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Analysis of the Utilization of Artificial Intelligence in Shopee's Live Feature Based on Competition Law

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Abstract

The rapid development of technology has had a significant impact on various aspects of life, one of which is the economic sector. The application of technology in the economic sector involves the use of AI in e-commerce, particularly in the live feature of Shopee, which provides substantial benefits for business actors. However, it can also create imbalances in the market at times. The market imbalance has led to unhealthy business competition practices that are contrary to Law Number 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unfair Business Competition. The purpose of this research is to analyze the utilization of AI in Shopee's live feature, which is indicated to potentially lead to unfair business competition practices based on Competition Law. The method used in this research is normative empirical, combining the implementation of positive law with legal events occurring in society. The utilization of AI in Shopee's live feature causes an imbalance in the market by providing significant advantages to business players who possess multiple AI models, allowing them to dominate up to 50% of the market share for certain products and hindering new competitors from entering the market. The use of AI in Shopee's live feature leads to market dominance and a dominant position by business players, which contradicts Articles 19 and 25 of Law Number 5

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of 1999 concerning the Prohibition of Monopoly Practices and Unfair Business Competition.

KEYWORDS: *Utilization, Artificial Intelligence, Competition Law*

Introduction

The rapid growth of technology has a significant impact on the economy, particularly in the realm of digital-based businesses. Online trading creates new challenges for e-commerce platforms to maintain relevance, appeal, and competitive advantage, making digital marketing an essential part of contemporary marketing strategies.[1] In order to address the challenges of growth in the digital business world, it is essential to start leveraging artificial intelligence technology, commonly referred to as AI. Artificial Intelligence (AI) is a field of computer science or the simulation of human intelligence, specifically designed to solve cognitive problems that are generally associated with human intelligence.[2] Modern marketing and AI have become key supporters in optimizing e-commerce marketing strategies. In the context of marketing, AI can be applied in the development of advanced product recommendation systems that allow businesses to use AI as a campaign management tool, enabling them to plan, execute, and monitor their marketing campaigns efficiently.[3] In addition, there is also the development of algorithms and techniques that enable computers to perform tasks that were previously only possible for humans. The use of AI

[1] Siti Mulasih dan Aep Saefullah, "Tren Pemasaran Digital: Analisis Perbandingan Platform Media Sosial Facebook Ads Dan Google Ads," *Jurnal Riset Rumpun Ilmu Ekonomi* 3, no. 1 (2024): 89–101, https://doi.org/10.55606/jurrie.v3i1.2768.
[2] Mohammad Arkan et al., "Webinar dan Workshop Peran Artificial Intelligence Dalam Analisis Big Data Untuk Mendukung Sektor Bisnis E-Commerce," *Jurnal Pengabdian Kolaborasi dan Inovasi IPTEKS* 2, no. 1 (2024): 228–36.
[3] Mayang Larasati, Nasrudin, dan Yusuf Tojiri, *E-Commerce dan Transformasi Pemasaran Strategi Menghadapi Era Digital* (Padang: Takaza Innovatix Labs, 2024).

has been employed to enhance the quality and effectiveness of product recommendation systems applied to livestreaming features.[4]

The most popular digital business platform among the public is Shopee. Shopee utilizes AI in its live feature to analyze user data and business information more accurately. Through the utilization of AI, Shopee is able to identify shopping trends and user preferences in real-time, allowing them to better tailor their marketing strategies. The application of AI, such as that used by Shopee, allows for an understanding of purchasing patterns and consumer behavior, enabling the platform to offer relevant and more personalized products to users, there by enhancing user satisfaction and loyalty. Additionally, the AI employed by Shopee is capable of optimizing product delivery by predicting needs and improving the delivery process. Thus, it can be said that the utilization of AI in Shopee's live feature not only enhances the shopping experience for users but also provides a competitive advantage for businesses on Shopee. However, the use of AI in Shopee's live feature is often misused by business operators. The misuse of AI in this context creates unhealthy competition in the realm of e-commerce, where business actors use AI to attract viewers based on user' s search histories. Thus, the use of AI in this case also raises several issues related to competition law. It is said that healthy business competition certainly has good characteristics, such as a large number of buyers, a large number of sellers, homogeneous goods in the eyes of consumers, freedom for consumers to choose products, and buyers and sellers knowing each other as well as the goods being traded.[5]

Indonesia has enacted Law Number 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unfair Business Competition, or the Competition Law. Competition law is an important instrument in

[4] Sitti Aliyah Azzahra, Syafran Nurrahman, dan Aep Saefullah, "Integrasi Kecerdasan Buatan Dalam Sistem Rekomendasi Produk Untuk E-Commerce," *Jurnal Sains dan Teknologi (SAINTEK)* 3 (2024): 21–28.
[5] Reznia Febrina, "Persaingan Usaha pada Era Digital Menurut Perspektif Hukum Persaingan Usaha," *Jurnal Karya Ilmiah Multidisiplin* 2 (2022): 121–27.

promoting economic efficiency and creating a level playing field for all business actors. This law is necessary to ensure that competition in the economic sector can take place without obstacles and also serves as a reminder to safeguard against unhealthy and unfair economic practices.[6] However, the existence of the Competition Law has not been able to prevent unhealthy business competition practices in this digital era. The use of AI in product recommendations can create unregulated injustices. The product recommendation system implemented in the live feature of Shopee has the potential to lead to discrimination or manipulation, resulting in a dominant position and market control in business competition, which could harm competitors or consumers. In fact, Article 19 and Article 25 of the Competition Law prohibit monopolistic practices and the abuse of a dominant position. A dominant position is a condition for business actors in a particular market that lacks significant competition, where the business actor holds a leading position based on financial resources, the ability to access offerings and sales, and the capability to match supply and demand in sales more effectively than other business actors.[7]

The use of AI in product recommendation systems on Shopee's live feature can lead to a dominant position for certain businesses and market control that contradicts the Competition Law. In practice, many e-commerce players, whether as sellers or affiliates, who market their products live, have complained about a decrease in viewership and purchasing power due to the use of AI that recommends similar products only for one business. This results in the practice of monopoly and/or unfair competition by obstructing certain business actors from engaging in the same activities in the relevant market or stifling competitors' businesses in that market. A dominant position occurs when a business actor or a group

[6] Susanti Adi Nugroho, *Hukum Persaingan Usaha di Indonesia dalam Teori dan Praktik serta Penerapan Hukumnya* (Jakarta: Kencana Prenadamedia Group, 2020).
[7] Akhmad Farhan Nazhari dan Naufal Irkham, "Analisis Dugaan Praktik redatory Pricing dan Penyalahgunaan Posisi Dominan dalam Industri E-Commerce," *Jurnal Persaingan Usaha* 3, no. 19–31 (2023).

of business actors controls 50% or more of the market share of a specific type of goods or services.[8] The utilization of AI in this case also harms consumers because it limits their access to competitive goods and/or services, and it also hinders competitors from entering the market. However, business competition should be conducted honestly and fairly to achieve profits within reasonable limits and the development of the company. Without competition in business, entrepreneurs will not progress and develop, but it is essential to uphold ethics in healthy competition. (Tainpublon, 2020). Based on this, in this research, the author intends to examine how the legal analysis of business competition is affected by the use of AI in the live feature of Shopee, which is indicated to cause a gap in business competition.

Method

This research is conducted as an empirical normative study, which is research in action regarding the applicability of normative law. This type of research is field research, which examines the implementation of positive legal provisions or laws in relation to the legal rules applied to every legal event that occurs in society.[9] This research is descriptive in nature, conducted to obtain data regarding humans, conditions, or other phenomena in order to reinforce the research hypotheses.[10] The data sources used in this research are primary and secondary data. Primary data refers to the legal behavior of community members, while secondary data consists of legal materials in legal research, such as legislation and previous research findings.[11] Data collection is conducted using a questionnaire by

[8] Ria Setyawati dan Rayhan Adhi Pradana, "Penyalahgunaan Posisi Dominan Oleh Pelaku Usaha Dominan Melalui Penggunaan Algoritma Harga," *UIRLaw Review* 6, no. 2 (2022): 104.
[9] Muhaimin, *Metode Penelitian Hukum* (Mataran: Mataram University Press, 2020).
[10] Nurul Qamar dan Farah Syah Rezah, *Metode Penelitian Hukum Doktrinal dan Non-Doktrinal* (Makassar: CV. Social Politic Genius, 2020).
[11] Sigit Sapto Nugroho, Anik Tri Haryani, dan Farkhani, *Metodologi Riset Hukum* (Madiun: Oase Pustaka, 2020).

providing a set of questions for respondents to answer.[12] The collected data was then analyzed descriptively, starting with grouping similar data and information by sub-aspects, followed by interpreting to give meaning and understand the relationships between each aspect that constitutes the research problem, thus obtaining a comprehensive picture.[13]

Result and Discussions

The rapid development of technology has had a significant impact on various aspects of life, one of which is the economic sector. Economic actors around the world can transact more easily and quickly thanks to this technology. One of the rapid developments in the economic sector utilizing technology is the sale of products that can be conducted through the internet network known as marketplaces or e-commerce. The development of e-commerce has positive impacts, including providing convenience to users in shopping, allowing businesses to reduce operational costs, expanding market reach, and eliminating the need for physical stores. Additionally, e-commerce reduces entry barriers for new entrepreneurs with limited capital and enables global product sales. However, on the other hand, e-commerce also leads to intense competition, particularly among small and new businesses.[14] Based on the data obtained, Indonesia is among the top 10 countries in the world with the highest percentage of e-commerce usage. All human activities can be carried out easily, quickly, and efficiently thanks to digitalization. One of the tangible impacts of the digital era is on the economic sector, where economic activities are starting to operate with a digital system. This is marked by the emergence of e-commerce platforms such as Shopee, Lazada, Tokopedia, and Buka Lapak.

[12] Anggy Giri Prawiyogi et al., "Penggunaan Media Big Book untuk Menumbuhkan Minat Baca Siswa di Sekolah Dasar," *Jurnal Basicedu* 5, no. 1 (2021): 449.
[13] Bambang Sunggono, *Metodologi Penelitian Hukum* (Jakarta: PT. Raja Grafindo Persada, 2015).
[14] Muhammad Fariz Abdullah dan Adi Mansah, "Pengaruh Penggunaan E-Commerce Bagi Masyarakat," *Journal of Reseources dan Reserves* 1, no. 2 (2023): 13.

Every year, the number of e-commerce users in Indonesia continues to rise.[15] The most popular e-commerce platform among the Indonesian people is Shopee, which recorded 124.9 million visits in 2023, a significant increase from the previous year.[16] The emergence of e-commerce brings benefits to several economic sectors, but it also presents challenges for business actors and the government. The digital economy era poses risks of unhealthy business competition, such as market dominance and abuse of dominant position. This occurs because digital platforms have large consumer data or Big Data, making it easy for the dominant position of digital platforms to be misused and resulting in unhealthy business competition.[17]

As the number of e-commerce users increases, Shopee has become the top choice for both consumers and business operators. Business actors on Shopee come from various backgrounds, including sellers and affiliates. Sellers act as direct vendors on the platform, while affiliates serve as intermediaries between sellers and consumers. Shopee has more than 5 million active sellers and collaborates with over 2.5 million affiliates, a number that has more than doubled.[18] This phenomenon has prompted Shopee to continuously innovate and explore potential aspects that can support sellers or affiliates in boosting sales. One of the innovations introduced by Shopee is the launch of the live streaming feature, or Live Shopee, which marks a turning point for this e-commerce platform. This feature allows sellers or affiliates to showcase their products directly to the

[15] Erlina F. Santika, *ECDB: Proyeksi Pertumbuhan e-Commerce Indonesia Tertinggi Sedunia pada 2024*, 2024, https://databoks.katadata.co.id/datapublish/2024/04/29/ecdb-proyeksi-pertumbuhan-e-commerce-indonesia-tertinggi-sedunia-pada-2024.
[16] Cindy Mutia Annur, *Indonesia Jadi Penyumbang Kunjungan Terbanyak ke Shopee pada 2023*, 2024, https://databoks.katadata.co.id/datapublish/2024/03/21/indonesia-jadi-penyumbang-kunjungan-terbanyak-ke-shopee-pada-2023.
[17] Irene Puteri A.S Sinaga, Gerhan Muhammad Rizky, dan Khoirul Sodikin, "Analisis Tantangan Penegakan Hukum dan Persaingan Usaha di Era Digitalisasi," *Journal of Law, Administration, and Social Science* 4, no. 1 (2024): 1–12.
[18] Dimas Andi dan Handoyo, "Punya lebih dari 5 juta penjual aktif, Shopee dorong pertumbuhan ekonomi digital," 2021, https://industri.kontan.co.id/news/punya-lebih-dari-5-juta-penjual-aktif-shopee-dorong-pertumbuhan-ekonomi-digital.

audience, enabling real-time interaction and answering consumer questions in detail by demonstrating the products.

In 2023, the live feature on Shopee showed a significant impact on increasing transactions on the platform. Over time, Shopee Live continued to evolve by adding new features supported by the utilization of AI. Some applications of AI in Shopee include product recommendations, fraud detection, visual search, automated chatbots, and data analysis. The product recommendation feature used by Shopee serves to analyze user shopping data, providing more relevant and appealing product suggestions for users. Additionally, data analysis is employed to examine user data and other business information, helping Shopee identify shopping trends and user preferences.[19] Business operators who utilize Shopee's live feature have stated that the Shopee live feature has become a quite effective tool for introducing and selling their products to consumers. Moreover, with the assistance of AI utilization facilitated by Shopee, business operators are able to reach and stabilize the number of viewers, which significantly impacts customer's purchasing power or checkout ability. In addition to business actors who feel the impact of AI utilization, various e-commerce companies also acknowledge that the use of AI will turn users into loyal customers due to the convenience it offers, thereby extending business relationships with customers.[20]

The utilization of AI in e-commerce, particularly in the live features of Shopee, certainly provides significant advantages for business players. In addition to market imbalances, the use of AI in e-commerce can also have a negative impact related to customer's personal data.[21] However, it can

[19] Rahadi Pratomo Singgih dan Mira Permatasari, "Pemanfaatan Artificial Intelligence dalam Pengembangan E-Commerce," *Prosiding Seminar STIAMI* 10, no. 3 (2023): 43.
[20] Dian Susiyanto dan Naningsih, "Pengaruh Artificial Intelligence Terhadap E Business dan E Commerce," *Neraca Jurnal Ekonomi, Manajemen, dan Akuntansi* 2, no. 1 (2024): 485.
[21] Agitkarai Sirajuddin Putra dan Lalu Muh. Hayyanul Haq, "Tanggung Jawab Hukum Penggunaan Artificial Intelligence Terhadap Pelanggaran Data Pribadi Pada Platform E-Commerce," *Jurnal Commerce Law* 4, no. 1 (2024): 114.

sometimes create imbalances in the market. Based on research findings, the use of AI in Shopee's live features can hinder potential competitors from entering the relevant market because businesses with numerous AI models can generate more accurate product recommendations. This leads to an algorithm that tends to be unbalanced, resulting in certain businesses dominating the market for specific products as their offerings are continuously recommended by AI, thereby strengthening their position in the market. Consequently, small business owners perceive that AI is only intended for larger enterprises, making them reluctant to use AI as a catalyst for business development.[22]

The utilization of AI can hinder business actors from entering the market, and the uneven application of AI in Shopee's live features also impacts unhealthy business competition. Small business operators are struggling to compete in a market dominated by businesses with better resources. The use of AI by these businesses also limits the market and hinders sales growth for other operators, creating a dominant position. A business with a dominant position can lead to monopolistic competition practices, allowing it to set prices or create barriers to entry for new or undesirable businesses.[23] Actually, a dominant position is not prohibited in business competition, as long as the business actor achieves a dominant position or becomes a superior player in the relevant market through their own capabilities in a fair manner. The dominant position of a business actor can prevent consumers from obtaining goods or services from competing businesses so strongly that the business actor can control the behavior of those consumers to refrain from purchasing goods from their competitors.[24] The utilization of AI by large business actors on Shopee live, which can read user product search algorithms, can prioritize recommending low-quality

[22] Singgih dan Permatasari, "Pemanfaatan Artificial Intelligence dalam Pengembangan E-Commerce."
[23] Alum Simbolon, *Hukum Persaingan Usaha* (Yogyakarta: Liberty, 2019).
[24] Andi Fahmi Lubis et al., *Hukum Persaingan Usaha* (Jakarta: Komisi Pengawasan Persaingan Usaha, 2017).

but popular products while ignoring high-quality products from other businesses. This allows dominant players to take actions that prevent or hinder consumers from obtaining competing goods and/or services.

The use of AI in Shopee's live features creates a detrimental marketing culture, hindering the promotional strategies and innovations of other business players. In addition, the use of AI to manipulate reviews, set prices, and artificially increase viewer numbers by irresponsible parties also harms business actors who wish to enter the market competition fairly. The high costs of utilizing AI also make it difficult for small and medium-sized enterprises to access this technology, ultimately widening the gap in business competition. The use of AI also leads to unethical practices and a dominant position that hinders other business actors. Therefore, the government needs to implement stricter policies and ensure that with the advancement of technology, particularly in the utilization of AI, it not only benefits large businesses but also creates healthy and fair competition for all entrepreneurs. There are two types of policy instruments in regulating business competition, namely structural policy regulation instruments that focus on market share and behavioral policy regulation instruments that emphasize combating competitive behavior and practices, such as efforts by businesses to gain a dominant position.[25] The government, as the regulator, can implement both types of policies to optimally prevent unhealthy business competition in this digital era.

The rapidly increasing number of e-commerce users has led to the growth of businesses in e-commerce, consisting of both sellers and affiliates, resulting in competitive business competition.[26] In today's digital era, artificial intelligence or AI has become a key component in various aspects, one of which is in business, particularly in e-commerce. One e-commerce

[25] Nurianto Rachmad Soepadmo, *Hukum Persaingan Usaha* (Sidoarjo: Zifatama Jawara, 2020).
[26] Erica Flora dan Elfrida Ratnawati, "Indikasi Jual Rugi untuk Menyingkirkan Pelaku Usaha Lainnya Berdasarkan UU No. 5 Tahun 1999 Tentang Larangan Praktek Monopoli dan Persaingan Usaha," *Unes Law Review2* 6, no. 1 (2023): 2764–70.

platform that utilizes AI is Shopee, specifically in its live streaming feature, referred to as live Shopee. In this context, Shopee leverages AI to enhance the quality and effectiveness of its product recommendation system, enabling it to present more personalized, relevant, and engaging product recommendations for consumers. The use of AI in the live Shopee feature strengthens its appeal and effectiveness by providing personalized product recommendations, analyzing consumer behavior, and facilitating real-time interactions.[27]

Among the benefits of utilizing AI are optimizing marketing strategies, enhancing operational efficiency, and providing a more personalized convenience for consumers. Behind these profits, new challenges arise for business actors and the government as well. Actually, the government as a regulator has established regulations to prevent monopolistic practices and unhealthy business competition, namely Law Number 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unhealthy Business Competition, hereinafter referred to as the Competition Law. This regulation is designed to prevent unfair market dominance and unhealthy business competition practices. However, with the rapid advancement of technology and the utilization of AI, there are growing concerns about the occurrence of monopolistic practices and unhealthy competition. The utilization of AI in the digital economy sector makes three claims: first, it will expand forms of anti-competitive behavior; second, algorithmic markets will shape anti-competitive behavior beyond pricing; and third, fraud is a key feature of algorithmic market design.[28] Unfair competition is competition among business actors in carrying out production and/or marketing activities of goods or services that is

[27] Azzahra, Nurrahman, dan Saefullah, "Integrasi Kecerdasan Buatan Dalam Sistem Rekomendasi Produk Untuk E-Commerce."
[28] Nicolas Petit, "Antitrust and Artificial Intelligence: A Research Agenda," *Journal ofEuropean Competition Law & Practice* 8, no. 6 (2017): 361.

conducted in an dishonest manner, against the law, or hinders fair competition.[29]

The e-commerce platform that is currently booming is Shopee. Shopee is related to business law as it involves contractual agreements between business actors and consumers. Shopee has many strategies to increase the number of users and business players, including sellers and affiliates. One of the innovations introduced by Shopee is the launch of the Shopee live feature, supported by the use of AI to reach consumers and increase sales. Sales on Shopee live allow business operators to interact directly with consumers without meeting in person, and the prices offered are relatively lower due to product discounts and free shipping.[30] Based on the research conducted on business actors consisting of sellers and affiliates, the majority stated that the live feature on Shopee is very helpful for entrepreneurs in introducing and selling products to consumers. In addition to the benefits of the Shopee live feature, there are also advantages from the application of AI in Shopee live, which helps business actors easily reach viewers and recommend products to consumers based on search engines. However, the research also shows that the utilization of AI in the Shopee live feature creates an imbalance in business competition. Not all business actors can experience the benefits of AI implementation in the Shopee live feature because the technology is not used evenly, leading to market dominance by larger business actors and resulting in a dominant position.

Competition in the era of the digital economy is largely based on innovation. This innovation is carried out by every business player to attract consumers to use their products; as a result, the digital market is dominated

[29] Ahmad Fauzi, "Pengawasan Praktek Monopoli Sebagai Bentuk Persaingan Usaha Tidak Sehat," *Delegalata Jurnal Ilmu Hukum* 6, no. 2 (2021): 296–405.
[30] Ajeng Tri Normalita Putri, Eddhie Praptono, dan Soesi Idayanti, "Predatory Pricing Sebagai Praktik Persaingan Usaha Tidak Sehat dalam Penjualan Live Shopee," *Jurbisman Jurnal Bisnis Manajemen* 2, no. 1 (2024): 237–54.

by large business players.[31] The innovation carried out by large business players is by utilizing AI as a tool to facilitate them in introducing and selling their products. The application of AI in live Shopee provides disproportionate advantages to large businesses. AI algorithms more often recommend products from companies that have a good sales record and reviews without considering the quality of the products themselves. Additionally, AI algorithms also recommend the cheapest products with sales in the tens of thousands. This is known as predatory pricing, or an action taken by business actors to eliminate their competitors by setting prices below production costs.[32] As a result, businesses that have already dominated the market find it increasingly easy to strengthen their position, while small businesses struggle to compete and gain an equal share of the market. This indicates a market dominance by large businesses that can obstruct the entry of new players.

Article 25 of the Competition Law states that business actors are prohibited from using their dominant position, either directly or indirectly, to impose trading conditions with the aim of preventing and/or hindering consumers from obtaining competing goods and/or services in terms of both price and quality. The utilization of AI in Shopee's live feature allows business actors to continuously optimize their sales and marketing strategies based on extensive consumer data. In this case, the use of Big Data AI can provide all the product data that consumers have ever searched for. The application of Big Data AI can support an effective market, but it can also be used to engage in anti-competitive behavior.[33] It can be said that the utilization of AI has led large businesses to restrict the market, as they can

[31] Sonny V Tulung dan Hadi Yusuf, "Analisis Regulasi Hukum Dagang Atas Persaingan Usaha dalam E-Commerce di Era Digital," *Jurnal Intelek dan Cendikiawan Nusantara* 1, no. 2 (2024): 1265–76.
[32] Vicky Darmawan dan Ditha Wiradiputra, "Predatory Pricing dalam E-Commerce Menurut Perspektif Hukum Persaingan Usaha," *Jurnal Ilmu Sosial dan Pendidikan* 6, no. 3 (2022): 9847.
[33] Christopher Townley, Eric Marrison, dan Karen Yeung, "Big Data and Personalized Price Discrimination in EU Competition Law," *Yerabook of European Law* 36 (2017): 683–748.

adjust pricing offers, promotions, and product recommendations more effectively compared to smaller businesses that have limited access to AI. As a result, the dominant position of large businesses becomes increasingly difficult for their smaller competitors to catch up with.

Business actors are also prohibited from using their dominant position to restrict the market and technological development.[34] The high costs of developing and implementing AI in the online stores of large businesses have caused many smaller or newer entrepreneurs to fall behind in adopting this technology. As a result, small business operators are unable to compete effectively in a market increasingly dominated by businesses that leverage AI at high costs. Seller or affiliate accounts that use Shopee's live feature and leverage AI at a high cost are able to detect product data that consumers are searching for, allowing them to easily attract viewers numbering in the hundreds or even thousands. This viewer count significantly impacts the reputation and reviews of both the products and the store. This results in a gap that not only exacerbates inequality in business competition but also reinforces the dominance of large enterprises that have greater resources to invest in the utilization of AI.

The utilization of AI in e-commerce can provide more personalized and relevant product recommendations to users, thereby increasing sales and strengthening the relationship between businesses and consumers. By using algorithmic machines and data analysis, recommendation systems can analyze purchase history, frequently viewed products, and the most recently searched items.[35] However, the use of this algorithmic machine AI is often misused by business actors to manipulate marketing algorithms, increasing the visibility of their products in Shopee's live features. Along

[34] Republik Indonesia, *Undang-Undang Nomor 5 Tahun 1999 tentang Larangan Praktek Monopoli dan Persaingan Usaha Tidak Sehat*, 1999.
[35] Didi Riswan, Heri Eko Rahmadi Putra, dan Risfan Nazar Saputra, "Pengembangan Sistem Rekomendasi Berbasis Kecerdasan Buatan Untuk Meningkatkan Pengalaman Pengguna Di Platform E-Commerce," *Jurnal Komputer Teknologi Informasi Sistem Komputer* 2, no. 3 (2024): 573–80.

with the utilization of algorithms, the data analysis by business actors can direct product recommendations to a broader and more relevant consumer base. Based on this, it results in the dominance of large business players, where AI algorithms tend to direct consumers towards well-known products from large businesses or companies, even though products from small businesses may be of higher quality. This is contrary to Article 19 of the Competition Law, poin b, which prohibits business actors from engaging in activities that could lead to unfair competition practices, such as obstructing consumers or competing business actors from establishing business relationships with those competing business actors. Consumers should be able to choose other sellers or affiliates, but this is hindered by businesses that use AI to highlight their products.

The competition law aims to prevent the emergence of unhealthy competition. Unhealthy competition refers to the rivalry among business actors in conducting the production or marketing of goods and services in a dishonest manner, in violation of the law, or in a way that hinders fair competition.[36] Based on that understanding, the use of AI in Shopee's live feature can already be considered a form of unfair competition, as this utilization of AI prevents many small or new businesses from entering the market and competing with larger enterprises. The potential form of this abuse of dominant position is referred to as refusal to deal, or the refusal to transact with retailers or competitors because the business actor occupies a dominant position.[37] Market dominance and a strong position reinforced by the use of AI will lead to violations of the principles of fair competition. The Competition Law stipulates that business competition must occur fairly without any dominance that hinders competition among business actors.

[36] Republik Indonesia, *Undang-Undang Nomor 5 Tahun 1999 tentang Larangan Praktek Monopoli dan Persaingan Usaha Tidak Sehat*.
[37] Sinaga, Rizky, dan Sodikin, "Analisis Tantangan Penegakan Hukum dan Persaingan Usaha di Era Digitalisasi."

A dominant position is one occupied by an economic actor with the largest market share, allowing that business actor to have market power.[38] Market dominance by business actors is not actually prohibited under competition law in Indonesia. However, a dominant position is prohibited if there is an abuse of the relevant market power, which can lead to unhealthy business competition. Abuse of a dominant position occurs when a business actor sets conditions to obstruct and prevent consumers from obtaining products from competing business actors, thereby restricting the market and technological development that can hinder competing business actors from entering the relevant market.[39]

Given the prohibition against the abuse of dominant positions and market control associated with the use of AI in Shopee's live features, there is a need for stricter oversight of AI utilization in e-commerce, particularly in live streaming features like Live Shopee. In addition to oversight, regulatory updates are also necessary to address the challenges arising from technological advancements, ensuring that the use of AI in e-commerce, especially on Live Shopee, does not reinforce dominant positions, market control, or create monopolies that contradict the Competition Law. To mitigate the impact of AI usage that indicates unhealthy competition, transparency in the workings of AI and product recommendation systems for consumers is essential. Then, facilitating small business actors to gain equal access to the use of AI in Shopee's live features so that small business actors can compete fairly with other businesses. Based on this, the establishment of new regulations regarding prohibited actions in business competition, as outlined in Articles 8 to 18, and aspects of responsibility regulated in Articles 19 to 28 of the Competition Law, is an appropriate solution to anticipate unhealthy business competition practices in the

[38] Rachmadi Usman, *Hukum Persaingan Usaha di Indonesia* (Jakarta: Sinar Grafika, 2013).
[39] Nazhari dan Irkham, "Analisis Dugaan Praktik redatory Pricing dan Penyalahgunaan Posisi Dominan dalam Industri E-Commerce."

digital era, ensuring that no business actors are harmed by one another.[40] Lastly, the government, as a regulator, needs to implement stricter rules to prevent algorithm manipulation that uses AI and ensure that all e-commerce actors have a fair opportunity to compete in the market.

Conclusion

The utilization of AI in e-commerce, especially in the live feature of Shopee, certainly provides significant advantages for business players. However, it can sometimes create imbalances in the market. The use of AI in Shopee's live feature leads to market imbalances by giving substantial benefits to businesses that have multiple AI models, allowing them to dominate up to 50% of the market share for certain products and hindering new competitors from entering the market. AI also reinforces the dominant position of large businesses, making it difficult for small businesses to compete, as well as limiting the market and sales growth opportunities for other businesses. Additionally, AI tends to prioritize popular products of lower quality, neglecting high-quality products, which restricts consumer choices. Overall, the use of AI creates an unhealthy marketing culture, hinders innovation, and reduces fair competition. The utilization of AI in Shopee's live features leads to market dominance and a dominant position by business actors, which contradicts Articles 19 and 25 of Law Number 5 of 1999 concerning the Prohibition of Monopoly Practices and Unfair Business Competition. Therefore, although the application of AI in e-commerce brings innovation and benefits, there must be strict oversight and regulation to ensure that the use of AI does not violate the principles of fair competition.

[40] Ahmad Sabirin dan Raafid Haidar Herfian, "Dampak Ekosistem Digital terhadap Hukum Persaingan di Indonesia serta Optimalisasi Peran Komisi Pengawas Persaingan Usaha (KPPU) di Era Ekonomi Digital," *Jurnal Persaingan Usaha* 2, no. 1 (2021): 81.

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