Dampak terhadap Martabat Manusia dalam Kajian Etis. *Jurnal Filsafat Indonesia*, 6(1).
- Putra, R. A. (2021). *Akankah Artificial Intelligence Dapat Menggantikan Profesi Pengacara?* CTRL UGM. [https://ctrl.law.ugm.ac.id/2021/05/24/akankah-artificial-intelligence-dapat-menggantikan-profesi-pengacara/#\\_ftnref2](https://ctrl.law.ugm.ac.id/2021/05/24/akankah-artificial-intelligence-dapat-menggantikan-profesi-pengacara/#_ftnref2)
- Rahmatika, A. N. (2022). Strategi Pertahanan Negara Indonesia Dalam Menghadapi Ancaman Artificial Intelligence. *Peperangan Asimetris (PA)*, 8(1). <https://doi.org/10.33172/pa.v8i2.1511>



- Rich, E., & Knight, K. (1996). *Artificial intelligence* (2. ed., repr. in India). Tata McGraw-Hill.
- Saleh, R. (1982). *Pikiran-Pikiran Tentang Pertanggung Jawaban Pidana*. Ghalia Indonesia.
- Santosa, P. I. (2012). *Pertanggungjawaban Pidana Menurut Ajaran Dualistis*. Newsletter Kepaniteraan Mahkamah Agung R. <https://kepaniteraan.mahkamahagung.go.id/artikel-hukum/347-pertanggungjawaban-pidana-menurut-ajaran-dualistis-penulis-prayitno-iman-santosa>
- Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.
- Szasz, T. S. (1998). *Insanity: The idea and its consequences* (Nachdr.). Syracuse Univ. Press.
- Undang-Undang Nomor 1 Tahun 2023 Tentang Kitab Undang-Undang Hukum Pidana.
- Undang-Undang Nomor 18 Tahun 2003 Tentang Advokat.
- Undang-Undang Nomor 27 Tahun 2022 Tentang Perlindungan Data Pribadi.
- Usman, A. (2022). *Konsultasi Hukum Bagian Dua*. BPSDM Hukum Dan HAM. <https://bpsdm-dev.kemenkumham.go.id/informasi-publik/publikasi/pojok-penyuluhan-hukum/konsultasi-hukum-bagian-dua#:~:text=Kegiatan konsultasi hukum dapat dilakukan,satunya yaitu menggunakan jaringan internet.>
- Utoyo, M., & Afriani, K. (2020). Sengaja dan Tidak Sengaja dalam Hukum Pidana Indonesia. *Lex Librum : Jurnal Ilmu Hukum*, 7. <https://doi.org/10.46839/ljih.v0i0.298>
- Ventre, D. (2020). *Artificial Intelligence, Cybersecurity and Cyber Defence*. ISTE.
- Yang, J., Amrollahi, A., & Marrone, M. (2024). Harnessing the Potential of Artificial Intelligence: Affordances, Constraints, and Strategic Implications for Professional Services. *The Journal of Strategic Information Systems*, 33(4), 101864. <https://doi.org/10.1016/j.jsis.2024.101864>
- Ye, X., Yan, Y., Li, J., & Jiang, B. (2024). Privacy and personal data risk governance for generative artificial intelligence: A Chinese perspective. *Telecommunications Policy*, 102851. <https://doi.org/10.1016/j.telpol.2024.102851>