

The Urgency of Regulating the Transparency Principle of the 'AI System' in Indonesia: The Phenomenon of Self-Preferencing and Regulation in the European Union

Ratih Mulia Fazriati¹, Sinta Dewi Rosadi², Prita Amalia³.

¹Universitas Padjadjaran, West Java, Indonesia, ratih19001@mail.unpad.ac.id. ²Universitas Padjadjaran, West Java, Indonesia, sinta@unpad.ac.id. ³Universitas Padjadjaran, West Java, Indonesia, prita.amalia@unpad.ac.id.

Corresponding Author: ratih19001@mail.unpad.ac.id1

Abstract: This research discusses the phenomenon of self-preferencing by artificial intelligence (AI) technology in the e-commerce sector in Indonesia, as well as a comparison with regulations in the European Union. AI as an automated decision-making tool has been adopted by e-commerce platforms to improve efficiency and service personalization. However, some e-commerce platforms use AI for self-preferencing practices, such as Shopee's practice with SPX couriers. This practice raises issues of unfair business competition and threatens the transparency principle of technology utilization. This research analyzes relevant regulations such as UU ITE, PP PSE, and PP E-Commerce by conducting a comparative study of regulations in the European Union such as the Artificial Intelligence Act, Digital Market Act, and P2B Regulation. This research shows that AI is constructed as an electronic agent whose utilization must be in line with the principles contained in the ITE Law. In the ITE Law, the principle of transparency for electronic agents is not regulated. This is different from regulations in the European Union which regulate the principle of transparency as a form of legal certainty for business actors in the e-commerce platforms.

Keyword: Self-Preferencing, Kecerdasan Buatan, E-commerce, Regulasi, Indonesia.

INTRODUCTION

Indonesia is the country with the largest market volume in e-commerce users compared to other Southeast Asian countries (Frendistya & Fakrulloh, 2024). E-commerce or also known as trading through electronic systems (PMSE) is an activity of goods and/or services transactions whose transactions are carried out through a series of electronic devices and procedures (Armiwulan et al., 2024). In the process of modern era trading activities, the place for business actors to carry out activities is no longer only in physical form (face to face), but the organization of trading activities now uses an application system to be used as a means of electronic communication that facilitates business activities (Franceschi & Schulze, 2019). This facility certainly makes it easier for consumers to access goods and/or services that will be consumed. With the development of the times that are now starting to shift to digital markets

that utilize technology to make trading activities easier. Trading activities that are now carried out in an electronic system allow e-commerce platforms to use technology as a tool to facilitate business operations and also achieve business targets. One example is the utilization of algorithms and artificial intelligence (AI) in e-commerce platforms.

In e-commerce, the utilization of AI is seen in determining the recommended products and pricing the products. AI uses data from e-commerce platform users to later be processed to recommend products according to user preferences. Automation owned by AI makes it easier for e-commerce companies to provide services that are based on orientation to consumer needs. The utilization of this technology is also adopted by large e-commerce companies in various countries. E-bay is one example of e-commerce that utilizes AI system for product personalization function (Budhijanto, 2024). Alibaba's e-commerce platforms also utilize AI Chatbots to handle and service millions of customer conversations. In Indonesia, e-commerce platforms such as Shopee and Gojek utilize AI to improve their services.

The utilization of AI does provide benefits for both consumers and businesses. For consumers, the presence of product personalization generated from AI technology makes it easier for consumers to choose products and/or services on e-commerce platforms. On the other hand, businesses are also given the convenience to be able to enter and market their products and be able to compete with other competitors. This is certainly beneficial for Small-Medium Enterprises (micro, small, and medium enterprises). However, in reality, there are many e-commerce companies that not only provide a platform to sell goods and/or services (providers), but they also act as business actors within their own platform (Wadipalapa et al., 2024). In a sense, the e-commerce company has a dual role or what is known as dualism role.

This dual role ownership is not something new in business practice. If we look at the retail business, an example of dualism-role can be found in supermarket retail. Supermarkets are not only a place that provides a place for products to be marketed, but have other roles (dualism-role) (Rahman et al., 2022), i.e. as a seller of his own products/goods on his premises. It is this dual role ownership that has the risk of the phenomenon of privileging one's own products. Supermarket products/goods are given a special place to be seen more than competitors' products/goods (privileging one's own products) (Zuwanda et al., 2024). This is also found in the digital marketplace and is known as self-preferencing.

This practice is known as also known as self-preferencing. Self-preferencing is an action taken by a business designed to favor its own products or services over those of its competitors (Gaur & Abraham, 2024). Self-preferencing in digital markets is not possible without the help of tools, in this case, algorithms and artificial intelligence play an important role in this action. Self-preferencing in digital marketplaces is something that can be designed. In a sense, the owner of the service provider platform can set the rules of its algorithm to be able to perform the act of self-preferencing. Therefore, self-preferencing is closely related to three things: the actions taken by the platform, the technology utilized by the platform, and the process of self-preferencing.

There is a case in point in South Korea, where the e-commerce platform, Naver, abused the use of AI to exercise digital market dominance through algorithmic manipulation in favor of its own company. Another case is Amazon through its voice commerce feature, when a consumer asks for a product they need, the algorithm only shows 1 product offering from Amazon and is labeled Amazon's Choice (Chaudhary et al., 2024). From a business monopoly perspective, this is an act of market dominance where there should be competing products also offered in the voice commerce feature.

Another case that can be found in the digital market in relation to self-preferencing is the case of Google in 2017, where Google utilized its algorithm to give preferential treatment to its platform, namely for Google Shopping (Chin et al., 2024). Similar to Google, Apple also commits acts of market dominance where the app-store (owned by Apple) is designed with algorithms that favor its own apps. The process of self-preferencing uses a ranking system. Ranking is technically decisionmaking related to the determination of weights, also known as weighting. This weighting is done by giving a number of scores to certain choices and using data to process the results. The authority that has power over this weighting is owned by the e-commerce platform. The platform provider is the highest authority, in which case the platform provider knows the electronic system architecture designed to operate the system.

This lack of transparency provides the potential for misuse of technology for the business interests of the platform. As in the existence of bias in ranking. Bias in ranking makes it possible for platforms that have multiple roles to give greater weight to the products owned by the platform. Ideally, the products and/or services in the platform should be given the same weighting. This is to avoid market dominance practices and ensure fair business practices among business actors.

In the European Union, self-preferencing in digital markets such as e-commerce is not allowed. This is as stipulated in Article 6 paragraph 5 of the Digital Markets Act of the European Union. This self-preferencing action is also carried out by utilizing technology to provide convenience in carrying out self-preferencing actions by business actors on e-commerce platforms and e-commerce platforms. In addition, the European Union also regulates how ratings should be regulated. This is contained in the provisions of the P2B Regulation which regulates for intermediary service provider platforms that conduct ratings. Furthermore, platforms that conduct ratings using artificial intelligence also need to look at the provisions governing artificial intelligence regulated in the Artificial Intelligence Act. P2B raises issues related to the transparency of platforms that provide intermediary services, on the other hand, the AIA regulates the transparency obligations for providers of an electronic system, which in this case is AI.

In reality, self-preferencing cases have been carried out by many e-commerce platforms operating in Indonesia, such as e-commerce platforms Shopee, Tiktok, Tokopedia, Lazada which use their electronic systems by activating automatic mode to automate the selection of courier services. Indonesia currently does not have regulations regarding the phenomenon of self-preferencing, the technology used for self-preferencing and the process of self-preferencing as the European Union regulates this phenomenon. At present, the existing regulation in Indonesia regulates how business actors conduct trading activities through electronic systems. Regulations relating to the utilization of information technology to assist the trade sector are Law No. 1 of 2024 on Electronic Information and Transactions, Government Regulation No. 71 of 2019 on the Implementation of Electronic Transaction Systems, and Government Regulation No. 80 of 2019 on Trading Through Electronic Systems.

In an increasingly advanced digital era, artificial intelligence (AI) technology has presented new challenges, one of which is the practice of self-preferencing. This practice refers to the act of businesses, especially digital platforms, prioritizing their own products or services over competitors through algorithms. This phenomenon raises a number of issues, including unfairness in the digital market, distortion of business competition, and consumer harm. Unfortunately, in Indonesia, regulations related to AI and the practice of self-preferencing are still very limited. Regulations relevant to the phenomenon of self-preferencing utilizing AI technology such as the ITE Law, PMSE Regulation, PSTE Regulation, have not specifically regulated this phenomenon. This is in contrast to the European Union, which is more advanced with regulations such as the Digital Markets Act, Artificial Intelligence Act, P2B Regulation that specifically identify and address the negative implications of AI, including selfpreferencing.

The urgency to address this issue is becoming increasingly clear. Without specific regulations, the potential misuse of AI technology by large businesses is difficult to identify and prevent, which can create unfair business practices that will threaten competitiveness between large businesses and MSMEs, stifle innovation, and strengthen the dominance of a few

large businesses. Moreover, Indonesia's delay in regulating this phenomenon risks leaving the country behind in the digital age competition, especially when compared to the European Union which has a more proactive regulatory approach. Therefore, this study will compare the regulatory approaches in Indonesia and the European Union as a step towards providing recommendations in drafting a legal framework that is adaptive to the development of AI in Indonesia.

METHOD

The research conducted uses the normative juridical method which will examine a phenomenon that occurs in society through the approach of laws and regulations in Indonesia. In this case, the author will examine based on the laws and regulations in force in Indonesia relating to the phenomenon of self-prefencing that utilizes the technology it uses. The laws and regulations that the author will examine, namely Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE Law) which has been amended twice, namely Law No. 1 of 2024 concerning the Second Amendment to Law No. 11 of 2008, Government Regulation No. 71 of 2019 concerning the Implementation of Electronic Transaction Systems, and Government Regulation No. 80 of 2019 concerning Trading Through Electronic Systems (Soekanto & Mamudji, 2013).

This research also uses a comparative study approach, where in addition to looking at the laws and regulations in Indonesia, this research also analyzes the regulations in the European Union, namely the Artificial Intelligence Act (AIA) related to the regulation of AI technology, the Digital Markets Act (DMA), and EU Regulation 2019/1150 on Promoting Fairness and Transparency for Business Users of Online Intermediation Service (P2B Regulation) related to the phenomenon of self-preferencing. The analysis is conducted with a focus on identifying legal frameworks relevant to the phenomenon of self-preferencing, particularly in the context of the principle of transparency in the use of AI technology by digital platforms. This research aims to provide an overview of how the regulation can be a reference in the development of legal policy in Indonesia. In addition, the research also uses primary legal materials, namely laws and regulations that are used as the basis for studying legal phenomena normatively, then secondary legal materials that can be used as materials to explain, interpretations that can enrich legal analysis, and tertiary legal materials that can also provide definitions or problems with terms both legal and non-legal terms.

RESULTS AND DISCUSSION

Indonesia's Approach to Regulating AI Systems in E-Commerce Sector Self-Preferencing Case in E-Commerce Platform in Indonesia

Nowadays, the practice of self-prefencing has been widely found in Indonesia. Ecommerce platforms such as Shopee, Tiktok, Tokopedia, Lazada have also used their electronic systems by activating automatic mode to automate the selection of courier services. One of the e-commerce platforms is currently under investigation by the Business Competition Supervisory Commission (KPPU). Shopee was found to be misusing technology in terms of the automation feature owned by this system by activating the automatic mode of selecting its own courier service, namely SPX. Since 2021, Shopee has offered a special promo rate in the Jabodetabek area with a delivery period of under 24 hours (1 day delivery) specifically for SPX or J&T. Shopee activates the automatic mode of courier selection, this results in the system automatically making recommendations to customers in the Jabodetabek area with the cheapest and fastest service, which is provided by SPX or J&T (Budhijanto, 2024).

Technical Explanation of Self-Preferencing in E-Commerce

Technically, Shopee's self-preferencing raises an important issue of how AI algorithms work in making automated decisions, specifically related to weighting in the decision-making

process (Dewi & Lusikooy, 2024). The weighting provided by the AI algorithm gives a heavier tendency (by numbering) to the internal services owned by the platform which results in SPX being automatically selected for courier services in the Jabodetabek area. This practice leads to the utilization of technology, algorithms used in a biased manner, which may act unfairly and indicate harm to other competitors operating on the platform or in other words weaken competition (Eviani et al., 2024).

Indonesia Regulation on E-Commerce Platform

The nature of technology utilization in Indonesia is regulated in several Indonesian laws and regulations. In relation to e-commerce, the relevant legislation is Government Regulation No. 80/2019 (PP PMSE). E-commerce operates by using an electronic system. In e-commerce activities, the electronic system works by performing various functions such as preparing, collecting, processing, analyzing, storing, displaying, announcing, sending, and/or disseminating electronic information (Kaplan & Haenlein, 2019). The operation of an electronic system used by an e-commerce platform is regulated in the PMSE Regulation, but the regulation is not specific.

Indonesia Regulation on Electronic Transaction

In the hierarchy of laws and regulations, the regulation of electronic systems in detail refers to a hierarchically higher regulation, namely Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE Law), which has been amended three times with the latest being Law No. 1 of 2024 concerning the Second Amendment to Law No. 11 of 2008 concerning Electronic Information and Transactions. If we look fundamentally at the philosophy contained in the ITE Law, in the consideration of the ITE Law at point e, it is stated that "the use of information technology plays an important role in trade and national economic growth to realize public welfare," This shows that technology is expected to support various sectors of life, including trade and the digital economy (Andriati et al., 2024).

AI as Electronic Agent from the Perspective of UU ITE

Information technology is defined as "a technique for collecting, preparing, storing, processing, publishing, analyzing, and/or disseminating information." The utilization of technology to support trade and economic growth must also be based on the principles contained in the ITE Law. Based on Article 3 of the ITE Law, the utilization of technology and electronic transactions must be based on the principles of legal certainty, benefits, prudence, good faith, and freedom of choice of technology or technology neutral. Such as in terms of utilizing AI in e-commerce platforms (Jürgensmeier & Skiera, 2024).

The utilization of AI in e-commerce platforms to support trading activities is currently regulated in several provisions of Indonesian laws and regulations. Enni Soerjati argues that AI is constructed as an electronic agent. This construction of AI as an electronic agent is also supported by Daniel Seng's view of AI systems as electronic agents because AI makes "autonomous" decisions that mirror those of human agents. The definition of an Electronic Agent is contained in the provisions of Article 1 point 8 of Law No. 8 of 2016 concerning Information Technology and Electronic Transactions, namely "Electronic Agent is a device of an Electronic System made to perform an action on certain Electronic Information automatically organized by a Person." Based on this definition, electronic agents have a role "to perform an action on electronic information", but are still organized by a Person. A person in this case is an individual, whether an Indonesian citizen, foreign citizen, or legal entity. However, in the ITE Law, the regulation regarding electronic agents is limited, this is because further provisions regarding electronic agents are regulated in Government Regulations (Rahman et al., 2022).

Indonesia Regulation on Implementation of Electronic Systems and Transactions Government Regulation No. 71/2019 on the Implementation of Electronic Systems and Transactions (PP PSTE) further regulates the provisions regarding electronic agents. In PP PSTE, basically the implementation of electronic agents needs to pay attention to the principles contained in Article 39 of PP PSTE, namely prudence, security and integration of Information Technology systems, security control over Electronic Transaction activities, Cost Effectiveness and Efficiency, consumer protection in accordance with statutory provisions, the principle of controlling the security of user data and electronic transactions (Zuwanda et al., 2024). In the construction of PP PSTE, electronic agents are part of the operation of electronic systems. This results in the obligations of electronic system providers applying mutatis mutandis to Electronic Agent providers.

Related to the phenomenon of self-preferencing that occurs in e-commerce platforms. If we look at the provisions in PP PSTE, then we will see from what angle the platform's obligation to organize its electronic agent. This is regulated in Article 40 paragraphs (1) and (2) of PP PSTE. In relation to the phenomenon of self-prefenecing on e-commerce platforms that utilize artificial intelligence technology to rank based on the platform's wishes, the provisions in Article 40 paragraphs (1) and (2) do not discuss the obligation of the Electronic Agent organizer to provide transparency on the operation of its electronic system. Meanwhile, if we look at the provisions in Article 37 paragraph (1) regarding the obligation to submit information to protect user rights on Electronic Agents, the information that needs to be submitted is as follows:.

- a. The identity of the Electronic Agent organizer
- b. The object being transacted
- c. Eligibility or security of the Electronic Agent
- d. Procedure for using the device
- e. Contract Terms
- f. Procedure for reaching agreement
- g. Privacy and/or Personal Data protection guarantees; and
- h. Phone number of the complaint center.

This information disclosure can certainly also be constructed in the principle of transparency from the organizer to its users. When looking from the perspective of the obligations of electronic agents from PP PSTE, the platform's obligation to provide transparency is seen in Article 37 paragraph (1) although this article is general, not specific to electronic agents operated in e-commerce platforms only.

Furthermore, regarding the actions taken by Shopee to conduct self-preferencing, if we look at the provisions in PP PSTE, there is no regulation regarding how an electronic system and/or electronic agent that operates should be operated on an e-commerce platform. The principle contained in PP PSTE as stipulated in Article 39, consumer protection in accordance with the provisions of laws and regulations, there is no principle that ensures fairness in competition between business actors in e-commerce platforms in terms of algorithms (Coglianese & Lai, 2023).

Indonesia Regulation on E-Commerce

In the previous paragraph, the author wrote briefly about the regulation of e-commerce in Indonesia. E-commerce in Indonesia is regulated in Government Regulation No. 80/2019 (PP PMSE). PP PMSE is a different government regulation from PP PSTE. PP PMSE is intended to regulate the legal aspects of Trade in the implementation and utilization of Electronic Systems specifically for Trade. This PP was born to provide legal certainty for trade activities carried out electronically based on the principles of fair business competition and respect and protect consumer rights (Kifer & Prince, 2023). Therefore, basically the regulation in this PP has a lot to do with how the rules of the game in organizing electronic systems specifically in trading activities.

Self-Preferencing Regulation in Indonesia Regulation on E-Commerce

If it is again related to the phenomenon of self-preferencing that utilizes electronic agents, the author will first look at whether or not electronic agents are regulated in the PMSE Regulation. Based on Article 1 of the E-Commerce Regulation, the regulation regarding electronic agents is not specifically regulated as regulated in the PSTE Regulation. However, the E-Commerce Regulation regulates electronic systems. This is contained in Article 1 point 3 of the E-Commerce Regulation, which defines electronic systems in the same way as the PSTE Regulation and the ITE Law. If we refer to the provisions contained in PP PSTE related to the obligations of electronic agents, they apply mutatis mutandis to the implementation of Electronic Agents, Therefore, the construction of thinking to see the regulation on AI system in PP PMSE needs to be constructed as an electronic system (Lipsky et al., 2024).

In relation to the phenomenon of self-preferencing, business actors (E-Commerce platforms), the E-Commerce Regulation does not regulate how the rules of algorithms or electronic systems are fair and transparent. E-commerce platform organizers that organize electronic systems in the construction of PMSE Regulation are included in Business Actors. In essence, business actors who organize trading activities through electronic systems must be based on the principles of good faith, prudence, transparency, trustworthiness, accountability, balance, and fairness and health (Carugati, 2023).

This research argues for the urgency of regulating transparency for AI systems on ecommerce platforms in relation to the phenomenon of self-preferencing. In essence, the principle of transparency is already regulated in the E-Commerce Regulation. However, what needs to be considered is the explanation of the principle of transparency contained in the PMSE Regulation. The principle of transparency is further explained about transparency relating to electronic information related to Business Actors, Consumers, Goods and/or Services that are the object of trade, terms and conditions of the Trade in Goods and/or Services through Electronic Systems (Coglianese & Lai, 2023).

In the case of Shopee's automated algorithm that discriminately prioritizes services owned by its platform, Shopee is suspected of implementing a standardization system in the way it selects delivery companies by eliminating the option of selecting couriers and shipping costs. The actions taken by Shopee cannot occur if the electronic system operated by Shopee transparently makes its information accessible to its users.

The PMSE Regulation does not regulate the operation of electronic agents, as regulated in the PSTE Regulation. Article 20 of the PMSE Regulation regulates the obligations for business actors through electronic systems, which require business actors to fulfill the terms and conditions of PPMSE in accordance with agreed service quality standards and statutory provisions. In the context of mitigating the phenomenon of self-preferencing, as in the case of Shopee, which utilizes electronic agents, Article 21 of PP PMSE does not regulate how the implementation of electronic agents operated in an electronic system. Therefore, there are limitations in the E-Commerce Regulation in relation to the transparency of an electronic system operated by an e-commerce platform.

EU Approach on Regulating E-Commerce Platform Introduction to E-Commerce Regulation in EU

In the European Union, e-commerce platforms operating within the European Union must comply with the provisions of the European Union. There are several provisions relating to e-commerce platforms. One of the regulations is Regulation (EU) 2022/1925 or also known as the Digital Markets Act. In Article 1 of the DMA, the purpose of this regulation is to contribute to the proper functioning of the internal market by establishing harmonized rules that ensure

for all businesses, a contestable and fair market in the digital sector throughout the European Union, where gatekeepers are present with the aim of providing benefits to businesses and end users. The creation of the DMA is also motivated by the many inequities in the digital marketplace that lead to imperfect competition. There is potential that competition between small businesses and large businesses in the digital sector could be unfair (Gaur & Abraham, 2024).

The term gatekeepers in the DMA means an enterprise that provides core platform services which are further regulated in Article 3 of the DMA. A firm will be designated as a gatekeeper if it has a significant impact on the internal market, provides core platform services that are an important gateway for businesses to reach end users, and enjoys a strong and durable position in its operations, or can be expected to enjoy such a position in the near future. Businesses that can be categorized as gatekeepers are also businesses that have an annual turnover of or more than EUR 7.5 billion in the last three financial years and that provide the same core platform services in at least three Member States (Chaudhary et al., 2024). Gatekeepers Explanation

Article 3 of the DMA states that gatekeepers are businesses with large-scale turnover. The European Commission in 2023 has determined the businesses categorized as 'gatekeepers', namely Alphabet, Amazon, Apple, ByteDance, Meta and Microsoft. These business actors are business actors that provide core platform services. As defined in Article 2 of the DMA, core platform services are services consisting of online intermediation services, online search engines, online social networking services, video-sharing platform services, independent interpersonal communication services, operating systems, web browsers, virtual assistants, cloud computing services, online advertising services. These service provider platforms are large companies or businesses that dominate the digital market.

Gatekeepers/Platform Responsibilities

One of the companies that is now in the stage of needing to fulfill its obligations is Amazon. Since 2000, Amazon has been a place for third parties to offer or market goods. According to the European Commission's website, Amazon is a core platform service that falls under online intermediation services and online advertising services. Pursuant to the provisions of Article 2 paragraph 2 of Regulation (EU) 2019/1150, online intermediation services are services that meet the following requirements, namely information society services within the meaning of point (b) of Article 1 paragraph (1) of Directive (EU) 2015/1535 of the European Parliament and of the Council, enabling business users to offer goods or services to consumers, with the aim of facilitating the initiation of direct transactions between business users and consumers, regardless of where such transactions are ultimately concluded, and are provided to business users on the basis of a contractual relationship between the providers of such services and the business users offering goods or services to consumers (Rahman et al., 2022). As a provider of online intermediation services, Amazon is now in the process of fulfilling its obligations, one of which is the obligation related to self-preferencing.

Articles Regarding Self-Preferencing

In the DMA, self-preferencing is regulated in the provisions of Article 6 paragraph 5. The provisions in the Article state that gatekeepers are not allowed to treat more favorably, in ranking and indexing as well as, services and products offered by the gatekeepers themselves than similar services or products from third parties. Gatekeepers must apply transparent, fair, and non-discriminatory provisions for such rankings. The term ranking in DMA is defined as the relative prominence given to goods or services, where ranking in core platform services is often found not to consider the technological means used for presentation, organization, or communication. Basically, the principle contained in the Article is that transparency for ratings in core platform services should include all forms of relative prominence, including display,

ranking, linking, or voting results and should also include instances where core platform services present or communicate results to end users (Dewi & Lusikooy, 2024). In other words, e-commerce platforms operating within the European Union need to pay attention in relation to their platform services to observe the principles of transparency, fairness and non-discrimination in their services when offering their final choice.

Technical Explanation of Self-Preferencing Using AI System

In the ranking process, of course, e-commerce platforms also utilize technology based on artificial intelligence (AI) in their business operations. In the European Union, there is a regulation that specifically regulates AI, namely the Artificial Intelligence Act (AIA). In 2024, the AIA is a regulation that governs AI that will be used in the European Union. The purpose of the AIA is to improve the functioning of the internal market and encourage the use of humancentered and trustworthy AI, while ensuring a high level of protection of health, safety, fundamental rights listed in the Union Charter, including democracy, rule of law, and environmental protection, against the harmful impacts of AI systems in the EU and in favor of innovation (Andriati et al., 2024).

EU Regulation Regarding AI System

The AIA defines AI as a machine-based system that is designed to operate with varying degrees of autonomy and can demonstrate adaptability after deployment, and for explicit or implicit purposes, infer, from the inputs it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can affect physical or virtual environments. Based on this definition, AIA recognizes the level of autonomy possessed by AI. Autonomy in AI means that an AI system can work alone automatically to perform an action. The autonomy of an AI system will result in impacts or risks, which AIA also recognizes different types of risks, such as unacceptable risk, high-risk, limited risk, and minimal risk (Kaplan & Haenlein, 2019).

Limitation on AI Act Regarding Self-Preferencing

In the context of self-preferencing using AI systems, the AIA does not regulate this phenomenon. Like the purpose of this regulation, the AIA aims to maintain the safety and security of users of an AI system that will be used in the internal market (Jürgensmeier & Skiera, 2024). The utilization of AI by gatekeepers in providing their services needs to look at the provisions contained in the AIA, whether the gatekeepers fall into the category of provider, deployer, importer, distributor, or operator.

Analysis of Amazon Case

If we look at the phenomenon carried out by the Amazon platform, for example, it is related to Amazon as a platform that provides services, which in its operation develops AI systems for its business needs. In relation to AIA regulation, Amazon falls into the category of provider in AIA. Provider in AIA is defined as an individual or legal entity, public authority, agency, or other body that develops AI systems or general purpose AI models or that owns AI systems or general purpose AI models developed and places them on the market or places AI systems into services under its own name or trademark, either with payment or without payment (Eviani et al., 2024). Amazon as a provider is subject to the rights and obligations in the AIA. However, what needs to be noted is that the regulatory system of the AIA is based on the risk generated from the AI system. Therefore, providers such as Amazon need to see the provisions that whether the AI products utilized in its services fall into the categories of unacceptable risk, high-risk, limited risk, and minimal risk.

Analysis of Amazon Case – Why Transparency Matter

Determining the risk categorization of AI products will have consequences for the obligations that need to be complied with. In the context of self-preferencing on e-commerce platforms, this phenomenon has the potential for unfair competition activities to occur, which is a legal issue that has risks. However, in the AIA, unfair competition is not included in the risk category as mentioned above. Risk in AIA is also defined as a combination of the probability of occurrence of harm and the severity of the harm. In other words, risk in the AIA is focused on the direct impact on physical safety or basic human rights, such as security and non-discrimination, rather than specifically covering the issue of unfair competition.

Analysis of AIA Regarding Transparency Principle

Self-preferencing can be included in the AIA regulation, but not in the high-risk AI system (HRAIS) category. This is because HRAIS has been specifically regulated in Annex III, which falls into the HRAIS category, namely biometric identification and categorisation of natural persons, management and operation of critical infrastructure, educational and vocational training, employment, workers management and access to self-employment, access to and enjoyment of essential pricate services and public services and benefits, law enforcement, migration, asylum, and border control management, administration of justice and democratic processes. Although self-preferencing in e-commerce platforms does not fall into the category of HRAIS as stipulated in the AIA, but in relation to the transparency of a system used for rating in e-commerce, it can fall within the scope of Article 50 paragraph 1 of the AIA which regulates the transparency obligations for providers and deployers of certain AI systems (Coglianese & Lai, 2023).

Analysis of AIA Regarding Transparency Principle

Recital 132 of the AIA describes certain transparency obligations that apply to AI systems that interact with humans or generate content, even if they do not fall under the HRAIS category. As mentioned in Recital 132 of the AIA, AI systems that interact with humans may pose risks such as fraud or disguise (whether or not they fall under the HRAIS category). This brings an obligation on systems that interact with humans to be informed when they are interacting. In other words, humans need to know if they are dealing with an AI system that may be able to perform actions such as providing outputs such as recommendations, choices, and other outputs. Transparency in AIA is one of the fundamental principles. This is due to the purpose of AIA, which is to ensure the safety and security of AI system users. Self-preferencing that uses AI systems to prioritize the platform's own products or services over third-party products or services, while not falling into the HRAIS category, should still ensure that users are aware of the AI system they are interacting with and can understand how the decisions made by the AI system impact the search results or recommendations they receive (Kifer & Prince, 2023).

EU Regulation 2019/1150 on Promoting Fairness and Transparency for Business Users of Online Intermediation Services (P2B Regulation)

To strengthen the regulation on transparency for e-commerce platforms. From the perspective of the EU Regulation on Promoting Fairness and Transparency for Business Users of Online Intermediation Services (P2B) Regulation, e-commerce platforms fall within the scope of the notion of 'provider of online intermediation services' which under Article 2 is defined as "any person or legal entity who provides, or who offers to provide, online intermediation services to business users". An e-commerce platform is an intermediary service that provides a platform for businesses, consumers and platforms to conduct their trading activities.

In principle, the P2B regulation is motivated by the objective of enabling the functioning of the internal market by establishing rules to ensure that online intermediary service business users and intermediary service providers can ensure transparency, fairness, and effective redress with respect to online search engines used by intermediary service providers. This is because the number of cases of unfair business practices between intermediary service providers is large (Lipsky et al., 2024). P2B raises major issues related to a competitive online ecosystem that requires regulations to govern the online trading ecosystem to run fairly and transparently (Chin et al., 2024).

De Franceshi believes that with the rise of the digital economy and business models that are starting to develop using data and algorithms, a more adaptive regulatory strategy is needed. This also relates to the utilization of artificial intelligence that provides benefits to businesses, but also has an impact on unfair business practices or market control. Therefore, to answer these challenges, P2B regulations focus on regulating online intermediary service providers (Dewi & Lusikooy, 2024).

In relation to the phenomenon of self-preferencing, the P2B regulation explicitly regulates the rating. Based on Article 5 paragraph (1) of the P2B regulation, online intermediation service providers must specify in their terms and conditions the main parameters that determine the rating and the reasons for the importance of the main parameters. This provides transparency to platform users such as businesses and consumers. Furthermore, in Article 5 paragraph (2) of the P2B regulation, transparency of these parameters must be provided in an easy and publicly available description, which is compiled in clear and understandable language, and must always update the description (Frendistya & Fakrulloh, 2024).

The Urgency of Regulating Transparency Principles for AI Systems in E-Commerce Sector

The situation as described above presents the urgency that the implementation of electronic agents (AI) is also an important issue. Especially related to the transparency of an electronic system that plays an important role both for consumers and in providing legal certainty, especially for business actors in the e-commerce platform. In an increasingly complex digital ecosystem, transparency not only aims to protect consumers, but also to ensure that businesses using AI technology in their business operations are transparent or open. Regulation on the principle of transparency will ensure that business actors conducting trading activities in e-commerce platforms understand how electronic systems and/or electronic agents operate and what are the main parameters owned by electronic system operators, as well as how the agent makes decisions, provides recommendations, or manages consumer data. The lack of transparency in the regulation of electronic agents is also not in accordance with the basic principles contained in the ITE Law such as the principle of technological neutrality as well as the principles contained in the consideration of the ITE Law, namely technology is expected to support various sectors of life, including the trade sector and the digital economy, which means technology must also be able to create healthy business competition to support the trade sector and the digital economy (Armiwulan et al., 2024).

Indonesia can take the approach of the European Union which regulates how an electronic system that conducts ratings in e-commerce platforms, where the EU requires intermediary service providers to include information related to the parameters of the electronic system that works in the terms and conditions of the intermediary service provider. In addition, the phenomenon of self-preferencing is not permitted by the Digital Markets Act regulations. The EU also specifically regulates an AI system operated within the European Union (Wadipalapa et al., 2024). Therefore, intermediary service providers have a set of rules that must be met before conducting their business operations.

Indonesia as a developing country that has the largest digital market volume in the ecommerce sector can review the provisions contained in the PMSE Regulation which is the main regulation related to trading through electronic systems. With the increasing variety of phenomena born due to globalization and the transformation of the digital economy, there is a great potential for unfair competition that utilizes technology such as artificial intelligence. It is necessary to review whether the existing laws and regulations are still relevant to the times (Rahman et al., 2022).

By implementing regulations that require e-commerce platforms to transparently explain how their ranking algorithms work, Indonesia can reduce risk and ensure that every business, large and small, has an equal opportunity to compete. This will support a more inclusive and equitable digital ecosystem (Chaudhary et al., 2024).

The Global Digital Compact issued by the UN is also related to responsible which in essence AI systems must be transparent and have human-centric design. Where transparent in this context is related to providing protection to users that the AI system used can be trusted both from the data used to operate and the results provided to users (Eviani et al., 2024).

Related to the principle of transparency that needs to be regulated, it will also relate to the obligation for electronic system providers to ensure that AI systems operated in e-commerce platforms will not produce biased results due to machines. As in the Shopee case where the AI system provides choices for users without any information disclosure to users (Gaur & Abraham, 2024).

In dealing with the phenomenon of self-preferencing that utilizes AI technology, it is necessary to look at the definition of the law itself. Mochtar Kusumaatmadja believes that law is the whole of the principles and rules that regulate human life in society, but also includes institutions (institutions) and processes that realize the enactment of these rules in reality (Budhijanto, 2024). The use of technology that is advancing rapidly does not mean that it must be limited by only being regulated by a strict regulation. Prof. Mochtar's legal definition provides flexibility that the law is not only regulating and rigid, but the law is also a principle which in its development does not only stand alone, but is also accompanied by rules, processes and institutions that can work together to provide legal certainty. In terms of the phenomenon of self-preferencing, legal certainty for e-commerce platform users, both consumers and business actors who carry out trading activities through electronic systems.

CONCLUSION

The phenomenon of self-preferencing raises the issue of the importance of transparency of the rating process in an electronic system that uses electronic agents. Transparency in AI systems is necessary to protect consumers, ensure fair competition, and support the growth of a fair digital economy. Looking at the provisions of the European Union, the EU specifically regulates the phenomenon of self-preferencing. The Digital Markets Act (DMA) regulation in the EU sets out rules to create fair and healthy competition in the digital market. Major ecommerce platforms in the EU fall under the scope of the DMA regulation. E-commerce platforms such as Amazon, Alphabet, and Meta are categorized as gatekeepers. Gatekeepers under the DMA are required to comply with the rules related to the prohibition of selfpreferencing practices stipulated in Article 6 paragraph (5) of the DMA. Another provision related to self-preferencing is related to the use of artificial intelligence (AI) technology that supports the phenomenon of self-preferencing. The provisions regarding AI are regulated in the Artificial Intelligence Act (AIA). In the AIA, e-commerce platforms can be constructed as providers or deployers. There are no specific regulations governing e-commerce as the AIA has a risk-based approach. If we look into the provisions contained in the AIA, the Article relating to the phenomenon of self-preferencing is Article 50 paragraph (1) related to transparency obligations for providers or developers. Where e-commerce platforms fall into the category of providers of AI systems. Another regulation related to self-preferencing is the EU Regulation 2019/1150 (P2B Regulation) of the European Union which in relation to the phenomenon of self-preferencing, the P2B regulation explicitly regulates the rating system owned by e-commerce platforms. Based on Article 5 paragraph (1) of the P2B Regulation, e-commerce platforms must set out in their terms and conditions the main parameters that determine the rating and the reasons for their importance. This provides transparency to platform users such as businesses and consumers.

Indonesia, in this case, can adopt the approach taken by the European Union, which has regulations against the prohibition of the phenomenon of self-preferencing both from regulations relating to the use of technology. The phenomenon of self-preferencing that occurs in e-commerce platforms has an impact on weak competition and the presence of market dominance practices in the digital market. Based on the author's findings, this phenomenon is certainly not in line with the basic philosophy of the ITE Law that technology is expected to support various sectors of life, including the trade sector and digital economy, not to be abused. The utilization of technology such as AI systems in the Shopee case, poses a risk of injustice through the manipulation of algorithms that prioritize services owned by Shopee through the ranking function. If we look at the provisions relating to technology related to selfpreferencing, namely AI systems. Based on Indonesian national law, AI is constructed as an electronic agent. Regulations regarding electronic agents are regulated in the ITE Law and the PSTE Regulation. However, in relation to regulations for e-commerce platforms, Indonesia has regulations governing trade through electronic systems, namely the PMSE Regulation. In relation to the phenomenon of self-preferencing that occurs in e-commerce platforms, based on the PMSE Regulation, there is no regulation that specifically regulates electronic operations.

REFERENCE

- Andriati, S. L., Rizki, I. K., & Malian, A. N. B. M. (2024). Justice on Trial: How Artificial Intelligence is Reshaping Judicial Decision-Making. Journal of Indonesian Legal Studies, 9(2). https://doi.org/10.15294/jils.v9i2.13683
- Armiwulan, H., Rahman, R. A., Prabowo, V. N., & Hajdú, J. (2024). Artificial Intelligence and Its Challenges To Elections In Indonesia: A Legal Analysis. Jambura Law Review, 6(2), 264–285. https://doi.org/10.33756/jlr.v6i2.24243
- Rahman, R. A., Prabowo, V. N., David, A. J., & Hajdú, J. (2022). Constructing Responsible Artificial Intelligence Principles as Norms: Efforts to Strengthen Democratic Norms in Indonesia and European Union. PADJADJARAN Jurnal Ilmu Hukum (Journal of Law), 9(2), 231–252. https://doi.org/10.22304/pjih.v9n2.a5
- Budhijanto, D. (2024). E-commerce Law: Smart Contract & Cybersecurity. Logos Publishing.
- Carugati, C. (2023). Antitrust Issues Raised by Answer Engines. Brussels: Bruegel. https://www.econstor.eu/handle/10419/274213
- Chaudhary, M., Gaur, L., Singh, G., & Afaq, A. (2024). Introduction to Explainable AI (XAI) in E-Commerce. In Studies in Computational Intelligence (Vol. 1094, pp. 1–15). Springer, Cham. https://doi.org/10.1007/978-3-031-55615-9_1
- Chin, T., Ghouri, M. W. A., Jin, J., & Deveci, M. (2024). AI Technologies Affording The Orchestration of Ecosystem-Based Business Models: The Moderating Role of AI Knowledge Spillover. Humanities and Social Sciences Communications 2024 11:1, 11(1), 1–13. https://doi.org/10.1057/s41599-024-03003-7
- Coglianese, C., & Lai, A. (2023). Algorithms and Competition in the Digital Economy. E-Competitions, Special Issue Algorithms & Competition, 24(10), 1–17. https://papers.ssrn.com/abstract=4787890
- Dewi, G. D. P., & Lusikooy, A. E. (2024). E-commerce Transformation in Indonesia. Nation State: Journal of International Studies, 6(2), 117–138. https://doi.org/10.24076/nsjis.v6i2.1304

- Eviani, N. Y., Yunus, A., Hafizhah, N. A., & Irwansyah, I. (2024). Navigating Justice and Legal Equilibrium in Automatic Pricing Algorithms: A Cross Border Legal Approach. Cepalo, 8(1), 1–16. https://doi.org/10.25041/cepalo.v8no1.3380
- Franceschi, A. De, & Schulze, R. (2019). Digital Revolution: New Challanges for Law (Data Protection, Artificial Inttelligence, Smart Products, Blockchain Technology and Virtual Currecies. Reemers Publishing Services.
- Frendistya, D., & Fakrulloh, Z. (2024). Legal Reform of Restrictions on the Use of Artificial Intelligence (AI) in Order to Maintain Public Law in Indonesia. Proceedings of the 4th International Conference on Law, Social Sciences, Economics, and Education, ICLSSEE 2024, 25 May 2024, Jakarta, Indonesia. https://doi.org/10.4108/eai.25-5-2024.2349444
- Gaur, L., & Abraham, A. (2024). Role of Explainable Artificial Intelligence in E-Commerce (L. Gaur & A. Abraham, Eds.; Vol. 1094). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-55615-9
- Jürgensmeier, L., & Skiera, B. (2024). Measuring Self-Preferencing on Digital Platforms. SSRN Electronic Journal, 1–73. https://doi.org/10.2139/SSRN.4393726
- Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in My Hand: Who's The Fairest in The Land? On The Interpretations, Illustrations, and Implications of Artificial Intelligence. Business Horizons, 62(1), 15–25. https://doi.org/10.1016/j.bushor.2018.08.004
- Kifer, A., & Prince, J. (2023). Conflicts of Interest and Platforms. SSRN Electronic Journal, 1– 12. https://doi.org/10.2139/SSRN.4575050
- Lipsky, A. B., Ginsburg, D. H., Raskovich, A., & Neto, D. da S. O. (2024). Comment of the Global Antitrust Institute on the Brazilian Ministry of Finance, Department of Economic Reform Request for Contributions: Economic and Competitive Aspects of Digital Platforms. SSRN Electronic Journal, 24(11), 1–27. https://doi.org/10.2139/SSRN.4815130
- Soekanto, S., & Mamudji, S. (2013). Penelitian Hukum Normatif. Rajawali Press.
- Wadipalapa, R. P., Katharina, R., Nainggolan, P. P., Aminah, S., Apriani, T., Ma'rifah, D., & Anisah, A. L. (2024). An Ambitious Artificial Intelligence Policy in a Decentralised Governance System: Evidence From Indonesia. Journal of Current Southeast Asian Affairs, 43(1), 65–93. https://doi.org/10.1177/18681034231226393
- Zuwanda, Z. S., Lubis, A. F., Solapari, N., Sakmaf, M. S., & Triyantoro, A. (2024). Ethical and Legal Analysis of Artificial Intelligence Systems in Law Enforcement with a Study of Potential Human Rights Violations in Indonesia. The Easta Journal Law and Human Rights, 2(03), 176–185. https://doi.org/10.58812/eslhr.v2i03.283.