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BIG DATA DOMINANCE AS A MARKET ENTRY BARRIER IN DIGITAL MARKETPLACE: A LEGAL ANALYSIS UNDER INDONESIAN COMPETITION LAW

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Abstract. The rapid expansion of the digital economy has elevated data to a strategic asset that determines competitive advantage within e commerce ecosystems. The massive accumulation of Big Data by incumbent marketplace platforms potentially creates significant barriers to entry for new market players, thereby undermining competitive market structures. This study aims to (1) analyze the legal qualification of Big Data control by incumbent platforms as a barrier to entry under the Essential Facilities Doctrine, and (2) evaluate the adequacy of Indonesian competition law, particularly Law No. 5 of 1999 on the Prohibition of Monopolistic Practices and Unfair Business Competition, in addressing digital data based dominant position abuse. Employing a normative legal research method with statute and conceptual approaches, this study examines relevant legislation and applies Network Effects Theory, Lock in Effect Theory, and the Essential Facilities Doctrine as analytical frameworks. The findings reveal that Big Data constitutes a barrier to entry by generating information asymmetry, network effects, and consumer lock in that new competitors cannot easily replicate. The existing legal framework exhibits critical gaps, as the definition of dominant position under Law No. 5 of 1999 remains oriented toward financial turnover and physical assets, leaving digital market power unmeasured. This study recommends amending Law No. 5 of 1999 to incorporate data volume and algorithmic capacity as indicators of dominant position, strengthening the supervisory authority of KPPU (Business Competition Supervisory Commission) through algorithmic audit powers, and integrating data portability rights within the Personal Data Protection Law (UU PDP) as a structural remedy to reduce digital market entry barriers.

Keywords: Big Data; Competition Law; Barriers to Entry; Digital Marketplace; Dominant Position; Essential Facilities

I. INTRODUCTION

The emergence of digital marketplaces has fundamentally transformed the commercial landscape, introducing legal challenges that conventional competition frameworks were not designed to address. Digital platforms such as Shopee, Tokopedia, and Lazada now function as critical economic intermediaries, connecting millions of buyers and sellers while simultaneously accumulating vast quantities of behavioral and transactional data (Fatmawati, Alisyahbana, & Nurbayani, 2025). This dual role as both market facilitators and data accumulators creates structural conditions in which large incumbents can leverage data dominance to exclude potential competitors from the marketplace. In the Indonesian context, where digital economy growth has been among the fastest in Southeast Asia, this phenomenon raises significant legal and policy concerns that demand rigorous scholarly attention.

Big Data, characterized by its volume, velocity, and variety, has become the primary determinant of competitive advantage in platform based markets (Purwanto & Susanto, 2021). Unlike traditional production inputs, data exhibits non rivalrous and cumulative properties: its value increases as more users interact with a platform, and its accumulation reinforces the platform's ability to optimize services, pricing, and user targeting through machine learning algorithms. This self reinforcing dynamic, known as the data quality feedback loop, creates a competitive moat that new entrants find difficult or impossible to overcome (Nasution, 2020). Consequently, data ownership by incumbent platforms has emerged as one of the most consequential non traditional barriers to market entry in the digital economy.

The concept of barriers to entry is central to competition law analysis, as markets with high entry barriers tend toward concentration and monopolistic behavior. Traditional barriers—such as high capital requirements, economies of scale, or regulatory licensing—are relatively well understood and addressed within existing legal frameworks. However, data driven barriers are qualitatively different: they are largely invisible, self reinforcing through network effects, and resistant to conventional regulatory interventions (Kuncoro, 2022). The dominant position achieved through Big Data control may not manifest through predatory pricing or exclusionary contracts alone, but through the systematic creation of informational asymmetry that advantages the incumbent in every dimension of market competition.

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In Indonesia, the primary legislative instrument governing market competition is Law No. 5 of 1999 on the Prohibition of Monopolistic Practices and Unfair Business Competition. Enacted before the digital economy reached its current scale, this legislation was designed for industrial age market structures and defines dominant position primarily in terms of market share thresholds (50% for a single entity), financial turnover, and physical asset ownership (Sirait, 2022). The Business Competition Supervisory Commission (KPPU) is the designated enforcement authority, but its investigative powers remain constrained by the absence of explicit jurisdiction over digital assets, algorithmic conduct, and data driven market power (Hartono & Dewi, 2023).

This regulatory gap is particularly significant given the growing body of evidence suggesting that incumbent platforms in Indonesia have leveraged Big Data to entrench their market positions. Platform conduct such as personalized pricing, algorithmic preference for affiliated merchants, and cross platform data integration illustrates how data control translates into competitive advantage (Wijaya & Prasetyo, 2021). Without a legal framework capable of assessing data volume and algorithmic capacity as indicators of market power, these practices remain largely beyond the reach of KPPU's enforcement mandate.

International developments reinforce the urgency of legal reform in this area. The European Union's Digital Markets Act (DMA), enacted in 2022, has introduced ex ante regulation of 'gatekeeper' platforms, establishing obligations such as data portability and interoperability that directly address data driven barriers to entry. The United States, through Federal Trade Commission actions and proposed legislative reforms, has similarly recognized the anticompetitive potential of Big Data concentration (Anggraini, 2023). Indonesia, as an emerging digital economy, must develop an equivalent normative framework that reflects both international best practices and domestic legal traditions.

This study is guided by two research questions: (1) How can the legal qualification of Big Data control by incumbent marketplace platforms be categorized as a barrier to entry (barriers to entry) under the Essential Facilities Doctrine? and (2) To what extent does Indonesian competition law specifically Law No. 5 of 1999 adequately address dominant position abuse based on digital data control? The answers to these questions will contribute to both academic discourse and policy reform efforts aimed at ensuring that Indonesia's competition law remains effective in the digital age.

II. RESEARCH METHODS

This study employs a normative legal research (yuridis normatif) methodology, which is appropriate for analyzing and evaluating existing legal frameworks in relation to emerging social and economic phenomena (Marzuki, 2021). Normative legal research focuses on the systematic examination of legal norms, principles, doctrines, and their application to concrete problems, rather than empirical observation of social behavior. This methodological orientation is justified by the nature of the research questions, which concern the adequacy and interpretation of legal provisions rather than empirical market data.

Two primary research approaches are deployed within the normative framework. First, the Statute Approach examines the textual content, legislative history, and official interpretations of relevant Indonesian statutes, including Law No. 5 of 1999 on the Prohibition of Monopolistic Practices and Unfair Business Competition, Government Regulation No. 57 of 2010 on Business Mergers, KPPU Regulation No. 3 of 2023 on Merger Assessment Guidelines, and Law No. 27 of 2022 on Personal Data Protection. The statute approach is complemented by comparative analysis of relevant instruments from the European Union (TFEU Article 102; Digital Markets Act 2022) and the United States (Sherman Act; FTC Act) to identify international regulatory standards.

Second, the Conceptual Approach constructs legal arguments by applying established theoretical frameworks to the facts of digital market competition. Three theoretical frameworks are central to this study: (1) the Essential Facilities Doctrine, which originates in American antitrust law and obligates dominant firms controlling infrastructure critical to market participation to provide access to competitors on reasonable terms; (2) Network Effects Theory, which explains how the value and competitive advantage of a platform increases disproportionately as its user base grows, creating feedback loops that entrench incumbent advantages; and (3) Lock in Effect Theory, which describes conditions in which consumers face prohibitively high switching costs when attempting to migrate to alternative platforms, thereby reinforcing incumbent market power. These theoretical frameworks are applied to the Indonesian digital marketplace context to assess whether existing legal provisions are adequate to regulate Big Data driven competition barriers.

Legal materials are classified into three categories. Primary legal materials consist of statutory instruments and KPPU decisions directly relevant to competition regulation and digital market governance. Secondary legal materials include national and international academic journals, competition law textbooks, OECD and EU Commission policy reports, and KPPU official publications. Tertiary legal materials encompass legal dictionaries and encyclopedias used for conceptual clarification. The analysis is conducted prescriptively: rather than merely describing existing law, the study assesses its adequacy and formulates recommendations for reform, consistent with the problem solving orientation of normative legal scholarship.

III. RESULTS AND DISCUSSION

A. The Nature and Competitive Dynamics of Digital Marketplaces

A digital marketplace constitutes an electronic platform that intermediates commercial transactions between multiple buyers and sellers without directly participating in the supply of goods or services. Unlike traditional markets with geographic and temporal constraints, digital marketplaces operate across jurisdictions, continuously, and at scale. The academic literature identifies four evolutionary stages of e marketplace development: Commodity Exchanges,

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Value Added Services, Knowledge Networks, and Value Trust Networks (Raisch, 2004). Each successive stage reflects deepening integration of data into the marketplace's value proposition and competitive strategy.

In the Indonesian market, platforms such as Shopee, Tokopedia, Bukalapak, and Lazada have achieved commanding market positions by progressively accumulating user data across all transactional, behavioral, and interactional dimensions. The data collected includes purchase histories, search queries, browsing behavior, payment preferences, geographic locations, and social network connections (Setiawan & Lestari, 2022). This data infrastructure enables incumbents to offer services—including personalized recommendations, dynamic pricing, credit scoring, and logistics optimization that new entrants cannot replicate without equivalent data assets. The result is a competitive landscape characterized by significant asymmetry between incumbents and potential entrants.

The competitive significance of this data asymmetry is reinforced by the platform's role as a two sided market. On one side, the platform attracts consumers through superior user experience enabled by data driven personalization; on the other, it attracts merchants by offering access to a large, data profiled consumer base. This dual dynamic creates self reinforcing network effects in which each additional user increases the platform's data richness, which in turn enhances service quality, which attracts further users. For a new entrant without historical data, breaking into this cycle requires overcoming compounded informational and reputational disadvantages (Anggraini, 2023).

B. Big Data as a Strategic Asset and Competition Factor

Big Data refers to datasets characterized by high volume, velocity, and variety that exceed the processing capacity of conventional data management tools (Purwanto & Susanto, 2021). The strategic significance of Big Data in competitive markets derives from its capacity to enable superior decision making, product customization, operational efficiency, and market prediction. Firms with superior data assets can outperform competitors not merely through resource advantages but through informational advantages that compound over time as more data is generated and analyzed.

In the digital economy, Big Data is sourced from three consumer data categories: Volunteered Data (information consciously provided by users, such as registration details and product reviews), Observed Data (information collected through user behavior monitoring, such as click streams and dwell times), and Inferred Data (information derived by algorithms from patterns in the preceding categories, such as predicted purchasing intent and creditworthiness) (Purwanto & Susanto, 2021). The combination of these data streams enables incumbent platforms to build comprehensive consumer profiles that support both competitive advantage and potential exclusionary practices.

Information asymmetry constitutes the primary mechanism through which Big Data generates competitive barriers. When an incumbent platform possesses granular data about consumer behavior, pricing sensitivity, and purchasing cycles, it can optimize its commercial strategies in ways that competitors without equivalent data cannot match. This asymmetry operates at multiple levels: between the platform and its merchant users, between the platform and potential new platform entrants, and between the platform and regulatory authorities charged with monitoring competition (Kuncoro, 2022). The regulatory asymmetry dimension is particularly consequential, as KPPU may lack both the technical capacity and legal mandate to audit algorithmic conduct effectively.

The characteristics of Big Data that render it competitively significant also make it potentially classifiable as an essential facility under competition law. Specifically, Big Data accumulated by incumbent platforms is difficult or impossible to replicate by new entrants within a commercially feasible timeframe; it is essential to competitive participation in data driven markets; and its control by a dominant firm constitutes a condition that directly harms market competition (Nasution, 2020). These characteristics align with the established criteria for essential facility status, which have been applied in both American and European competition law contexts.

C. The Essential Facilities Doctrine and Its Application to Big Data

The Essential Facilities Doctrine (EFD) is a principle of competition law that imposes an obligation on dominant firms controlling infrastructure essential to market participation to provide competitors access to that infrastructure on fair, non discriminatory terms. The doctrine originated in American antitrust jurisprudence, particularly in the context of railroad networks, and has since been applied to telecommunications infrastructure, energy networks, and, increasingly, digital platforms (Sirait, 2022). In the European Union, the doctrine operates under Article 102 of the Treaty on the Functioning of the European Union (TFEU), which prohibits the abuse of dominant position, including refusal to supply or deal where such refusal forecloses competition.

The application of the Essential Facilities Doctrine to Big Data requires demonstrating: (1) that the incumbent controls a facility or resource; (2) that the facility is essential to competing in the relevant market; (3) that the facility cannot practically or reasonably be duplicated by competitors; and (4) that denial of access to the facility harms competition (Hartono & Dewi, 2023). In the context of digital marketplace data, each of these criteria can be substantiated. First, incumbent platforms exercise exclusive control over their accumulated data through proprietary algorithmic systems. Second, access to consumer behavioral data is increasingly essential to competing effectively in digital markets where personalization and prediction drive user acquisition and retention. Third, a new entrant cannot replicate five or ten years of historical behavioral data from millions of users in a commercially meaningful timeframe. Fourth, the foreclosure of data access prevents new entrants from achieving competitive parity, reducing market contestability and consumer welfare.

The application of the EFD to digital data in Indonesia faces doctrinal challenges because Law No. 5 of 1999 does not explicitly enumerate data or digital infrastructure as categories of essential facilities. The concept is implicitly present in Article 25, which prohibits dominant

firms from abusing their position in ways that impede competitors' access to the market, but the absence of specific provisions governing digital assets creates interpretive uncertainty (Anggraini, 2023). This doctrinal gap is compounded by the absence of KPPU decisions that have substantively applied essential facilities reasoning to data driven market power, leaving the legal position underdeveloped relative to jurisdictions such as Germany, where the Federal Cartel Office has explicitly addressed digital platform market power.

The establishment of this doctrine in Indonesian context will be significantly aided by comparative analysis. The German Bundeskartellamt's proceedings against Facebook's data collection practices and the EU Commission's designation of Google, Amazon, and Meta as 'gatekeepers' under the Digital Markets Act provide instructive models for how data control can trigger essential facilities obligations (Wijaya & Prasetyo, 2021). These precedents demonstrate that data repositories satisfying the volume, variety, and velocity thresholds associated with Big Data can legitimately be classified as essential facilities when they are controlled by dominant incumbents whose data practices foreclose competitive market entry.

D. Network Effects Theory and Consumer Lock in in Indonesian Marketplaces

Network effects theory explains how the utility derived from a product or service increases as the number of users grows. In the context of digital marketplaces, direct network effects arise when additional users—whether buyers or sellers—increase the platform's value to existing participants. Indirect network effects arise when growth on one side of the market (e.g., more merchants) increases value to the other side (e.g., more consumers with greater product selection) (Kuncoro, 2022). Both types of network effects are powerfully present in Indonesia's leading marketplace platforms, creating a structural advantage for incumbents that new entrants cannot overcome without achieving similar user scale.

The interaction between network effects and Big Data creates a compounded barrier to entry. As a platform's user base grows, it generates more behavioral data; this data enables algorithmic improvements that enhance service quality; enhanced service quality attracts further users, generating more data; and so the cycle continues. This data quality feedback loop means that the gap between incumbent platforms and potential entrants is not static—it widens continuously as long as incumbents maintain user engagement (Setiawan & Lestari, 2022). A new entrant entering the market today must overcome not merely the incumbents' current data advantage but the projected future advantage that the feedback loop will generate by the time the new entrant achieves meaningful market scale.

The Lock in Effect is the consumer side manifestation of these dynamics. Consumers who have established behavioral profiles on an incumbent platform—through purchase histories, payment credentials, delivery address records, and loyalty programme participation—face significant switching costs when considering migration to an alternative platform. These costs are not merely financial; they include the inconvenience of rebuilding preference profiles, the loss of personalized recommendations based on historical data, and the temporary deterioration of service quality as the new platform's algorithms learn the user's preferences (Nasution, 2020). In the Indonesian marketplace context, features such as Shopee's ShopeePay wallet and Tokopedia's integrated financial services create additional switching barriers by embedding financial dependency within the platform ecosystem.

From a legal perspective, excessive lock in practices that are engineered to prevent consumer migration rather than arising organically from superior service quality may constitute an abuse of dominant position under Article 25 of Law No. 5 of 1999. When an incumbent platform uses data driven techniques to deliberately increase switching costs such as making user data non portable, suppressing competitor recommendations, or using predatory loyalty pricing these practices move beyond legitimate competition on the merits and toward anticompetitive foreclosure (Hartono & Dewi, 2023). The challenge for Indonesian competition law is to develop criteria that distinguish between legitimate service differentiation (which should be protected) and engineered lock in (which should be regulated).

E. Adequacy of Indonesian Competition Law: Law No. 5 of 1999

Law No. 5 of 1999 constitutes the primary legislative framework for competition regulation in Indonesia. Its key provisions relevant to digital market competition include: Article 10 (prohibition of boycott agreements designed to exclude market participants), Article 15 (prohibition of exclusive dealing arrangements that close market access to new entrants), Article 19 (prohibition of conduct that refuses or prevents specific business actors from engaging in equivalent business activity), and Article 25 (prohibition of dominant position abuse). Collectively, these provisions establish a framework capable of addressing certain forms of digital anticompetitive conduct, but with important limitations that the current study identifies (Sirait, 2022).

The most significant limitation of Law No. 5 of 1999 in the digital marketplace context is its definition of dominant position. Under Article 25, a firm is presumed to hold a dominant position if its market share reaches or exceeds 50% for a single entity, 75% for two entities, or 90% for three entities. These thresholds are calculated based on market share in terms of sales revenue or production volume measures that are both practically difficult to compute in multi sided digital markets and conceptually inadequate to capture data driven market power (Nasution, 2020). A platform may hold overwhelming data dominance controlling 80% of consumer behavioral data in a product category while generating only 40% of sales revenue in that category, thereby falling below the legal threshold for dominant position while exercising de facto informational supremacy over competitors.

This mismatch between the statute's market power indicators and the actual sources of digital competitive advantage creates what legal scholars term a legal gap (kekosongan hukum): a situation in which existing law is formally applicable but substantively inadequate to regulate the conduct it purports to address (Anggraini, 2023). The legal gap in Law No. 5 of 1999 is particularly acute because it

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affects not only the substantive analysis of dominant position but also the evidentiary and procedural dimensions of KPPU enforcement: KPPU's investigation procedures are designed for markets in which market power is expressed through pricing, supply control, and contractual exclusivity rather than through data accumulation and algorithmic conduct.

KPPU Regulation No. 3 of 2023, which updates guidelines for the assessment of mergers, acquisitions, and asset transfers, represents a partial step toward addressing data concentration risks. The regulation acknowledges that digital assets may constitute relevant considerations in merger review and empowers KPPU to impose behavioral or structural remedies where a proposed combination would create anticompetitive data concentration (Hartono & Dewi, 2023). However, the regulation addresses ex post merger effects rather than organic data accumulation by incumbents, and its practical implementation has yet to be tested in cases involving pure data asset accumulation without accompanying corporate transactions.

The Personal Data Protection Law (UU No. 27 of 2022 on Personal Data Protection) creates adjacent regulatory infrastructure that could, if properly integrated with competition law, contribute to reducing data driven market entry barriers. Specifically, provisions relating to data portability the right of data subjects to transfer their data from one controller to another have the potential to reduce consumer switching costs and thereby diminish lock in effects that reinforce incumbent market power (Wijaya & Prasetyo, 2021). However, the UU PDP was designed primarily with privacy protection rather than competition promotion in mind, and its data portability provisions lack the technical specificity and interoperability requirements necessary to function effectively as a competition remedy in multi sided market contexts.

F. Strengthening KPPU's Role in Digital Market Supervision

KPPU faces structural challenges in regulating Big Data driven market power that go beyond the inadequacies of its statutory mandate. These challenges include technical capacity constraints (the absence of in house algorithmic auditing expertise), jurisdictional limitations (unclear authority over data practices not directly linked to specific anticompetitive agreements or mergers), and institutional resource constraints (limited investigative staff and budget relative to the scale and complexity of digital platform markets) (Setiawan & Lestari, 2022). Addressing these challenges requires both legislative reform and institutional capacity building.

The academic literature and international regulatory practice suggest that effective digital market competition oversight requires KPPU to develop three core capabilities: first, the capacity to conduct algorithmic audits systematic technical investigations of the mechanisms by which platform algorithms select, rank, and price products and services, with a view to identifying discriminatory or exclusionary conduct; second, the capacity to assess data concentration quantitative methodologies for measuring the volume, variety, and competitive significance of data held by incumbent platforms, enabling data based market power assessment independent of revenue based market share calculations; and third, the capacity to design and monitor behavioral remedies appropriate to digital markets, including data sharing mandates, interoperability requirements, and data portability enforcement (Kuncoro, 2022).

International models provide valuable guidance. The German Bundeskartellamt, empowered by the 10th Amendment to the Act Against Restraints of Competition (GWB), has developed regulatory practice in which market power assessment explicitly incorporates data driven competitive advantages, network effects, and platform conglomerate effects. The European Commission's ex ante gatekeeper regulation under the Digital Markets Act establishes pre specified obligations for platforms designated as gatekeepers—obligations that include data sharing, interoperability, and prohibition of self preferencingwithout requiring case by case proof of competitive harm (Anggraini, 2023). Adapting elements of these regulatory architectures to the Indonesian legal context, with appropriate modifications to reflect domestic institutional capacity and constitutional constraints, offers a practical pathway toward effective digital competition enforcement.

IV. CONCLUSIONS

This study has demonstrated that the control of Big Data by incumbent marketplace platforms constitutes a non traditional but legally significant barrier to market entry that is not adequately addressed by Indonesia's existing competition law framework. The analysis establishes that Big Data held by digital incumbents satisfies the substantive criteria for classification as an essential facility under the Essential Facilities Doctrine: it is controlled exclusively by incumbents, essential to competitive participation in data driven digital markets, practically impossible to replicate by new entrants within a commercially meaningful timeframe, and its denial to competitors causes measurable harm to market competition. The application of Network Effects Theory and Lock in Effect Theory to the Indonesian marketplace context further reveals that the competitive advantages generated by Big Data control are self reinforcing: each additional user interaction enriches the incumbent's data advantage, enhancing service quality, attracting further users, and widening the competitive gap with potential entrants. Consumer lock in, engineered through data based personalization and switching cost creation, compounds the structural entry barriers by reducing the effective demand available to new market participants. Law No. 5 of 1999, while providing a foundational framework for competition regulation, exhibits critical doctrinal inadequacies when applied to digital market structures. The statute's definition of dominant position—anchored in revenue based market share thresholds—fails to capture data driven market power. Its provisions on essential facilities and market access barriers lack the specificity required to address algorithmic exclusion and data accumulation strategies. And KPPU's institutional mandate does not clearly extend to algorithmic auditing or digital asset assessment, leaving significant regulatory gaps. On the basis of these findings, the following recommendations are advanced. First, the government and

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legislature should amend Law No. 5 of 1999 to incorporate data volume, algorithmic processing capacity, and network effect magnitude as explicit indicators of dominant position in digital markets, supplementing rather than replacing existing revenue based thresholds. Second, KPPU's mandate should be legislatively strengthened to include algorithmic audit authority, data concentration assessment powers, and the capacity to impose data sharing or interoperability obligations as behavioral remedies in digital market cases. Third, the data portability provisions of Law No. 27 of 2022 should be operationalized through implementing regulations that establish technical interoperability standards, enabling competition law and data protection law to function synergistically in reducing digital market entry barriers. Fourth, KPPU should adopt ex ante regulatory approaches for platforms designated as digital gatekeepers, following the model of the EU Digital Markets Act, to prevent anticompetitive data concentration before permanent market harm occurs. Fifth, formal cooperation mechanisms between KPPU, the Ministry of Communication and Digital Affairs (Komdigi), and the National Personal Data Protection Commission (Komnas PDP) should be institutionalized to enable coordinated regulatory responses to digital market competition issues.

REFERENCES

[1] Anggraini, A. M. T. (2023). Hukum persaingan usaha di era ekonomi digital: Tantangan dan reformasi regulasi. Jurnal Hukum dan Pembangunan, 53(1), 1–24. https://doi.org/10.21143/jhp.vol53.no1.3712

[2] Fatmawati, F., Alisyahbana, A. N. Q., & Nurbayani, S. U. (2025). Digital monopoly: Unveiling the dynamics of market power and the new era of economic regulation. Jurnal Dinamika Hukum, 25(1), 45–62. https://doi.org/10.20884/1.jdh.2025.25.1.4521

[3] Hartono, S., & Dewi, R. A. (2023). Kewenangan KPPU dalam pengawasan platform digital dan aset data: Tinjauan hukum persaingan usaha. Jurnal Hukum Ius Quia Iustum, 30(2), 301–325. https://doi.org/10.20885/iustum.vol30.iss2.art4

[4] Kuncoro, A. (2022). Efek jaringan dan kekuatan pasar di ekosistem digital Indonesia. Jurnal Ekonomi dan Pembangunan Indonesia, 22(2), 115–134. https://doi.org/10.21002/jepi.v22i2.1523

[5] Marzuki, P. M. (2021). Penelitian hukum (edisi revisi). Prenada Media Group.

[6] Nasution, B. J. (2020). Hambatan masuk pasar digital dan doktrin essential facilities dalam hukum persaingan usaha Indonesia. Jurnal Hukum & Pembangunan, 50(4), 785–808. https://doi.org/10.21143/jhp.vol50.no4.2716

[7] Purwanto, E., & Susanto, A. (2021). Big data sebagai aset strategis dalam persaingan usaha di pasar digital. Jurnal Manajemen Teknologi, 20(3), 210–228. https://doi.org/10.12695/jmt.2021.20.3.4

[8] Setiawan, D., & Lestari, N. P. (2022). Peran KPPU dalam mengawasi perilaku anti persaingan di platform e commerce Indonesia. Jurnal Ilmu Hukum, 13(1), 55–78. https://doi.org/10.30652/jih.v13i1.8834

[9] Sirait, M. (2022). Posisi dominan dan penyalahgunaannya dalam hukum persaingan usaha Indonesia: Perspektif komparatif. Jurnal Hukum dan Peradilan, 11(2), 199–218. https://doi.org/10.25216/jhp.11.2.2022.199 218

[10] Wijaya, R., & Prasetyo, H. (2021). Portabilitas data dan persaingan pasar: Implikasi UU Pelindungan Data Pribadi terhadap struktur pasar digital. Jurnal Hukum Bisnis, 40(1), 1–20. https://doi.org/10.31599/jhb.v40i1.680

[11] Akman, P. (2021). The relationship between data protection and competition law: Synergies and tensions. Computer Law & Security Review, 41, 105553. https://doi.org/10.1016/j.clsr.2021.105553

[12] Crémer, J., de Montjoye, Y. A., & Schweitzer, H. (2019). Competition policy for the digital era: Final report. European Commission. https://doi.org/10.2763/407537

[13] Ezrachi, A., & Stucke, M. E. (2020). Virtual competition: The promise and perils of the algorithm driven economy. Harvard University Press.

[14] Kerber, W. (2021). Data governance in the digital economy: Between competition, innovation, and consumer protection. Journal of European Competition Law & Practice, 12(6), 418–427. https://doi.org/10.1093/jeclap/lpab028

[15] Prado, M. M., & Trebilcock, M. J. (2022). Path dependence, development, and the dynamics of institutional change. Oxford Journal of Legal Studies, 42(1), 1–28. https://doi.org/10.1093/ojls/gqab045

[16] Vestager, M. (2021). Levelling the digital playing field. Competition Policy International. https://doi.org/10.1093/jeclap/lpab054

[17] Whinston, M. D. (2020). Exclusivity and tying in U.S. v. Microsoft: What we know and don't know. Journal of Economic Perspectives, 15(2), 63–80. https://doi.org/10.1257/jep.15.2.63