Civil Liability Regime for Artificial Intelligence in Indonesia: Become a Future Legal Subject?

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Abstract. On the one hand, the development of Artificial Intelligence ("AI") today has had such a significant impact on the lives of modern society that its emergence began to use widely. However on the other hand, AI existence raises the problem of liability if there is a loss during its use. Determining accountability has given rise to a serious debate between objective and subjective approaches to AI to be given the legal subject and rejected otherwise. The purpose of this article is to analyze how AI does base on current Indonesian law, its civil liability in the event of harm by comparing the EU and Japan, and whether AI in Indonesia could be a legal subject in the future. Using normative legal research methods with statutory approaches, comparative approaches, and conceptual approaches, this article finds: (i) AI under Indonesian law is currently an electronic agent, so it cannot be the legal subject and its civil liability based on the principle of negligence liability by the organizer as long as it is not the fault of its users; (ii) Indonesia is currently still using an objective approach and for the future regarding the possibility of change into a legal subject only occurs if there is a national law and international agreement to place AI in law through a subjective approach.

Keywords: Artificial Intelligence · Civil Liability · Legal Subject

1 Introduction

The Artificial Intelligence ("AI") is a system designed by humans with software and hardware such as automated intelligence, assisted intelligence, autonomous intelligence, and augmented intelligence with the help of machine learning, deep neural network, big data, and the internet of things, and cloud computing [1]. The emergence of AI in modern society has given rise to the possibility to be used in various sectors of the field so that AI has a high socio-economic impact [2]. According to PwC, the potential of AI alone will contribute $15.7 trillion to the global economy by 2030 [3]. This potential possibility can achieve by looking at the trend of increasing AI investment every year. Moreover, in the presence of the COVID-19 pandemic, McKinsey findings have provided awareness to be much more significant in accelerating the use of AI in some sectors than previously thought [4]. Tangible evidence is seen from Stanford University Human-Centered Artificial Intelligence report results that the total global investment in AI in 2020 amounted to $ 67.9 billion, or an increase of 40% compared to 2019 [5].

The magnitude of the potential and growth of AI also raises challenges for legal science to how to deal with it, considering every innovation will care about it [6]. Including AI, its current use intends to make decisions that have a broader impact on individuals and society that can lead to manipulation, discrimination, violations of privacy and property rights, and many others [7]. So AI has sparked a global debate about how to regulate AI in its responsibility for the dangers it poses and consider AI to be a legal subject [8].

In this article, the author will analyze AI based on Indonesian law. As far as the search for studies in Indonesia, the author only found the topic of AI to assist in preparing legislation and review from the side of criminal liability. Nevertheless, no one has discussed AI related to accountability and alluding to the legal subject from the civil side. Therefore, this article will focus on these two things.

2 Methodology

This article is a normative legal study with data sources used from primary data and secondary data. In this article, the approaches used are statutory, comparative, and conceptual approaches. The data obtained is then analyzed qualitatively to classify the aspects studied. Furthermore, conclusions related to this study are drawn and then elaborated descriptively-analytically.

3 Analysis and Discussion

3.1 Civil Liability Against AI That Causes Harm According to Indonesian Law

Referring to Indonesia's positive law, there is currently no specific legislation governing AI. Although there are no particular regulations, the authors found and argue that AI under the Law No. 11 of 2008 on Electronic Information and Transactions ("ITE Law") is a tool constructed to be an electronic agent. Several reasons support him for this. First, see Article 1 number 8 of the ITE Law on the definition of electronic agents, which is the device of an electronic system made to act on certain electronic information automatically organized by people. People here as electronic system organizers consider mutatis mutandis as electronic agent organizers based on Article 36 paragraph (3) of Government Regulation No. 71 of 2019 on on The Implementation of Electronic Systems and Transactions ("PP PSTE") and AI as its electronic system. Second, Article 36 paragraph (4) of PP PSTE states that electronic agents can be in the form of visual, audio, electronic data, and other formats. The other format can be included by AI, considering its form of software and hardware. Third, from a trade law perspective, electronic agents can also be constructed as intermediary traders. The electronic agent here becomes a party authorized by the owner of electronic information to take action on the electronic information in his possession automatically [9]. From such a structure, the authors conclude that can expand the responsibilities of electronic agents to include civil liability because AI becomes a legal object and not a legal subject to take an objective approach [10].

Furthermore, for the three reasons above, the existence of AI in Indonesia in terms of civil liability in the event of loss as an electronic agent then uses the principle of

negligence liability as stipulated in Article 1367 of Civil Code the juncto Article 21 the ITE Law. Civil liability based on the principle of negligence liability will be strengths by Edmon Makarim opinion that the ITE Law adheres to the principle of negligence liability whereby the organizer is positioned in a state of guilt always charged to be responsible unless it can be proven that the error of the electronic system is not his fault [11]. Then, Edmon Makarim also added that it could be possible to use strict liability in losses that have a significant impact and potentially harm the broader public interest in the ITE Law [11].

Additionally, when compared with other countries such as the European Union ("EU") and Japan. The EU takes an objective approach because it considers AI as a tool to facilitate human work. Then related to its civil liability, the EU issued guidelines that divide it into two based on the risk, namely high-risk, low risk [12]. If AI is at low risk where the impact is not significant, civil liability is based on the principle of negligence liability, while AI-based on high risk, if there is a significant potential danger or damage to many people, is used strict liability [13]. Likewise, Japan considers AI as a human tool because the country lacks a productive age population. Event of losses due to AI, civil liability in Japan is the same as that used by the EU [14].

3.2   Assessing AI as a Legal Subject in Indonesia: Challenges and Possibilities

Referring to Development in modern law, the legal subject is divided into two, namely naturally, namely human, and given by law, namely legal entities [15]. Regarding AI itself, internationally, there is currently no agreement that states AI is a legal subject because it is still a debate. The debate into two approaches between the objective approach and the subjective approach. The objective approach argues that AI is not a legal subject because AI does not have a legal personality in the form of rights and obligations given the results of human programmers [16]. Furthermore, the objective approach uses the analogy of animal and employer human relationships to see AI as a tool, i.e., if the AI's actions cause harm, then ai owners can hold accountable as long as the user does not make the error. As for if according to Indonesian civil law, the analogy regulating in Article 1367 paragraph (1) of the Civil Code related to responsibility for goods under its supervision, Article 1367 paragraph (3) of the Civil Code related to liability between workers and employers, and Article 1368 of the Civil Code regarding liability between owners and their pets. Therefore, the objective approach emphasizes that AI here is an object and not a subject because the primary existence of AI is to help humans work [17].

Instead, the objective approach does challenge by a subjective approach that uses bundle theory by Visa A.J. Kurki and fiction theory by Friedrich Carl von Savigny as its subjectivity to declare AI as the subject of a new law [18, 19, 20]. AI is considering a new legal subject because it will be the need of modern-era society, so it must doing recognize by law to obtain rights and obligations [21]. AI can demonstrate the characteristics of entities recognized as legal subjects such as intelligence, autonomous decision-making, and learning from their own experiences, memory, and planning [22]. Although it lacks the personality and ability to express its will common to humans and legal entities, AI can still be granted legal subject status as an artificial legal entity. Through such artificial legal entities, AI has a unique nature whose scope of rights and obligations is

not necessarily the same as those of other legal subjects, both human and legal entities [23]. Therefore, AI can only have rights and obligations by being strictly defined by law [24].

Although the objective approach emphasizes the existence of law personality feelings, the subjective approach must be changed from a different point of view, considering that AI has a unique nature so that the criteria of legal subjects do base on acceptance in people's lives [25]. According to the subjective approach, the change intends to emphasize that the treatment of AI should be a separate legal subject, in contrast to humans and legal entities [26]. Then to contemplate that AI is different when it uses analogies with animals, humans, or legal entities, it should be considered a new and unique category [27]. Therefore, AI should be assessed from a third-person perspective and not from a first-person or second-person perspective because they are data-driven and can only see their environment in the form of data when responding to its consciousness [27]. Thus, the understanding of objective approaches should evolve into accepting new people's lives to confer AI as a legal subject so that it can bear responsibility for the damage it causes [28]. Furthermore, the subjective approach then argues that using an objective approach will hinder AI innovation because it emphasizes unbalanced accountability for its makers [29].

Looking at the previous explanation, then AI cannot currently be a legal subject for Indonesia because Indonesia uses an objective approach by considering AI as a tool in Civil Code and constructed to be an electronic agent under the ITE Law. Then the next question is whether AI will be a legal subject in the future for Indonesia? In the future, it does not rule out the possibility if there is a national law and international agreement on AI to be the legal subjectn [30]. However, for now, the EU High-Level Expert Group on AI (HLEG-AI) issued a statement not to give legal subjects to AI due to the still unreasonable risks of AI development, accountability, transparency, and responsibility until the dreaded moral hazard arises over its use [31]. Many legal experts warn that such attribution makes it possible to escape responsibility because they know they will not be held accountable [32]. In addition, providing AI as a legal subject will not necessarily provide better protection for now because the existence of AI is still unclear what legal interests it represents [33].

Besides to the above reasons, the fact that providing legal subjects for AI today in a subjective approach still cannot meet the criteria to meet the criteria for rights and obligations [34]. The subjective approach argues that AI is currently still in the development stage and will achieve at some level so that there are no barriers to giving it currently in law [35]. Unfortunately, the subjective approach has not been able to explain what kind of greatness at some level is meant for AI to give a legal subject [36]. Besides, if the AI cannot find and meet its criteria, it will be like animals with all the similar attributes there are in ai, even reason and personality, but repeated calls to give legal subjects to animals have failed mainly due to their inability to perform tasks [37]. It is increasingly feared again because in AI, there are difficulties where AI has variations between software and hardware of different forms, thus raising the question of whether the two variations can be said to be the same to be legal subjects [38]. Eventually, the change of AI into the subject of law in Indonesia could occur if subjective approaches in future national law and international agreement accept.

4 Conclusion

Currently, Indonesian law applies an objective approach to civil liability to AI that causes harm with the principle of negligence liability. This principle is because AI is considered an electronic agent where AI is a legal object under the ITE Law. The implication is that AI is not considered a legal subject. In the future, the study of AI should do improve. Experts in both law and IT need to discuss whether AI can be a legal subject and analyze other AI developments such as intellectual property in anticipation and prepare the rule of law to gain benefits from the rapid development of AI.

References

1. J. F. and R. Seamans, "AI and the Economy," *Innov. Policy Econ.*, vol. 19, pp. 161–162, 2019, https://doi.org/10.1086/699936.
2. H. Varian, "Artificial Intelligence, Economics, and Industrial Organization," in *The Economics of Artificial Intelligence: An Agenda*, Chicago: University of Chicago Press, 2019, p. 399.
3. PwC, "The Macroeconomic Impact of Artificial Intelligence," New York, 2018.
4. and N. H. Tara Balakrishnan, Michael Chui, Bryce Hall, "The state of AI in 2020," *McKinsey*, 2020. https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/global-survey-the-state-of-ai-in-2020.
5. Human-Centered Artificial Intelligence Stanford University, "Artificial Intelligence Index Report 2021," Stanford, 2021.
6. M. Kovac, "Autonomous Artificial Intelligence and Uncontemplated Hazards: Towards the Optimal Regulatory Framework," *Eur. J. Risk Regul.*, p. 16, 2021, https://doi.org/10.1017/err.2021.28.
7. M. E. and S. N. Navarro, "Regulating AI and Robotics: Ethical and Legal Challenges," in *Algorithms and Law*, Cambridge: Cambridge University Press, 2019, p. 33.
8. O. J. E. and J. Goldsmith, "Regulating Artificial Intelligence: Proposal for a Global Solution," in *Conference on AI, Ethics, and Society (AIES '18)*, 2018, p. 95, https://doi.org/10.1145/3278721.3278731.
9. Z. P. and A. Priancha, "Pengaturan Hukum Artifical Intelligence Indonesia Saat Ini," *Fakultas Hukum Universitas Indonesia*, 2020. https://law.ui.ac.id/v3/pengaturan-hukum-artifical-intelligence-indonesia-saat-ini-oleh-zahrashafa-pm-angga-priancha/.
10. V. Dignum, "Responsibility and Artificial Intelligence," in *The Oxford Handbook of Ethics of AI*, New York: Oxford University Press, 2020, p. 215.
11. E. Makarim, "Tanggung Jawab Penyelenggara Terhadap Tata Kelola yang Baik dalam Penyelenggaraan Sistem Elektronik (Good Electronic Governence)," Universitas Indonesia, 2009.
12. H. S. Antunes, "Civil Liability Applicable to Artificial Intelligence: A Preliminary Critique of the European Parliament Resolution of 2020," *SSRN*, p. 19, 2021.
13. European Union, *Artificial Intelligence and Civil Liability*. Brussels: European Union, 2020.
14. and H. F. Akira Matsuda, Ryohei Kudo, "AI, Machine Learning, and Big Data Laws and Regulationns: Japan," *Global Legal Insight*, 2021. https://www.globallegalinsights.com/practice-areas/ai-machine-learning-and-big-data-laws-and-regulations/japan.
15. Subekti, *Pokok Pokok Hukum Perdata*. Jakarta: PT Intermasa, 2010.
16. I. Stefán, "Examining the Issues of Legal Personhood of Artificial Intelligence and Robots," *Sect. Juridica Polit.*, vol. 38, no. 1, p. 482, 2019, doi: 10.32978.sjp.2020.026

17. F. R. José-Antonio Cervantes, Sonia López, Luis-Felipe Rodríguez, Salvador Cervantes, Francisco Cervantes, "Artificial Moral Agents: A Survey of the Current Status," *Sci. Eng. Ethics*, vol. 26, p. 527, 2020, https://doi.org/10.1007/s11948-019-00151-x.

18. V. A. J. Kurki, *The Legal Personhood of Artificial Intelligences.* Oxford: Oxford University Press, 2019.

19. S. Koos, "Artificial Intelligence as Disruption Factor in the Civil Law: Impact of the use of Artificial Intelligence in Liability, Contracting, Competition Law and Consumer Protection With Particular Reference to the German and Indonesia Legal Situation," *Yuridika*, vol. 36, no. 1, p. 241, 2021, https://doi.org/10.20473/ydk.v36i1.24033.

20. S. Koos, "Artificial Intelligence – Science Fiction and Legal Reality," *Malaysian J. Syariah Law*, vol. 6, no. 3, p. 25, 2018.

21. T. Luzan, "Legal Personhood of Artificial Intelligence," University of Helsinki, 2020.

22. G. PauliusČerka, JurgitaGrigienė, "Is it Possible to Grant Legal Personality to Artificial Intelligence Software Systems?," *Comput. Law Secur. Rev.*, vol. 33, no. 5, p. 697, 2017, https://doi.org/10.1016/j.clsr.2017.03.022.

23. A. M. Roman Dremliuga, Pavel Kuznetcov, "Criteria for Recognition of AI as a Legal Person," *J. Polit. Law*, vol. 12, no. 3, p. 112, 2019, https://doi.org/10.5539/jpl.v12n3p105.

24. J. Jowitt, "Assessing Contemporary Legislative Proposals for Their Compatibility With a Natural Law Case for AI Legal Personhood," *AI Soc.*, vol. 36, p. 505, 2021, https://doi.org/10.1007/s00146-020-00979-z.

25. I. Giuffrida, "Liability for AI Decision-Making: Some Legal and Ethical Considerations," *Fordham Law Rev.*, vol. 88, no. 2, pp. 444–445, 2019.

26. A. A. and O. Yastrebov, "Legal Status of Artificial Intelligence Across Countries: Legislation on the Move," *Eur. Res. Stud. J.*, vol. 11, no. 4, pp. 779–780, 2018, [Online]. Available: https://doi.org/10.35808/ersj/1245.

27. M. Hildebrandt, "The Artificial Intelligence of European Union Law," *Ger. Law J.*, vol. 21, no. 1, p. 76, 2020, [Online]. Available: https://doi.org/10.1017/glj.2019.99.

28. B. C. Cheong, "Granting Legal Personhood to Artificial Intelligence Systems and Traditional Veil-piercing Concepts to Impose Liability," *SN Soc. Sci.*, vol. 1, no. 231, p. 17, 2021, https://doi.org/10.1007/s43545-021-00236-0.

29. E. Marchisio, "In Support of 'No-fault' Civil Liability Rules for Artificial Intelligence," *SN Soc. Sci.*, vol. 1, no. 54, p. 19, 2021, https://doi.org/10.1007/s43545-020-00043-z.

30. and P. Y. S. Yuwono Prianto, Viony Kresna Sumantri, "Pros and Cons of AI Robot as a Legal Subject," in *Tarumanagara International Conference on the Applications of Social Sciences and Humanities*, 2019, p. 386, doi: https://doi.org/10.2991/assehr.k.200515.067.

31. High-Level Expert Group on Artifical Intelligence EU, *Liability for Artificial Intelligence and Other Emerging Technologies.* Brussels: European Union, 2019.

32. M. Hildebrandt, "Legal Personhood for AI?," in *Law for Computer Scientists and Other Folk*, Oxford: Oxford University Press, 2020, p. 248.

33. P. De Hert, V. Papakonstantinou, G. Malgieri, L. Beslay, and I. Sanchez, "The Right to Data portability in the GDPR: Towards User-centric Interoperability of Digital Services," *Comput. Law Secur. Rev.*, vol. 34, no. 2, pp. 193–203, Apr. 2018, https://doi.org/10.1016/j.clsr.2017.10.003

34. S. Chesterman, "AI and the Limits of Legal Personality," *Int. Comp. Law Q.*, vol. 69, no. 4, p. 843, 2020, https://doi.org/10.1017/S0020589320000366.

35. S. Wojtczak, "Endowing Artificial Intelligence with Legal Subjectivity," *AI Soc.*, p. 5, 2021, https://doi.org/10.1007/s00146-021-01147-7

36. J.-S. Gordon, "Artificial Moral and Legal Personhood," *AI Soc.*, vol. 36, p. 469, 2021, https://doi.org/10.1007/s00146-020-01063-2.

37. S. M. Solaiman, "Legal Personality of Robots, Corporations, Idols and Chimpanzees: a Quest for Legitimacy," *Artif. Intell. Law*, vol. 25, p. 175, 2016, https://doi.org/10.1007/s10506-016-9192-3.

38. J. C. and P. Burgess, "The Boundaries of Legal Personhood: How Spontaneous Intelligence Can Problematise Differences Between Humans, Artificial Intelligence, Companies and Animals," *Artif. Intell. Law*, vol. 27, p. 90, 2018, doi: https://doi.org/10.1007/s10506-018-9229-x