RETHINKING "ELECTRONIC AGENT" TERMINOLOGY IN THE LAW ON ELECTRONIC INFORMATION AND TRANSACTION FROM THE PERSPECTIVE OF INDONESIAN LASTGEVING LAW

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Abstract

The definition of "Electronic Agent" in Law of Electronic Information and Transaction (ITE Law) raised questions from the perspective of Agency Law (in Indonesia known as lastgeving). ITE Law construct that "Electronic Agent" is "a device of an electronic system that is made to do an action on a certain Electronic information automatically which is organized by person." This construction of saying "Electronic Agent" as a device can be criticized through the perspective of agency law which agent usually refers to legal subject. The doctrine of agent in Indonesia is known as "as an act of giving a power of attorney" or "lastgeving." Lastgeving is defined as a legal relationship between two legal subjects, where one subject gives his authority to another legal subject to do a certain action on behalf of the principal. This means, in concept, agent is a legal subject (legal entity) and not a legal object (object/device) which is constructed by ITE Law. This article will discuss how the adequacy of "Electronic Agent" terminology is used in the ITE Law from the perspective of Indonesia Lastgeving law. In discussing the issues stated above, this article uses the normative legal studies methodology. Keywords: Electronic Agent, Lastgeving, Agent, Artificial Agent, Electronic Information and Transaction Law

Intisari

Definisi "Agen Elektronik" dalam Undang-Undang Informasi dan Transaksi Elektronik (UU Elektronik) menimbulkan pertanyaan dari sudut pandang Hukum Keagenan (di Indonesia dikenal sebagai Lastgeving). UU ITE mengkonstruksikan pemahaman "Agen Elektronik" sebagai sebuah "perangkat dari suatu Sistem Elektronik yang dibuat untuk melakukan suatu tindakan terhadap suatu Informasi Elektronik tertentu secara otomatis yang diselenggarakan oleh Orang." Pengkonstruksian Agen Elektronik sebagai sebuah perangkat ini dapat dikritisi menyimpang dari konsep keagenan pada umumnya yang mengacu sebagai sebuah subjek hukum. Konsep agen atau di Indonesia secara doktrin dikenal sebagai "hukum pemberian kuasa" atau "lastgeving." Lastgeving didefinisikan sebagai hubungan hukum antara dua orang, dimana sang agen diberikan kepercayaan untuk melakukan suatu hal atas nama sang principal. Yang berarti, agen adalah sebuah subjek hukum (orang) dan bukan objek hukum (barang/perangkat) seperti yang dikonstruksikan oleh UU ITE. Artikel ini akan membahas bagaimana ketepatan penggunaan terminologi "agen elektronik" didalam UU ITE melalui

perspektif hukum pemberian kuasa atau lastgeving Indonesia. Dalam mambahas isu tersebut, artikel ini akan menggunakan metode yuridis normatif.

Kata Kunci: Agen Elektronik, Lastgeving, Agen, Artificial Agent, Undang-Undang Informasi dan Transaksi Elektronik

A. Introduction

The terminology of "Electronic Agent" (Agen Elektronik) in the Indonesian ITE law raise criticism from the perspective agency law, or for its Indonesian equivalent the "Lastgeving law" (Hukum Pemberian Kuasa). Lastgeving regulates the relationship between "mandator/Pemberi Kuasa" with the "mandatary/Penerima" to do certain acts on behalf of the mandator. Through lastgeving, the mandatary are allowed to do some acts under the name of mandator based on the authority granted and agreed by lastgeving. In the west, like in the USA or UK, this concept of lastgeving is often argued equivalent to the concept of "agency law" where the mandator is given the term "principal" and the mandatary is given the term "agent." In the agency law, the principal (mandator) gives a certain authority to Agent (mandatary) to do a certain act on behalf of the principal.

Problems arise when scholars tried to construct of Artificial Intelligence (AI) as "Electronic Agent" Under the ITE law.³ Indonesian ITE Law defined

¹ Civil Code, Article 1792-1819; Yunesha Ratih Fitriani, "Implementasi Subrogasi Dengan Lastgeving Sebagai Instrument Hukum Dalam Peralihan Hak Atas Tanah," *Lex Renaissance* Vol. 2, no. 1 (2017): 89, https://journal.uii.ac.id/Lex-Renaissance/article/view/7994/pdff.

² I Wayan Arthanaya, A.A. Gede Cahya Pratama, and I Nyoman Sumardika, "Tinjauan Yuridis Terhadap Kuasa Yang Diberikan WNI Kepada WNA Untuk Mengalihkan Hak Atas Tanah," *Jurnal Konstruksi Hukum* Vol. 1, no. 1 (2020): 2, https://www.ejournal.warmadewa.ac.id/index. php/jukonhum/article/view/2120.

³ Samir Chopra and Laurence White, "Artificial Agents and The Contradicting Problem: A Solution VIA Agency Analysis," *Journal of Law, Technology & Policy* Vol. 2009, no. 2 (2009): 363-365, https://www.researchgate.net/publication/228304132_Artificial_Agents_and_the_Contracting_Problem_A_Solution_Via_an_Agency_Analysis; Setia Putra, "Perlindungan Hukum Terhadap Konsumen Dalam Transaksi Jual-Beli Melalui E-Commerce," *Jurnal Ilmu Hukum Fakultas Hukum Universitas Riau* Vol. 5, no. 2 (2014), https://www.neliti.com/id/publications/9164/perlindungan-hukum-terhadap-konsumen-dalam-transaksi-jual-beli-melalui-e-commerc; Ilhami Ginang Pratidina, "Keabsahan Perjanjian Melalui Agen Elektronik Dalam Sistem Hukum Kontrak Indonesia" (Thesis, Universitas Airlangga, 2017), http://repository.unair.ac.id/62481/; Muhammad Hafidz S., Reka Dewantara, and Diah Pawestri M, "Keabsahan Perjanjian Kredit Antara Pihak Nasabah Dan Bank Melalui Agen Elektronik Artificial Intelligence Dengan Sistem Chatbot," *Jurnal Hukum*, (December 2019), http://hukum.studentjournal.ub.ac.id/index.php/hukum/article/view/3683; Zahrashafa P. Mahardika and Angga Priancha, "Pengaturan Hukum Artificial Intelligence Indonesia Saat Ini," hukumonline.com, https://www.hukumonline.com/berita/baca/lt608b740fb22b7/pengaturan-hukum-artifical-intelligence-indonesia-saat-ini/

electronic agent as "a device of an electronic system that is made to do an action on a certain Electronic information automatically which is organized by person." From this definition, the word "device" and "automatic" in the definition of electronic agent is often used as a bridge to construct AI as Electronic Agent. This is because AI is basically a device that do automatization of a certain business process, and can be interpreted as an agent that act on behalf of their principal.

Even though the construction seems to be correct, the use of terminology of "Agent/agen" in the ITE law might contradict with the true concept of "agent" or "mandatary" under the *lastgeving* law. In the concept of *lastgeving*, it is conceived as an act of giving an authority to another legal subject, which this involves rights and responsibility between the mandator and mandatary. While in legal theory, the one who can bear rights and responsibility is either a natural person or a legal entity.

If we look the concept of *lastgeving* and agency law, mandatary and agent is seen as a legal subject, because they are given a certain authority by the mandator/principal, as mandatary act on behalf of the mandator/principal.

⁽accessed July 2021); Daniel Seng and Tan Cheng Han SC, "Artificial Intelligence and Agents," *NUS Centre for Technology, Robotics, Artificial Intelligence & the Law Working Paper* 21/02 (October 2021); Rio Christiawan, "Tantangan Hukum Era GoTo," analisis.kontan.co.id, https://analisis.kontan.co.id/news/tantangan-hukum-era-goto-1 (accessed July 2021)

⁴ Law No. 19 Year 2016 on the revision of Law No. 11 Year 2008 on Information and Electronic Transaction, Article 1 (8) states that Electronic Agent is a device of an Electronic System that is made to perform an action on certain Electronic Information automatically held by a Person.

⁵ Setia Putra, "Perlindungan Hukum Terhadap Konsumen Dalam Transaksi Jual-Beli Melalui E-Commerce," *Jurnal Ilmu Hukum Riau* Vol. 4, no. 2 (2014); Ilhami Ginang Pratidina, "Keabsahan Perjanjian Melalui Agen Elektronik Dalam Sistem Hukum Kontrak Indonesia" (Thesis, Universitas Airlangga, 2017); Muhammad Hafidz S., Reka Dewantara, and Diah Pawestri M, "Keabsahan Perjanjian Kredit Antara Pihak Nasabah Dan Bank Melalui Agen Elektronik Artificial Intelligence Dengan Sistem Chatbot," *Jurnal Hukum*, (December 2019), http://hukum. studentjournal.ub.ac.id/index.php/hukum/article/view/3683; Zahrashafa P. Mahardika and Angga Priancha, "Pengaturan Hukum Artificial Intelligence Indonesia Saat Ini," hukumonline. com, https://www.hukumonline.com/berita/baca/lt608b740fb22b7/pengaturan-hukum-artifical-intelligence-indonesia-saat-ini/ (accessed July 2021).

⁶ Samir Chopra and Laurence White, "Artificial Agents and The Contradicting Problem: A Solution VIA Agency Analysis," *Journal of Law, Technology & Policy* Vol. 2009, no. 2 (2009): 363-365; Kate Forbes-Pitt, *The Assumption of Agency Theory* (London: Routledge, 2011), 136-137; Samir Chopra and Laurence F. White, *A Legal Theory for Autonomous Artificial Agents* (Michigan: The University of Michigan Press, 2011), 23, https://books.google.co.id/books?id=J5IoSzOKZIUC&printsec=frontcover&hl=id&source=gbs_ge_summary r&cad=0#v=onepage&q&f=false.

This view is being supported by the interpretation of the concept of *lastgeving* by Subekti and Tjitrosudibio cited by Latumenten that stated "*pemberian kuasa* or *lastgeving* is a consensus where someone give an authority to someone else, that accepted it for and on behalf of (mandator), in order to do an affair." In this interpretation, it is emphasized that the mandatary as "someone" or a legal subject that can hold rights and responsibility.

The logical construction of mandatary as a legal subject would then raise contradiction when being compared to the definition of electronic agent in the ITE law. First, electronic agent is defined as "a device of an electronic system that is made to do an action on a certain electronic information automatically" which lead to the question whether this concept of electronic agent refers to a legal subject? Or a "device" which considered as an object of law?

Second, the definition of electronic agent in the ITE law also mention the clause "which is organized by person." This also raises a question whether this organizing person would bear the responsibility of the electronic agent. A "device" as an object of law cannot bear rights and responsibility like legal subject do. Hence, this article would pose its main research question on finding the answer of "is the terminology of electronic agent in the ITE law contradict with the concept in *lastgeving* law?"

In answering the research question, this article will discuss about those arising question using the perspective of Indonesian law, mainly *lastgeving* law and ITE Law as well as related legal doctrines such as Agency Law of the U.S. In discussing this issue, this article will use the normative legal studies methodology.

B. Lastgeving, Agency Law and Artificial Agent

This section would discuss the concept of giving the mandate to other person according to Indonesian and US Law. In discussing the concept this article would use the translation of 'mandator' for the 'pemberi kuasa' and

⁷ Pieter E. Latumenten, "Pemberian Kuasa Dalam Konsep 'Volmacht Dan Lastgeving' Berdasarkan Cita Hukum Pancasila," *Jurnal Hukum Dan Pembangunan* Vol. 47, no. 1 (2017): 3.

'mandatary' for the 'penerima kuasa'.8

2. Concept of Indonesian Lastgeving Law

b. According to Burgerlijk Wetboek (BW)

According to the Indonesian Civil Code or *Burgerlijk Wetboek*, the concept of giving a mandate or *lastgeving* to other person regarding certain objective is regulated in the Book 4 Chapter XVI Section 1 concerning the issuance of mandate. In this chapter, the Civil Code defines mandate, mandator, a mandatary. It also divided mandate into general and specific.

The general mandatary concerned only on certain acts of management. on the other hand, the specific mandatary's mandate only exceeds to what has been consented by both parties such as encumbering or transferring assets, reaching certain compromise, or other acts that could only be done by the owner of certain goods. This mandatary also bears the cost, damage, and interest because of his negligence while he is using his authority given by the mandator in a period given. However, the degree of his accountability varied on whether he was paid or not. 10

The mandator also bears the obligation to reimburse all the cost or advances made by the mandatary in accordance with his mandate. This also includes the losses that incurred considering whether it is part of mandatary's negligence. The mandatary also has the rights to retain the goods he possesses until the mandator has paid all his claims. If a mandatary has been chosen by multiple individuals with the same matters, each one of them must be held liable for the entire consequences regarding the mandate.¹¹

The mandate could be terminated due three reasons. First, the mandate being relocated based on a substantial ground or if the mandator deems fit. Mandatary could also release himself from the mandate after giving notice to the mandator on timely manner, being aware that this release is not connected with losses that mandator would suffer. Second, notification of the mandate termination. Third, the bankruptcy, guardianship, or death of the mandator or/

⁸ Civil Code, 42.

⁹ Civil Code, Article 1795 – 1797.

¹⁰ Civil Code, Article 1800 - 1806.

¹¹ Civil Code, Article 1807 – 1812.

and the mandatary. In case one of the parties is unaware of these events, each of their action is still deemed as valid and their heirs need to notify each of the other and act accordingly.¹²

c. According to Wetboek van Koophandel (WVK)

The Wetboek van Koophandel voor Indonesia or the Indonesian Commercial Code also regulates the relationship between a mandator and a mandatary. It tries to define various types of this mandatary relationship. This includes the stock and commodity exchange (*bursa dagang*), broker (*makelar*), cashier(*kasir*), commissioner (*komisioner*), expeditor (*ekspeditur*), and carrier (*pengangkut*). 13

The commodity exchange is considered as a junction for seller, broker, cashier, and people that are considered as a stakeholder in a trade related relationship. ¹⁴ Today this exchange is established in Indonesia as the Indonesian Stock Exchange (*Bursa Efek Indonesia*) and the Indonesia Commodity & Derivatives Exchange (*Bursa Berjangka Jakarta*), which are regulated under the Capital Market Law (*UU Pasar Modal*) and Commodity Trade Law (*UU Perdagangan Berjangka Komoditi*). ¹⁵ Similar to the adjustment in the regulation above the term of broker has also different meaning. Before it was considered as a middleman in any forms of trade, they need to be sworn at a district court to be considered as a broker. ¹⁶ Now this practice is non-existent in regular trades and could only be found in stock exchanges.

d. According to the Law and Regulations in Indonesia (Trade Minister Regulation)

In the recently amended regulation by the Ministry of Trade Indonesia regarding agreement to distributing goods, it used a more recent term and universally recognized such as principal (*principal*) and agent (*agent*). The principal has a similar, if not the same, definition as mandator as a person or a corporation regarded as a legal entity or not that would give a mandate to an agent in Indonesia to sell goods that are produced, owned, or managed by the

¹² Civil Code, Article 1813 – 1819.

¹³ Agus Sardjono et al., Pengantar Hukum Dagang, 2nd ed. (Jakarta: Rajawali Pers, 2014), 107.

¹⁴ Trade Code, Article 85.

¹⁵ Agus Sardjono et al., Pengantar Hukum Dagang. 2nd ed. (Jakarta: Rajawali Pers, 2014), 112.

¹⁶ Trade Code, Article 62.

principal.¹⁷ Agent is considered as a businessman that act as a middleman for the principal according to an agreement which states a commission fee for the agent to market the goods without owning or managed by it.¹⁸

Even though there are principals, they are not the only entity who could give a mandate. This regulation also divides it as a producer principal, supplier principal, a foreign direct investment company working in trading, and representative branch from a foreign company. This would enable a goods producer, an appointed principal by the producer, and a foreign company has the same footing in appointing other legal entity as their mandator.¹⁹

Still an agent is a stakeholder for the distributions of goods. It then categorized as a sole or a sub. A sole agent has the exclusive right to be the only one to distribute the goods in certain area of distribution while the sub agent is a legal entity that are appointed by an agent or sole agent who received a mandate from the principal.²⁰

e. Electronic Agent in Indonesian ITE Law

ITE Law and its related regulation defines "electronic agent" as "a device of an electronic system that is made to do an action on a certain Electronic information automatically which is organized by person."²¹ It is often interpreted as a tool that can work autonomously to conduct offer and acceptance of offer in electronic transaction without the involvement of human.²² As it works autonomously without human intervention, it could be interpreted as a mandatary or agent that works based on behalf of the mandator.²³

¹⁷ Peraturan Menteri Perdagangan Nomor 24 Tahun 2021 tentang Perikatan Untuk Pendistribusian Barang Oleh Distributor Atau Agen, Article 1 (3).

¹⁸ Ministry of Trade Regulation Number 24 Year 2021 on Agreements for the Distribution of Goods by Distributors or Agents, Article 1 (6).

¹⁹ Ministry of Trade Regulation Number 24 Year 2021 on Agreements for the Distribution of Goods by Distributors or Agents, Article 3.

²⁰ Ministry of Trade Regulation Number 24 Year 2021 on Agreements for the Distribution of Goods by Distributors or Agents, Article 1 (8) and Article 1 (12).

²¹ Law Number 19 Year 2016 on the Revision of Law Number 11 Year 2008 on Information and Electronic Transactions, Article 1 (8); Government Regulation Number 71 Year 2019 on Implementation of Electronic Systems and Transactions, Article 1 (3).

²² Ilhami Ginang Pratidina, "Keabsahan Perjanjian Melalui Agen Elektronik Dalam Sistem Hukum Kontrak Indonesia" (Thesis, Universitas Airlangga, 2017).

²³ Samir Chopra and Laurence F. White, *A Legal Theory for Autonomous Artificial Agents* (Michigan: The University of Michigan Press, 2011), 23; Ilhami Ginang Pratidina, "Keabsahan

Chopra and White illustrate this through Amazon website that autonomously offering and accepting offer at any time and place through Information and communication technology (ICT). In their book, Chopra and White state that:²⁴

"The positions these systems occupy have been occupied by legal agents of similarly placed principals in the past. For instance, the tasks undertaken by Amazon.com's website agent would once have been accomplished by an army of salesclerks. Such automation does not mask the fact a similar range of responsibilities has been delegated to an entity of comparable competence in the field in question."

This approach is somewhat being supported by the elucidation of Indonesian Government Regulation No.71 Year 2019 on Operation of Electronic System and Transaction²⁵ that states Electronic Data Capture (EDC) in finance sector is an example of Electronic Agent.²⁶

EDC is a system originally designed for the collection of clinical data in electronic format for use in human clinical trials.²⁷ It takes "over the function of data entry, data validation and data reporting for analysis", ²⁸ thus started replacing the traditional paper-based data collection method.²⁹ The usefulness of this technology later spread into many sectors including the financial sector. In the context on financial sector, EDC Machine is often use

Perjanjian Melalui Agen Elektronik Dalam Sistem Hukum Kontrak Indonesia" (Thesis, Universitas Airlangga, 2017).

²⁴ Samir Chopra and Laurence F. White, *A Legal Theory for Autonomous Artificial Agents* (Michigan: The University of Michigan Press, 2011), 23.

²⁵ Government Regulation Number 71 Year 2019 on Implementation of Electronic Systems and Transactions, Article 36 (4); Previously also stated in Government Regulation Number 82 Year 2012 on Implementation of Electronic Systems and Transactions.

²⁶ Government Regulation Number 82 Year 2012 on Implementation of Electronic Systems and Transactions, Article 34.

²⁷ Alison Yeoman, Christine Urquhart, Faten Hamad, Dina Tbaishat (ed), *Information Systems: Process and Practice* (London: Facet Publishing, 2018), 241; Ryan Monte, "The Beginner's Guide to an Electronic Data Capture (EDC) System," advarra.com, https://www.advarra.com/blog/beginners-guide-electronic-data-capture-edc-system/ (accessed July 2021)

²⁸ Alison Yeoman, Christine Urquhart, Faten Hamad, Dina Tbaishat (ed), *Information Systems: Process and Practice* (London: Facet Publishing, 2018), 241.

²⁹ Carina King et al., "Electronic Data Capture in a Rural African Setting: Evaluating Experiences with Different Systems in Malawi," *Global Health Action* 7, no. 1 (December 2014), https://doi. org/10.3402/gha.v7.25878; Ryan Monte, "The Beginner's Guide to an Electronic Data Capture (EDC) System," advarra.com, https://www.advarra.com/blog/beginners-guide-electronic-data-capture-edc-system/ (accessed July 2021).

as one of method in doing electronic payment that usually via card.³⁰ EDC machine act as data collector that automatically retrieve customer information and process the transaction to the merchant without the need of a bank staff.³¹

Analyzing it from the perspective of electronic agent, the EDC machine could be interpreted as the bank staff that previously should gather customer data manually through paper, thus process it into the merchant account and manually check if the transaction has been done or not. EDC machine act on behalf of the bank similar to the action as bank staff acting on behalf of their employer. Which the pattern is also seen in the Chopra and White illustration of amazon.com website. Not to mention that looking at the current technology, AI could do more than an EDC Machine or Amazon website. In E-commerce platform, AI now can act on its own suggesting possible item that the consumer might interested in. Mimicking of a human sales agent that market goods on behalf of their mandator. Making it plausible to see AI as an electronic agent that act on behalf of its user or mandator.³²

Seen like this, it is logical to assume that the machine act on the mandator behalf and act as an "agent." However, in Indonesian *lastgeving* law, the

³⁰ Theodorus Sendjaja and Rosita Kawandari, "Peningkatan Kualitas Layanan Sistem Electronic Data Capture Untuk Meningkatkan Loyalitas Merchant," *E-Jurnal Apresiasi Ekonomi* Vol. 8, no. 1 (2020): 59, https://stiepasaman.ac.id/ojsapresiasiekonomi/index.php/apresiasiekonomi/article/view/271/279; Lawinsider.com, "EDC (Electronic Data Capture)," https://www.lawinsider.com/dictionary/edc-electronic-data-capture-machine (accessed November 23, 2020); Harry Prasetyo D. and Henry Yuliando, "Analisis Atribut Layanan Electronic Data Capture (EDC) Terhadap Kepuasan Merchant Dengan Menggunakan Model Kano (Studi Di Bank XYZ Cabang Jakarta Cipulir)" (Thesis, Universitas Gadjah Mada, 2017), http://etd.repository.ugm.ac.id/home/detail_pencarian/113120.

³¹ Supramono and Elsa, "Peranan Mesin Elektronik Data Capture (EDC) Sebagai Salah Satu Transaksi Pembayaran Elektronik Pada Bank," *Moneter: Jurnal Keuangan & Perbankan* Vol. 6, no. 2 (2018): 59-60, http://ejournal.uika-bogor.ac.id/index.php/MONETER/article/view/2412.

³² Samir Chopra and Laurence F. White, *A Legal Theory for Autonomous Artificial Agents* (Michigan: The University of Michigan Press, 2011), 363-365; Setia Putra, "Perlindungan Hukum Terhadap Konsumen Dalam Transaksi Jual-Beli Melalui E-Commerce," *Jurnal Ilmu Hukum Riau* Vol. 4, no. 2 (2014); Ilhami Ginang Pratidina, "Keabsahan Perjanjian Melalui Agen Elektronik Dalam Sistem Hukum Kontrak Indonesia" (Thesis, Universitas Airlangga, 2017); Muhammad Hafidz S., Reka Dewantara, and Diah Pawestri M, "Keabsahan Perjanjian Kredit Antara Pihak Nasabah Dan Bank Melalui Agen Elektronik Artificial Intelligence Dengan Sistem Chatbot," *Jurnal Hukum*, (December 2019), http://hukum.studentjournal.ub.ac.id/index.php/hukum/article/view/3683; Zahrashafa P. Mahardika and Angga Priancha, "Pengaturan Hukum Artificial Intelligence Indonesia Saat Ini," hukumonline.com, https://www.hukumonline.com/berita/baca/lt608b740fb22b7/pengaturan-hukum-artifical-intelligence-indonesia-saat-ini/(accessed July 2021).

mandatary is also given rights and obligation that can only be accepted by a legal subject, either natural person or a legal entity. In additon, *lastgeving* is done based on contractual basis while AI or Electronic System is usually commanded through a set of algorithms. This raise a question whether the approach of using the terminology of "electronic agent" which in *lastgeving* could be seen as "electronic mandatary" under this scenario would be a correct thing to do.

In discussing this issue further, the article will discuss in the perspective U.S. Agency Law and comparing it with the U.S. concept of "electronic agent." This is because the concept of *lastgeving* is argued to have equivalent of agency law in the common law jurisdiction. In this case, this article will also put into account the development of agency law and electronic agent in the US.

2. Concept of Electronic Agent in the U.S. Agency Law

a. Overview of US Agency Law

Within the US Law, the concept of *lastgeving* is equivalent to agency law which governs the relationship between a principal and an agent. It traces back to the latin phrases *Qui facit per alium, facit per se* or "he who acts through another is deemed in law to do it himself."³³ Furthermore, it extends its scope in a relationship between a guardian-ward, administrator-decedent, and employer-employee.³⁴ In the US Agency law, it is defined a fiduciary relation which results from the manifestation of consent by one person to another that the other shall act on his behalf and subject to his control, and consent by the other so to act."³⁵

While the relationship between the person is consensual, it could not be a contractual one. The consent still needs to be expressed or implied from the conduct of the principal and agent. Furthermore, this consent may also be results from the implication of both parties' conduct. Although their act

³³ Samir Chopra and Laurence F. White, *A Legal Theory for Autonomous Artificial Agents* (Michigan: The University of Michigan Press, 2011), 18.

³⁴ Cornell Law School, "Agency," https://www.law.cornell.edu/wex/agency (accessed July 2021)

³⁵ Ronald C. Wyse, "A Framework of Analysis for the Law of Agency," *Montana Law Review* Vol. 40, no. 1 (1979): 3, https://scholarship.law.umt.edu/mlr/vol40/iss1/2?utm_source=scholarship.law.umt.edu%2Fmlr%2Fvol40%2Fiss1%2F2&utm_medium=PDF&utm_campaign=PDFCoverPages.

could benefit other parties, the agent must act primarily for the benefit of the principal. This is important to distinguish the relationship from other compensation related services. With it, the principal does not need to be in full control at every time as he could give the responsibility to control, in accordance with his consent, to the agent.³⁶ Thus, we can conclude that in an agency relationship there must be three elements which are consent by both parties, the agent acts on behalf of the principal, and the principal has a control on the agent's acts.³⁷

b. U.S. Concept of Electronic Agent

As the frontrunner in the technological field, by the end of the 20th century, the discussion whether an electronic agent is a same legal entity as a conventional agent raised. To determine how this electronic agent scholars leaned towards what gives rise to contractual obligation rather than deeming electronic agent identical of the human one. One of the theories are considered as the most dominant is the will theory. ³⁸ Before dissecting into the will theory, we need to understand what is considered as an electronic agent. The United States Code on Commerce and Trade Section 7006 (3) describe electronic agent as a computer program or an electronic or other automated means used independently to initiate an action or respond to electronic records or performances in whole or in part without review or action by an individual at the time of the action or response.³⁹

Few scholarly definitions also come to light. One defines it as "a software thing that knows how to do things" 40 and "software which performs a given task using information gleaned from its environment to act in a suitable manner so as to complete the task successfully". 41 It ultimately shows the idea

³⁶ J. Dennis Heyes and Mark J. Loewenstein, *Agency, Partnership, and the LLC: The Law of Unincorporated Business Enterprises*, (Durham: Carolina Academic Press, 2007), xxiii.

³⁷ University of Houston Law School, "Agency Law" 301, no. 1997 (2006): 2-4.

³⁸ Anthony Bellia Jr., "Contracting with Electronic Agents," *Emory Law Journal* Vol. 50 (June 2006): 1073.

³⁹ United States Code, 2006 Edition, Supplement 5, Title 15 Commerce and Trade, Section 7006.

⁴⁰ Bjorn Hermans, "Intelligent Software Agents on the Internet: An Inventory of Currently Offered Functionality in the Information Society and a Prediction of (Near) Future Developments," *First Monday* (1996).

⁴¹ Bjorn Hermans, "Intelligent Software Agents on the Internet: An Inventory of Currently Offered Functionality in the Information Society and a Prediction of (Near) Future Developments," *First Monday* (1996).

of a software that could perform something without a human command.

In addition, they operated such as an individual intelligence, personalized, continuously running, and semi-autonomous, which are perfect for optimizing e-commerce experience. They are free to negotiate the terms and condition for transaction contracts and decide when payment and transactions could be taken place.⁴²

Then, how could this electronic agent be considered just as the same as a human one? In justifying its place in electronic transactions theories such as will theory are called upon. The first examine whether an electronic agent has the same capability to have a will and act in the first place. It is then divided into two which are the promise theory and consent theory.⁴³

The promise constructed the will of an electronic agent with what has been intended beforehand by the user of an electronic agent. Because he asserts his commitment through the electronic agent, it should be considered without considering the outcome, that this electronic agent has the will of its user to enter into contract. Still this approach is debatable as the user still need to constantly renew their commitment once a new offer was given.⁴⁴ The consent one also deals with a similar understanding that the possessor (user) is transferring its alienable rights. The possessor also manifests his consent to legally bound while transferring the rights.⁴⁵

Fischer tried to justify electronic agent as to set aside the question whether the computer itself could be held liable, 46 something that are susceptible to be questioned as the electronic agent need to be considered as an embodiment of its user. The question then refers to the state of the legal personhood of

⁴² JF Lerouge, "Use of Electronic Agents Questioned under Contractual Law: Suggested Solutions on a European and American Level," *John Marshall Journal of Computer and Information Law* Vol. 18, no. 2 (Winter 1999): 406, http://heinonlinebackup.com/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jmjcila18§ion=14.

⁴³ Anthony Bellia Jr., "Contracting with Electronic Agents," *Emory Law Journal* Vol. 50 (June 2006): 1073.

⁴⁴ P. S. Atiyah and Charles Fried, "Contract as Promise: A Theory of Contractual Obligation," *Harvard Law Review* Vol. 95, no. 2 (1981): 509, https://doi.org/10.2307/1340714.

⁴⁵ Randy E. Barnett, "Squaring Undisclosed Agency Law with Contract Theory," *California Law Review* Vol. 75, no. 6 (1987): 11, https://doi.org/10.2307/3480546.

⁴⁶ John P Fischer, "Computers as Agents: A Proposed Approach to Revised U.C.C. Article 2," *Indiana Law Journal* Vol. 72, no. 2 (1997): 570, http://www.repository.law.indiana.edu/ilj/vol72/iss2/13.

the electronic agent. Solum argues that once a system has achieved self-consciousness, they are morally entitled to be treated as a legal person.⁴⁷ Wein even broaden electronic agent position as a personhood that could be directly sued.⁴⁸

In concurrence, the US Law, under the Uniform Electronic Transaction Act ruled that a contract can be made by electronic agent even without an individual supervising it. ⁴⁹ Therefore, the legal realm in the US enabled electronic agent to be independent in acting without supervision of a person, still the principal shall bore the consequences whenever there's a fault done by the electronic agent. ⁵⁰ With this approach, the US does not consider electronic agent as a legal subject and treat it only as a tool used by user in making an automatic electronic transaction.

3. Bridging the understanding between Indonesian and US Lastgeving Law

The similar issue of how Indonesian and US law see the use of "agent" terminology under "electronic agent" is how electronic agent is seen within a transaction, whether it act as a subject, or an object in assisting a transaction or legal relation. The characteristic of being an object has shown profoundly in the US Law, making electronic agent merely a tool that could help in creating automated electronic transaction. However, the use of "agent" terminology in "electronic agent" somewhat evoking thoughts and intuition in seeing electronic agent as another legal subject on its own. This would lead to the question on whether electronic agent could bear the responsibility of its automatic action on its own.

C. Approaches in Seeing "Electronic Agent" as "Artificial Agent"

The use of technology such as computer systems has created an enormous change in society. Few years ago, computers were only looked at as a mere instrument to process and record information, then it has recently become a means of autonomous processing and transmission of data. Therefore nowadays,

⁴⁷ Lawrence B Solum, "Legal Personhood for Artificial Intelligences," *North Carolina Law Review* Vol. 70, no. 4 (1992): 1231, http://scholarship.law.unc.edu/nclr/vol70/iss4/4.

⁴⁸ Leon E. Wein, "The Responsibility of Intelligent Artifacts: Toward an Automation Jurisprudence," *Harvard Journal of Law & Technology* Vol. 6 (Fall 1992): 103.

⁴⁹ The United States of America, Uniform Electronic Transaction Act, Section 14(b)(1)

⁵⁰ Sandra Norman-Eady, "Uniform Electronic Transaction Act," OLR Research Report, 2000, https://www.cga.ct.gov/2000/rpt/2000-R-1076.htm#:~:text=It%20establishes%20a%20 legal%20foundation,on%20the%20s

contracts between computers are possible without human intervention. This type of contract is common in e-commerce practice conducted by an artificial agent or software agent.⁵¹ With computers and electronic devices being capable of operating autonomously, the computer's role shifts from a passive participant to an active participant. In the future, it has the potential to be a more sophisticated software agent capable of expressing emotions and demonstrating true "personality."⁵²

In today's legal system, computers still lack the legal capacity to become subjects of rights and obligations, express a binding will, and take responsibility for their own actions. Thus, it is not necessary for the artificial representative to be considered a legal entity to account for a contract. Intelligent artefacts like AI, however, are also capable of learning from experience and adjusting their own behavior similar to that of humans.

The recognition of these competencies later has influenced legal effects. Legal doctrine on the difficulties of contracts made by artificial agents starting to emerge. First, there are two parties in a contract. Since the artificial agent is not a legal entity, the parties involved in the contract are only the buyer and the seller. Second, potential difficulties in reaching agreement on terms between the parties as one party will omit the terms of the particular contract the artificial agent has entered into. Third, it is questioned if the agent's principal is not aware of the fact that a particular contract has been entered into, how can a binding intent be established.⁵³ The application of the agency model to human-computer agency contracts would not have been possible without the development of the legitimate legal personality of the artificial agent. The consent of both parties is required to establish a principal-agent relationship. Hence, in a principal-agent relationship performed by an artificial agent, the concept of consenting is absurd.⁵⁴

⁵¹ Francisco Andrade et al., "Contracting Agents: Legal Personality and Representation," *Artificial Intelligence and Law* Vol. 15, no. 4 (2007): 358, https://doi.org/10.1007/s10506-007-9046-0.

⁵² T. Allen and R. Widdison, "Can Computers Make Contracts?," *Harvard Journal of Law and Technology* Vol. 9, no. 1 (1996): 26, http://jolt.law.harvard.edu/articles/pdf/v09/09HarvJLTech025.pdf.

⁵³ Samir Chopra and Laurence White, "Artificial Agents - Personhood in Law and Philosophy," ECAI (2004): 2, https://www.sci.brooklyn.cuny.edu/~schopra/agentlawsub.pdf.

⁵⁴ JF Lerouge, "Use of Electronic Agents Questioned under Contractual Law: Suggested Solutions

There are two main possible solutions for the contracting problem. The first possibility is to consider the electronic devices only as a mere tool used by their owners. Think of an artificial agent as a set of practices or methodologies related to the associated computing and engineering domain. Artificial intelligence is not any different from any other technology we might use to facilitate the contract forming process such as Pen and paper. This solution considers all the declarative processes as performed by humans. This solution mentioned in the presumption theory of Allen and Widdison called "legal fiction" that treated all the transactions entered by computers the same as if it was entered by humans, regardless of its autonomy. This theory causes the consent of the agent to be inferred as the consent of the person using the agent. If the party using the agent creates a situation in which the artificial agent can act on its own, that party will be bound by all of the agent's actions. The risk of the transaction lies with the person using the agent, just like the civil liability regime.

The second possibility is to consider the electronic device as a legal person. In addition to natural persons, the law has long recognized those who are born and die physically, and subjects participating in society as subjects of rights and obligations. If the actions of such entity cause damage, they can be sued on their own. The possibility to attribute legal personality to software programs was expressed by L. B. Solum. This kind of approach is seen in Australia and South Africa where they started to accept AI as inventor, which originally is for human or legal entity. But in order to do that, we

on a European and American Level," *John Marshall Journal of Computer and Information Law* Vol. 18, no. 2 (Winter 1999): 408, http://heinonlinebackup.com/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jmjcila18§ion=14.

⁵⁵ T. Allen and R. Widdison, "Can Computers Make Contracts?," *Harvard Journal of Law and Technology* Vol. 9, no. 1 (1996): 43, http://jolt.law.harvard.edu/articles/pdf/v09/09HarvJLTech025. pdf.

⁵⁶ Lawrence B Solum, "Legal Personhood for Artificial Intelligences," *North Carolina Law Review* Vol. 70, no. 4 (1992): 1253-11256, http://scholarship.law.unc.edu/nclr/vol70/iss4/4.

⁵⁷ Alexandra Jones, "Artificial Intelligence Can Now Be Recognised as an Inventor after Historic Australian Court Decision," abc.net.au, https://www.abc.net.au/news/2021-08-01/historic-decision-allows-ai-to-be-recognised-as-an-inventor/100339264 (accessed August 2021); Baker McKenzie, "Australia: AI Passes the Inventor Test," insightplus.bakermckenzie.com, https://insightplus.bakermckenzie.com/bm/intellectual-property/australia-ai-passes-the-inventor-test; Meshandren Naidoo, "In a World First, South Africa Grants Patent to an Artificial Intelligence System," theconversation.com, https://theconversation.com/in-a-world-first-south-africa-grants-

must analyze the meaning of a legal person and how far the law attributes it. Personality in legal theory is focusing on the capability of being a subject of rights and obligation, a capability of being the center of productions of legal effect.

Roman law attributes the word "persona" to the social and legal roles played by humans. Social roles issue is more determinant for the attribution of legal personality rather than intelligence or self-consciousness. Aside from their intelligence, natural person plays a social role in society. However, it is obvious that in the 21st century intelligent agents are the newest actor to play a social role in society.⁵⁸

The discussion on the perspective seeing electronic and artificial agent did gave some insight on how scholars see artificial agent. However, the previous only discuss the issues that arises in the underlying concept of *lastgeving* or agency. It discusses the problems of non-human actor, in this case electronic agent, in receiving rights and obligation during the act of *lastgeving*. In the next chapter this article going to discuss and analyze which approach took by Indonesian ITE Law in seeing what electronic agent means in terms of *lastgeving* or agency relationship.

D. Rethinking of "Electronic Agent" Terminology in ITE Law: Approach of ITE Law on Electronic Agent

Indonesian ITE Law define electronic agent as "a device of an electronic system that is made to do an action on a certain Electronic information automatically which is organized by person." From this definition, it can be scrutinize that there are four major elements that contained in the definition. First, it elucidates that electronic agent is "a device". Second, "of an electronic system". third, "that is made to do an action on a certain electronic information automatically" and fourth, "organized by person."

patent-to-an-artificial-intelligence-system-165623 (accessed August 2021).

⁵⁸ Francisco Andrade et al., "Contracting Agents: Legal Personality and Representation," *Artificial Intelligence and Law* Vol. 15, no. 4 (2007): 362, https://doi.org/10.1007/s10506-007-9046-0.

⁵⁹ Law Number 19 Year 2016 on the Revision of Law Number 11 Year 2008 on Information and Electronic Transactions, Article 1 (8) states that Electronic Agent is a device of an Electronic System that is made to perform an action on certain Electronic Information automatically held by a Person.

In the first element, it can be understood that it is true that the ITE Law agrees that electronic agent is a "device." Based on the legal doctrine, a legal object could not bear the rights and obligation such as human does in a *lastgeving* or agency relationship. ⁶⁰ From the first element, it can be seen that ITE law leans toward seeing electronic agent as a tool controlled by human rather than seeing it as an independent legal subject. This understanding is then supported by the existence of the second element that said electronic agent is part of "electronic system."

The ITE law define electronic system as a set of electronic devices and procedures that serve to prepare, collect, process, analyze, store, display, announce, send, and/or disseminate electronic information.⁶¹ This concept of electronic system in ITE Law emphasize that electronic agent that is part of electronic system thus seen as devices. According to the ITE law, this device of electronic system is operated by government entity, person, business corporation or the society.⁶² This shows further on the position of ITE Law that sees electronic agent as a device controlled by human.

Another evidence that put ITE Law to see Electronic Agent more as a tool rather than subject is lies in Article 21 and 22 of the ITE Law and its Implementing Regulation. In the article 21 (2) section c of ITE Law, it is stated that all legal responsibility of electronic transaction conducted through electronic agent is becomes the responsibility of the electronic agent provider. In the article 21 (3) it is also stated that losses in electronic transaction due to malfunction caused by a third party will become the responsibility of the electronic agent provider, which is the electronic service provider that provide the tools of electronic agent. Article 22 of ITE law then later stated that more detailed regulation on electronic agent will be regulated under the Implementing regulation of the ITE Law.

⁶⁰ Pieter E. Latumenten, "Pemberian Kuasa Dalam Konsep 'Volmacht Dan Lastgeving' Berdasarkan Cita Hukum Pancasila," *Jurnal Hukum Dan Pembangunan* Vol. 47, no. 1 (2017): 3

⁶¹ Law Number 19 Year 2016 on the Revision of Law Number 11 Year 2008 on Information and Electronic Transactions, Article 1 (5) states that Electronic System is a series of electronic devices and procedures that function to prepare, collect, process, analyze, store, display, announce, send and/or disseminate Electronic Information.

⁶² Law Number 19 Year 2016 on the Revision of Law Number 11 Year 2008 on Information and Electronic Transactions, Article 1 (6).

Government Regulation No. 71 Year 2019 on Implementation of Electronic System and Transaction (GR 71/2019) that acts as ITE Law implementing regulation has further elucidate the position of electronic agent as a tool rather than subject. In Chapter 3 on "Electronic Agent" in the GR 71/2019, article 36 point (2) has stated that electronic agent is a part of electronic system. In the point (3) of the same article it is stated that the responsibility of electronic service provider is applied mutatis mutandis on the electronic agent provider. Which means the legal obligation of electronic agent provider is also applies towards the electronic provider that provides it. The position of electronic agent in the GR 71/2019 is also emphasized by the norms in article 36 point (4) that state electronic agent can be in a form of visual, audio, electronic data, or other forms.

If we criticized the forms stated article 36 point 4, the words visual, audio or electronic data is usually conducted in addressing a legal object rather than a legal subject. It is true that the category of "other forms" may open the possibility of electronic agent is treated as a subject. However, by assessing the first three wordings that act as categorization of forms of electronic agent, it can be concluded that ITE Law leans more in seeing electronic agent as a legal object (tools) rather than a legal subject (person or legal entity).

The perspective of seeing electronic agent as object however started to blur out when facing the third element which is "automation." According to Groover, automation can be understood as:

"... the technology by which a process or procedure is performed without human assistance. Humans may be present as observers or even participants, but the process itself operates under its own self-direction. Automation is implemented by means of a control system that executes a program of instructions. To automate a process, power is required to operate the control system and to drive the process itself." 63

It is true that electronic agent can process information automatically with little intervention of human. Which made several scholars in Indonesia

⁶³ Mikell P. Grover, Fundamentals of Manufacturing: Materials, Processes and System, 4th ed. (New Jersey: John Wiley & Sons, Inc., 2010), 887.

started to take this autonomation features in AI to construct AI to falls under category of electronic agent in the ITE Law.⁶⁴ If it seen from the first two elements discussed in the article, it is reasonable to say that AI do falls into this category of electronic agent. AI is a device created by human that in forms of electronic system, thus it also has the traits of automation that aligned with the third elements of electronic agent.

The vast development of AI system made scholars think that in the future, these electronic agents could be capable to do things autonomously as a human being. This then doubts concerning the status of electronic agent terminology started to blur. The term "agent" used in electronic agent somewhat evoking scholars to think that these devices may in the future completely replace the role of human as agent or mandatary. Which ignite the emerging thoughts on saying that AI could become a legal entity that holds rights and obligation right human does, such as depicted in lots of science fiction films or novels.

Even though this perception is seen as intuitive, it could be seen quite problematic in the *lastgeving* perspective. *Lastgeving* or agency relationship is conducted by human or legal entity based on an agreement. ⁶⁶ Consensus means it involves rights and obligations as the principles of *pacta sunt servanda* in an agreement itself reflects the rights of the freedom of contract. In the Agency Law counterpart, Chopra and White has also stated that agency consist of two subjects of law with electronic agent only serves as tools facilitating

⁶⁴ Setia Putra, "Perlindungan Hukum Terhadap Konsumen Dalam Transaksi Jual-Beli Melalui E-Commerce," *Jurnal Ilmu Hukum Riau* Vol. 4, no. 2 (2014); Ilhami Ginang Pratidina, "Keabsahan Perjanjian Melalui Agen Elektronik Dalam Sistem Hukum Kontrak Indonesia" (Thesis, Universitas Airlangga, 2017); Muhammad Hafidz S., Reka Dewantara, and Diah Pawestri M, "Keabsahan Perjanjian Kredit Antara Pihak Nasabah Dan Bank Melalui Agen Elektronik Artificial Intelligence Dengan Sistem Chatbot," *Jurnal Hukum*, (December 2019), http://hukum. studentjournal.ub.ac.id/index.php/hukum/article/view/3683; Zahrashafa P. Mahardika and Angga Priancha, "Pengaturan Hukum Artificial Intelligence Indonesia Saat Ini," hukumonline. com, https://www.hukumonline.com/berita/baca/lt608b740fb22b7/pengaturan-hukum-artifical-intelligence-indonesia-saat-ini/ (accessed August 2021); Rio Christiawan, "Tantangan Hukum Era GoTo," analisis.kontan.co.id, https://analisis.kontan.co.id/news/tantangan-hukum-eragoto-1 (accessed August 2021)

⁶⁵ Han SC, Tan Cheng and Daniel Seng. "Artificial Intelligence and Agents," *NUS Centre for Technology, Robotics, Artificial Intelligence & the Law Working Paper* 21/02 (October 2021).

⁶⁶ Pieter E. Latumenten, "Pemberian Kuasa Dalam Konsep 'Volmacht Dan Lastgeving' Berdasarkan Cita Hukum Pancasila," *Jurnal Hukum Dan Pembangunan* Vol. 47, no. 1 (2017): 3

the subject of law.⁶⁷ From this approach of *lastgeving* and Agency Law, it can be seen that conceptually, the approach of ITE law and its implementing regulation that sees Electronic Agent as a device is aligned with the concept of *lastgeving* in Indonesian *Lastgeving* Law.

The argument of ITE Law and its implementing regulation sees electronic agent aligned as *Lastgeving* Law thus again supported by the four elements of electronic agent concept in ITE Law, which is "operated by person." This article would argue that the phrase "operated by human" can be understand that ITE Law sees that in every electronic agent, there are person that responsible on the performance of the electronic agent. Which the person can be in forms of natural person or a legal entity. The ITE Law state that electronic agent is a form of electronic system, and electronic systems are runs by either government entity, natural person, legal entity, or society. These entities are responsible on the performance of tools named "electronic agent" that they have operated. This approach is thus emphasized by rules and regulations related to ITE Law, the GR 71/2019 that elucidate the responsibility of the legal entity behind electronic service provider or electronic service operator.

Through this paradigm of framing on the existence of electronic agent, it can be concluded that the terminology of electronic agent in the ITE Law should not be seen as a legal subject that bears the legal responsibility of its action. The significance of this paradigm in seeing electronic agent will give a clearer understanding in pinpointing parties who is responsible when a problem occurs in electronic transaction that involves electronic agent. Hence, giving clearer meaning of the confusion that might arise on the use of "agent" terminology in the "electronic agent." Additionally, the analysis also gives thoughts in evaluating the suitability of using the word "agent" in "electronic agent" when being seen in the perspective of the actual agency law or *Lastgeving* Law.

⁶⁷ Samir Chopra and Laurence White, "Artificial Agents - Personhood in Law and Philosophy," ECAI (2004): 2, https://www.sci.brooklyn.cuny.edu/~schopra/agentlawsub.pdf.

⁶⁸ Law Number 19 Year 2016 on the Revision of Law Number 11 Year 2008 on Information and Electronic Transactions, Article 1 (6) jo. Article 1 (5).

E. Conclusion

Analyzing the use of terminology of Electronic Agent together with the definition, it can be said that both of ITE Law and Indonesian Lastgeving Law are aligned to one another. This is because the ITE Law sees electronic agent as a tool that is governed by human. Where the rights and responsibilities of the Lastgeving relationship is bear by the legal entity who operate the autonomous machine called "electronic agent." The terminology alone, however, could also be criticized to be misleading and evoking imaginations that might be contradictory with the fundamental concept of lastgeving or agency, especially on context of legal subject. The term "agent" used somewhat opens the understanding that machines could replace legal entity in terms of doing lastgeving relationship. Which this would be contradictory to what the ITE law and Lastgeving Law originally intended. This should mean that the terminology of Electronic Agent, should be used together, grounded by the definition it contains in the ITE Law.

In the future, the ITE Law and the related regulations may need to find a more suitable terminology in describing the concept of "electronic agent" that is not evoking a misleading assumption when being seen through paradigm of the Agency Law or *Lastgeving* Law.

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