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Digital Antitrust: Reimagining Competition Law for Platform Economies and AI-Driven Markets

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Abstract

This study explores the dynamics of competition law within the context of platform-based economies and artificial intelligence (AI), using a case study of micro, small, and medium enterprises (MSMEs) in Bandung City. Employing a socio-legal qualitative approach and thematic analysis of field observations and in-depth interviews with business actors and legal experts, the research reveals that MSMEs' reliance on digital platforms creates an imbalanced structural power relationship. Algorithmic control over visibility, pricing, and penalties restricts the economic autonomy of small-scale entrepreneurs, resulting in a new form of dominance not yet addressed by conventional antitrust frameworks. The study recommends digital legal reforms that include algorithmic transparency, system audits, and the active involvement of MSMEs in platform policy-making processes. These findings highlight the urgent need to redefine the concept of market dominance in the age of data and AI, as well as the importance of cross-sector collaboration in building a fair, competitive, and inclusive digital ecosystem.

Keywords: competition law, digital platforms, MSMEs, algorithms, market dominance, artificial intelligence, digital ecosystem

Introduction

Over the past two decades, the global economic structure has undergone a massive transformation, largely driven by advances in digital technologies such as digital platforms and artificial intelligence (AI). This phenomenon has not only revolutionised the way businesses operate but also posed significant challenges to existing normative and legal frameworks, particularly within competition law (Khoerunsiya et al., 2023; Ramli et al., 2020). In the city of Bandung, the rapid growth of start-ups and e-commerce platforms has given rise to a new, complex economic landscape. Here, digital dominance—shaped by network effects and data control—has shifted the focus of competition law away from traditional indicators such as pricing and the number of market actors (Astuti et al., 2023). In this context, it becomes essential to reconstruct the principles and approaches of competition law to address challenges emerging from digital dominance, which is often subtle yet significantly influential in shaping market structures and consumer behaviour.

Bandung, the capital city of West Java Province, holds a strategic position in Indonesia's digital

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economic development. Its rapidly expanding start-up ecosystem, supported by technological institutions such as the Bandung Institute of Technology (ITB) and strong local government commitment to innovation and smart city initiatives, makes it an ideal location for examining the impact of the digital economy on market structures. Digital platforms such as Gojek, Tokopedia, and Grab have become integrated into everyday life in Bandung, where residents function not only as consumers but also as producers and micro-entrepreneurs (Rusmanto & Permatasari, 2023). However, this digital inclusion also coincides with market consolidation trending towards oligopoly, where a few dominant platforms control the flow of transactions (Ramli et al., 2020). This raises critical questions regarding the capacity of Indonesia's competition law to detect and intervene in forms of market power that are not conventionally visible (Judijanto et al., 2024; Khuan et al., 2023).

The platform economy refers to a technology-driven business model in which companies act as intermediaries between two or more user groups. This model possesses distinctive characteristics that differentiate it from conventional businesses, one of which is the presence of network effects; as more users join a platform, its value increases for other users, thereby creating a self-reinforcing mechanism (Kölbel & Kunz, 2020; Reuschl et al., 2021). Additionally, digital platforms excel at collecting and leveraging vast amounts of consumer behaviour data, enhancing the accuracy of algorithms, service personalisation, and market trend prediction (Guo, 2023). Another defining feature is high scalability with low marginal costs, enabling exponential growth with relatively modest investment (Lv, 2023). This model is also characterised by algorithmic intermediation, where crucial decisions such as pricing and recommendations are governed by algorithms, which are often opaque to users (Gu, 2023). In Bandung, the impact of these characteristics is evident in sectors such as transportation, food delivery, logistics, and retail, where MSMEs that previously had direct market access now rely on platform algorithms (Sun et al., 2023).

Indonesia's legal framework on competition, as set out in Law No. 5 of 1999, was originally designed to regulate the conduct of businesses within traditional markets. However, with the expansion of the digital economy, the effectiveness of this framework has increasingly come into question (Abubakar & Handayani, 2022). The digital market, being multi-sided and unbounded by geography, presents new challenges in defining the relevant market. This is reflected in the difficulties experienced by authorities when attempting to delineate clear market boundaries, particularly as some platforms operate across multiple sectors such as payments, transport, and e-commerce (Posumah & Moridu, 2023; Suryadarma & Faqih, 2024). As a result, conventional indicators of dominance have become inadequate; in the digital economy, dominance ought to be assessed more by control over data and algorithms than merely by market share (Khumairok, 2023). Moreover, the opacity of algorithms used in decision-making further complicates regulatory oversight, posing a challenge for legal institutions in monitoring these phenomena (Fatimah & Ludfi, 2024; Susanti, 2024). Furthermore, the increasing trend of mergers between large corporations and small start-ups—often unnoticed—suggests the elimination of potential competitors in the market (Yuspin & Wicaksono, 2023). In regions such as Bandung, the acquisition of start-ups by major firms further diminishes the bargaining power of local producers, who become increasingly marginalised within the digital ecosystem. Consequently, the growing integration of artificial intelligence (AI) in market governance introduces not only innovation but also new layers of complexity within the existing regulatory framework (Nuraziza & Sudirman, 2024; Suryadarma & Faqih, 2024).

The emergence of artificial intelligence (AI) in the market has significantly altered the dynamics

of competition law, particularly through the automation of pricing mechanisms and algorithms with the potential to foster tacit collusion. Research indicates that the use of pricing algorithms to determine real-time product prices may lead to scenarios where businesses unintentionally collude, thereby breaching competition law (Hartono et al., 2021). Price discrimination practices based on user profiling have also surfaced as a major concern, undermining the principle of fairness in trade (Stefanus, 2023). In the transport sector, such as in the city of Bandung, drivers heavily rely on algorithms to set fares and accept orders, yet often lack sufficient understanding of the underlying pricing mechanisms (Cahyono et al., 2023). This results in a severe information asymmetry that potentially undermines healthy competition (Riyadi & Larasaty, 2021). Given the continuous advancement of technology, it is essential for regulatory authorities to develop legal frameworks capable of addressing these emerging challenges, in order to uphold fair competition and ensure consumer protection (Alfian & Murniati, 2023).

In addressing the challenges posed by the digital economy, there is an urgent need to reformulate competition law frameworks to reflect the realities of the rapidly evolving digital ecosystem. Competition law must extend beyond the logic of traditional markets by incorporating an ecosystem-based approach, which provides a more nuanced assessment of market power—especially when a single platform operates across multiple sectors (Pfeiffer, 2019). Research suggests that the integration of data practices and artificial intelligence into competition policy is crucial, as these technologies have the capacity to create systemic market imbalances (Kunder et al., 2022). Moreover, oversight of mergers and acquisitions should take into account their long-term implications for market structure and local innovation—factors that are particularly vital in local contexts such as Bandung (Pakula, 2021). Consequently, intersectoral collaboration becomes essential, with competition law needing to be harmonised with other relevant legal domains such as consumer protection and personal data privacy (Ohlhausen & Rossen, 2022). These measures must be tailored to local conditions to ensure that competition law effectively functions as a tool for promoting economic equity and justice at both national and regional levels.

This research aims to address a notable gap in the literature and policy discourse concerning the application of digital competition law at the municipal level, using the city of Bandung as a representative case study. Amid the rapid expansion of digital platforms and the scarcity of context-specific regulation, this study seeks to offer a meaningful contribution through empirical and analytical approaches. A primary contribution of this research lies in its provision of an empirical mapping of the forms of digital platform dominance and their tangible impact on local businesses, particularly MSMEs, which often find themselves in a structurally disadvantaged position within the digital ecosystem. The study also explores in greater depth the informational asymmetries and market access barriers that arise from opaque algorithmic dominance, which may give rise to new forms of economic exclusion. Furthermore, this research formulates policy recommendations that are both practical and grounded in local findings, with the aim of enhancing the competitiveness of MSMEs so they may endure and thrive within an increasingly competitive digital economic landscape. As a pioneer of digital innovation in Indonesia, the city of Bandung bears the responsibility of serving as a testing ground for progressive and visionary legal policy. By reimagining competition law through the lens of platform economies and artificial intelligence, it becomes possible not only to safeguard a fair business climate but also to ensure that digitalisation equitably benefits all economic actors — from university-based startups to small enterprises in urban alleyways.

Previous studies have provided insights into how AI is transforming various sectors, including markets and financial services, as well as its influence on marketing strategies and customer

experience. For instance, Marvi *et al.* highlight that the application of AI in data analytics and marketing strategies enhances corporate decision-making and strategic planning (Marvi *et al.*, 2024). In the banking sector, Sheth *et al.* demonstrate the role of AI in delivering more personalised services, which are essential for improving customer experience in an evolving marketplace (Sheth *et al.*, 2022). These perspectives underscore the necessity of updating antitrust frameworks to accommodate AI-driven innovation. Hantao argues that the current antitrust legal framework may be inadequate to address the injustices stemming from monopolistic practices on digital platforms, advocating for more stringent regulatory measures to strike a balance between innovation and market competition (Hantao, 2024). In a similar vein, Wang reports that the growth of the digital economy is often accompanied by harmful anti-competitive practices, such as predatory pricing, which require more robust regulatory intervention (Wang, 2024).

The novelty of this study lies in its approach, which integrates competition law analysis with the algorithmic realities of the digital platform ecosystem—particularly in the context of micro, small, and medium enterprises (MSMEs) in mid-sized cities such as Bandung. This research goes beyond normative legal perspectives by empirically illustrating how dependency on platforms and algorithmic control has given rise to new forms of market dominance. These developments are not yet fully addressed within the conventional antitrust legal framework in Indonesia. By combining field interviews, observations, and digital discourse analysis, this study offers an interdisciplinary perspective that argues for the redefinition of algorithm-based economic power. It also highlights the urgent need for regulations that ensure fair access and technological accountability in the digital economy. The findings offer an original contribution to the development of a more contextually grounded and adaptive competition law.

Methodology

Method

This study employs a qualitative-descriptive approach within a socio-legal paradigm, integrating normative legal analysis with the socio-economic dynamics of the digital landscape in Bandung City. This approach is essential, as antitrust issues in the digital economy concern not only formal regulation but also encompass market behaviour and the influence of technology. Fadli (2021) highlights the strength of qualitative research design in uncovering descriptive data rooted in the subjectivity of actors. Furthermore, Kartikawati (2024) emphasises that digital transformation has shifted the paradigm of business competition, presenting new challenges for the enforcement of competition law. Accordingly, this research aims to identify the implementation of competition law principles in local practice while revealing the gap between normative frameworks and practical realities, as discussed by Lianos (2022) in relation to the need for policy reform in the digital era. Data were collected through legal document analysis, participatory observation, and in-depth interviews with key actors within the digital ecosystem Fitriiono *et al.*, (2023).

Data Analysis

The data were analysed using thematic analysis techniques, following the stages of open coding, axial coding, and selective coding to identify patterns and central themes within the context of digital antitrust. This process enabled the researcher to explore the interplay between platform dominance, algorithmic influence, and regulatory responses (Kartikawati, 2024). In addition, legal discourse analysis was employed to examine the legal narratives that govern competition

in the digital era. This method is essential for understanding how legal language shapes our perception of monopolistic behaviour occurring on digital platforms, where some studies have indicated that acquisition practices by large corporations often hinder competition (Lemos & Resende, 2023; Wu, 2023). The integration of thematic and legal discourse analysis offers deeper insights into the interaction between legal texts, technological practices, and the evolving socio-economic reality (Cahill & Wang, 2023).

Sample

The research participants were categorised into three main groups: (1) local business actors in Bandung who rely on digital platforms for the distribution or marketing of their products and services, such as culinary MSMEs, transport service providers, and online retailers; (2) representatives from digital platforms actively operating in Bandung, encompassing sectors such as transportation, e-commerce, and logistics; and (3) authorities or regulators involved in monitoring or formulating digital and competition policies, including academics specialising in digital law. Participants were selected through purposive sampling, based on their direct engagement within Bandung's digital ecosystem and their relevance to antitrust issues (Haqqi, 2023). A total of 15 to 20 individuals were targeted for in-depth interviews, with a balanced proportion between small business owners, platform operators, and policy/regulatory stakeholders (Baker, 2021). This approach aimed to ensure a well-rounded analysis that considers the perspectives of both affected actors and those in positions of power within the digital structure (Yusuf, 2024).

Research Instruments

The primary instrument in this study is a semi-structured interview guide, developed around key themes such as platform dominance, market access, algorithms and data, experiences of price discrimination, and interactions with competition law. This guide allows for flexibility in exploring participants' experiences and perspectives while maintaining a clear focus on the predefined research variables. In addition to the interview guide, an observation sheet was employed to document direct interactions between business actors and digital platform interfaces. Legal and policy documents were also utilised as supporting instruments to analyse existing regulatory narratives (Asmah & Rompegading, 2024). The combination of these three instruments ensures robust data triangulation, which is essential in qualitative approaches to enhance the validity and depth of the analysis. Consequently, this research contributes to a more nuanced understanding of competition dynamics within the digital economy.

Research Procedures

The research procedure commenced with a literature review and an analysis of legal documents, aimed at understanding the framework of Indonesian competition law and its challenges in the digital era. This was followed by the purposive selection of participants, based on a mapping of key actors within Bandung's digital ecosystem. Initial contact with participants was established through local business communities, digital associations, and academic networks. The next phase involved field data collection through interviews and observations. Interviews were conducted either in person or online, depending on the circumstances and preferences of the participants. Once the data had been collected, it was transcribed, thematically analysed, and subject to provisional validation through member checking with a selection of participants. The analytical findings were then compiled into a critical academic narrative, which will serve as the basis for developing contextually relevant policy recommendations for restructuring digital competition

law in Indonesia, particularly in major urban centres such as Bandung.

Data Analysis

As digital platforms and artificial intelligence continue to develop within the global economic system, the city of Bandung, a major centre of creative and technological industries in Indonesia, introduces new dynamics in business competition practices. This study examines how Indonesia's antitrust law responds to the emerging challenges brought about by the dominance of digital platforms and the use of algorithms in the local market. The main focus is on how small and medium enterprises in Bandung interact with these platforms, how algorithmic control affects market access, and the extent to which existing policies and regulations are able to provide protection within a framework of fair competition.

Dependence of MSMEs on Digital Platforms

The phenomenon of dependence on digital platforms, identified through observations of twenty MSME actors in the city of Bandung, reflects a profound transformation in the local economic structure, which previously relied on physical markets and direct interactions. The findings reveal that 45 percent of respondents reported being highly dependent, 35 percent dependent, 10 percent neutral, and only 10 percent stated that they were minimally or not at all dependent. This indicates that digital platforms such as Tokopedia, Shopee, Gojek, and Bukalapak have become central pillars of distribution and marketing. The chart above provides a clear visual representation of the uneven levels of dependence. It can be understood from this that the majority of MSME actors today not only use these platforms as channels of distribution but also regard them as the sole means to sustain their businesses. This suggests that within the context of digitalisation, platforms have evolved from functioning merely as market intermediaries to becoming market authorities that govern the rhythm of distribution, competition, and economic relations. See **Figure 1** for a visual representation of the levels of dependence on digital platforms among MSMEs in Bandung.

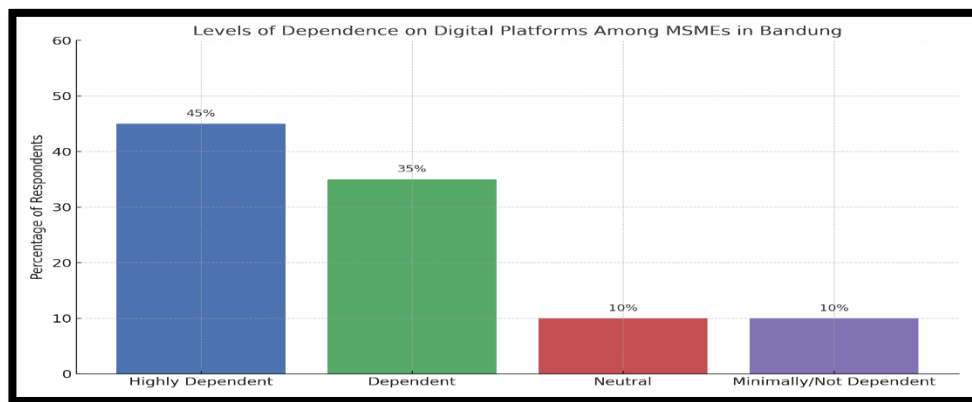


Figure 1. levels of dependence on digital platforms among MSMEs in Bandung

This growing dependence creates new power dynamics that were not previously encountered in traditional markets. MSME actors feel they are unable to reach a wide consumer base unless they comply with the algorithms and commercial policies dictated by the platforms. As a result, many business operators adopt a passive role in shaping their own strategies, as they perceive the platform systems to be deterministic and beyond negotiation. The logic of algorithmic operation,

which is often difficult to understand, coupled with frequently changing rules and the dominance of paid advertisements, increasingly restricts business space. This is especially true for micro and small-scale entrepreneurs who possess limited resources. These developments demonstrate that platforms serve not only as digital infrastructure but also as regulatory actors that shape the very structure of the market.

In our observations of the dashboards of micro, small, and medium-sized enterprise (MSME) seller accounts on e-commerce platforms, it was found that product visibility is highly dependent on algorithmic parameters such as shop ratings, frequency of paid promotions, and sales performance. For instance, one business owner reported that when they stopped running paid advertisements for a week, their flagship products immediately disappeared from the initial search results. This suggests that the algorithm not only determines product placement but also directly shapes the flow of transactions. In other words, market power within digital platforms has shifted from the seller-consumer relationship to the platform operators who control ranking systems and visibility mechanisms. In the context of antitrust law, this represents a form of structural influence that may lead to anti-competitive behaviour.

The high level of dependence that MSMEs have on digital platforms carries serious implications for the distribution of economic power and competitive fairness. Upon closer examination, this dependence is not merely the outcome of rational business choices to access broader markets. Rather, it is a consequence of systemic design that renders alternative market access routes increasingly irrelevant. In the vocabulary of digital political economy, this phenomenon is referred to as infrastructural entrapment, where market participants become locked into systems that appear neutral but are, in reality, governed by algorithmic logics shaped by global corporate entities. MSME actors are not only required to comply with promotional strategies and logistical systems, but are also subject to algorithmic evaluation mechanisms that are often opaque and authoritative. For example, performance scoring systems for sellers, the algorithms that determine product placement on main pages, and incentives linked to paid advertising all contribute, albeit indirectly, to the formation of new hierarchies within the digital marketplace.

Micro, Small, and Medium Enterprises (MSMEs) with greater capital to invest in paid promotions tend to enjoy higher visibility, while those lacking additional funds are often marginalised—even when offering high-quality products (Abushgair et al., 2025; Nishu et al., 2025). Consequently, the distribution of opportunities on digital platforms is no longer driven solely by product quality or customer satisfaction, but increasingly by the entrepreneur's ability to understand and respond effectively to algorithmic systems. When small business owners lack sufficient technological capacity or digital literacy, they are placed in a structurally subordinate position—a condition many scholars now describe as a new form of *digital subordination*. From an antitrust law perspective, this situation necessitates a redefinition of the concept of market dominance. Platforms no longer dominate through physical ownership or price control, but rather through control over digital access and visibility—a far more complex form of dominance that proves difficult to regulate within traditional legal frameworks.

The empirical realities observed in the Bandung context offer critical insights for policymakers, particularly the Indonesia Competition Commission (KPPU), the Ministry of Cooperatives and SMEs, and digital regulators such as the Ministry of Communication and Information Technology (Kominfo). The heavy reliance on digital platforms highlights the urgent need for a new antitrust policy framework—one that goes beyond prohibiting traditional cartel and

monopoly practices and instead addresses *algorithmic market behaviours* and *data-driven exclusionary practices*. One particularly necessary intervention involves the introduction of algorithmic transparency regulations, requiring platforms to disclose how products are ranked and how promotional or penal measures are applied to sellers. In addition, a periodic algorithmic audit should be conducted by an independent authority to ensure that systemic biases are not unfairly disadvantaging smaller enterprises.

This study also advocates for a participatory regulation approach, whereby MSME communities are actively engaged in the formulation of platform-related policies through mechanisms such as online deliberations, traders' forums, and consultative panels. This is essential, as MSME actors are key contributors to Indonesia's digital economy, and their voices should form the foundation of any regulatory framework. Moreover, the city of Bandung—often regarded as a national laboratory for the digital economy—holds significant potential to become a pioneer in piloting fair digital competition regulations. This can be achieved through collaboration among academics, regulators, business practitioners, and technology developers. If the dominant practices of digital platforms are allowed to continue unchecked, the digital ecosystem risks becoming a mere replication of traditional exploitative market structures—albeit now driven by algorithms and AI logic. It is therefore imperative to design antitrust policies that go beyond economic and legal considerations by also taking into account the social and cultural dimensions of MSMEs' digital dependency. Recognising these aspects is crucial for ensuring the long-term sustainability of local economies.

MSME Perspectives

To gain a deeper understanding of the experiences and perceptions of micro, small, and medium-sized enterprises (MSMEs) regarding the dominance and opacity of digital platform systems, in-depth interviews were conducted with 15 MSME actors operating in the city of Bandung. Participants were selected based on strategic criteria and diversity of business sectors, covering three key areas within Bandung's creative economy ecosystem: culinary (5 participants), fashion (6 participants), and handicrafts (4 participants). The selection followed a purposive sampling method, targeting those who had been actively using digital platforms for at least the past two years and who had direct experience engaging with algorithmic systems on e-commerce and on-demand service platforms such as Tokopedia, Shopee, Gojek, and GrabFood. This criterion was crucial to ensure that the insights gathered came from digitally active entrepreneurs with the reflective capacity to engage with the increasingly complex dynamics of the digital market.

The interviews were conducted both in person and online, with each session lasting between 45 and 90 minutes. The primary aim was to explore the forms of dependency experienced by entrepreneurs on digital platforms, as well as their experiences with the uncertainty and ambiguity of platform regulations, particularly in relation to algorithms, automatic penalties, promotional systems, and platform involvement in pricing and distribution strategies. Most respondents expressed similar concerns about the lack of transparency in platform systems and the direct consequences this had on the sustainability of their businesses. One interviewee, R, the owner of an online fashion enterprise, stated, "It feels like we're playing a game without ever knowing the rules. Suddenly, my product dropped in the search results even though I hadn't changed anything in my shop." This statement illustrates the significant influence that ranking or visibility systems managed by platforms have on consumer traffic, while also highlighting the absence of clarity in how such rankings are determined. Business owners are not provided with

sufficient information about how algorithms decide the positioning of their products in search results, which leads to frustration and a sense of helplessness in developing effective digital marketing strategies.

The interviews also highlighted issues related to automatic penalties, or digital fine systems, imposed by platforms. One culinary entrepreneur, who manages a cloud kitchen in the Cibaduyut area, shared their experience: *“I was penalised because the system assumed I had rejected an order, when in fact the app server had crashed. The fine was deducted from my earnings, and my account performance rating dropped immediately.”* Such incidents not only result in direct financial losses but also have systemic repercussions on account rankings, which in turn affect shop visibility and sales potential. According to the interviewees, there is no effective or timely appeal mechanism to contest these penalties. In several cases, business owners reported having to wait days for a response from the platform’s customer service, which was often scripted and unhelpful. This illustrates a clear power imbalance in the relationship between entrepreneurs and digital platforms, wherein the latter exercise full control over the system without sufficient accountability.

Another issue raised in the interviews was the pressure placed on sellers to participate in promotional programmes that are determined unilaterally by the platforms. A craftsman based in the Dago area explained, “Every month, we are invited to join discount campaigns offering thirty to fifty per cent off. If we refuse, our products immediately drop in search rankings the next day. It feels like an unwritten punishment.” According to the respondent, these large-scale discount campaigns, which are routinely organised by the platforms, are not genuinely optional. Rather, they represent a form of algorithmic economic coercion that not only reduces profit margins but also diminishes the value of local products that are grounded in craftsmanship and quality. For entrepreneurs who uphold the principle of fair pricing, meaning prices that are just and sustainable, such platform policies threaten the long-term viability of their businesses and the ethical economic models they seek to maintain.

To deepen the analysis from a legal and regulatory perspective, this study also involved interviews with two legal scholars specialising in issues of competition law and digital technology. One of them observed that the form of dominance exercised by digital platforms over micro, small, and medium enterprises (MSMEs) in Bandung represents a new manifestation of market power abuse, which is not yet fully addressed by the current framework of competition law in Indonesia. In their view, existing interpretations of market dominance remain overly narrow, focusing predominantly on market share or pricing practices deemed harmful. However, in the digital landscape, dominance is significantly more complex. It includes control over data, the ability to shape algorithmic processes, and the management of market access through closed systems that are difficult to scrutinise. The respondent also underlined the urgency of revising competition regulations, particularly by introducing new dimensions that encompass algorithmic discrimination, automatic penalties imposed without transparency, and unilateral intervention by platforms in the pricing policies of small business operators.

The findings from these interviews clearly indicate that the relationship between MSMEs and digital platforms cannot be described as a free market exchange in the classical economic sense. On the contrary, it more closely resembles a form of digital semi-feudalism, in which small business actors are compelled to comply with a system they neither control nor understand, and against which they are unable to organise collective resistance. When algorithms serve as the

primary determinant of business outcomes, while remaining opaque and inaccessible, the market no longer functions as a site of fair competition but rather becomes a space shaped by structural domination that escapes the reach of conventional legal tools. This study therefore argues that an effective digital antitrust approach for the Indonesian context must move beyond conventional measures such as market share or financial strength. It must be capable of recognising and addressing new forms of power that emerge through technology and the design of digital systems.

Structural Dominance of Platforms

In the context of Bandung, platform dominance is not merely economic in terms of market share, but also structural regarding control over market access. Business actors face challenges to compete on equal terms because their visibility rankings are influenced by complex technical variables exclusive to the platform, consistent with the gatekeeping power described in the literature. This algorithm-based model of competition creates an uneven playing field where small business owners struggle to position themselves effectively, frequently finding themselves in a subordinate role. The use of opaque algorithms breeds legal uncertainty for entrepreneurs, undermining the principle of procedural fairness enshrined in antitrust law and perpetuating systematic market exclusion (Meng, 2023). Concepts such as algorithmic collusion and discrimination underscore the need for legal frameworks that scrutinize dominant technologies rather than solely examining market outcomes. Platforms often utilize intricate scoring systems where the efficacy of paid advertisements becomes a crucial factor, creating barriers for small businesses unable to afford such services and consequently reinforcing the dominance of larger entities (Zhang et al., 2023).

Regulatory Gaps in the Digital Sector

An analysis of existing regulations, particularly Law Number 5 of 1999 and the provisions set by the Indonesian Competition Commission (KPPU), indicates that there are no specific articles addressing algorithmic control or access to data. This highlights a significant regulatory gap, as data functions as a core asset and strategic resource within the digital economy. Several countries have already begun to adopt principles such as data portability and algorithmic transparency, yet Indonesia remains behind in this area. The European Union, through the Digital Markets Act of 2022 and the Digital Services Act of 2022, has placed algorithmic transparency at the heart of its digital competition policy. In the United States, the Federal Trade Commission has introduced a platform neutrality approach intended to prevent the abuse of dominant positions by companies such as Amazon and Google. Indonesia must pay close attention to these developments. This study contends that legal reform on its own is not sufficient. There is also a pressing need for educational initiatives and the creation of an inclusive technological ecosystem. Micro, small and medium enterprises must be equipped with the necessary knowledge and skills to comprehend how platform systems operate. Local governments, such as the administration of Bandung, could collaborate with academic institutions, technology communities, and the private sector to establish competitive digital literacy centres.

Discussion

The findings of this research offer a comprehensive picture of the realities faced by micro, small, and medium enterprises (MSMEs) in Bandung in their interactions with digital platforms, whether as tools for distribution, marketing, or as core infrastructure within the broader digital economy. This discussion unpacks the key findings that emerged from the observations and

interviews, framing them within conceptual frameworks of competition law, digital power imbalances, and regulatory challenges in the context of the platform economy. Firstly, the quantitative observations of 20 MSME actors indicate that dependence on digital platforms is not merely a strategic business choice, but rather a structural and coercive relationship. When 80 per cent of respondents stated that they were either highly dependent or dependent on digital platforms, it becomes evident that these platforms are not simply alternative distribution channels. Instead, they have evolved into the primary gatekeepers of the digital economy. Market access is now mediated by digital systems that are not neutral. They are instead shaped algorithmically and governed by the logic of digital capitalism, which prioritises efficiency, performance, and the monetisation of data. As a result, MSMEs no longer compete in a free market, but in a digital space engineered by and for the interests of the platforms themselves.

In practice, this produces a new economic landscape marked by asymmetric dependence. Platforms possess authority not only as facilitators of transactions but also as informal regulators who establish the rules within their ecosystems. Through product ranking systems, automatic penalties, and control over visibility, platforms dictate who survives and who is marginalised. This power is not accompanied by adequate transparency requirements, which creates a form of digital dominance that is difficult to scrutinise. In such a context, MSMEs are compelled to comply in order to sustain their businesses. They have limited bargaining power, and this marks a significant transformation in the structure of the market.

Secondly, the findings from in-depth interviews with 15 MSME actors reinforce the evidence of power imbalances between the platforms and business operators. Several respondents explicitly expressed frustration regarding the lack of transparency in algorithm systems, automatic penalties, and the pressure to participate in discount campaigns. These three aspects indicate that the platform exercises unilateral control over the digital marketplace. In this context, there is an extreme asymmetry of information, whereby business actors are unaware of how the system determines product visibility rankings, when penalties are imposed, or how participation criteria for promotions are defined. This situation not only creates uncertainty but also fosters a collective sense of powerlessness, which influences long-term business strategies.

MSME operators in the culinary, fashion, and handicraft sectors interviewed for this study revealed that algorithm systems often change without prior notice, and such changes have an immediate impact on product visibility and sales volume. For instance, the owner of an online fashion store reported a drastic drop in the number of visitors to their digital shop solely due to not participating in the platform's promotional campaign. This reflects a form of algorithmic intervention that implicitly penalises business actors who do not conform to the platform's sales strategy. On the other hand, system-imposed penalties are also frequently applied unilaterally, such as income deductions due to alleged order refusals—even when the underlying cause is a malfunction in the application system.

Thirdly, from the perspective of competition law, these findings suggest the presence of market dominance that is not captured by the current regulatory framework. The dominance exercised by platforms does not take the conventional form of market share control or predatory pricing, but rather manifests through control over digital infrastructure, data, and algorithms. This is supported by interviews with two digital law experts, who noted that Indonesia's antitrust regulations are still rooted in traditional economic paradigms, and therefore have yet to adequately respond to the complexities of the digital economy. It is thus necessary to redefine

the concept of market dominance in the digital context, including recognising algorithmic power as an instrument of economic control that must be subject to oversight.

The legal experts interviewed in this study highlighted that forms of market power abuse in the digital sphere require new legal indicators. Concepts such as algorithmic bias, data hoarding, and algorithmic foreclosure have become indicators of dominance that cannot be reduced merely to market share. Within digital platforms, power may arise through the design of system architectures that are exclusive and not open to public scrutiny. This situation presents a major challenge for competition authorities, as current legal instruments are not equipped with analytical tools capable of detecting or proving technology-based dominance effectively.

Fourth, from the perspective of the digital political economy, the relationship between MSMEs and platforms can be seen as a form of modern semi-feudal relationship, where small business actors become dependent on digital infrastructure controlled by large corporations. Although it may appear to be a voluntary business arrangement, in reality MSMEs have no rational alternative other than to comply with the platform's rules. This marks a shift from the principle of free competition towards structural dominance rooted in technology. In this context, platform capitalism not only governs the circulation of goods and services, but also shapes a new socio-economic structure in which power lies in system design rather than in financial capital alone.

The idea of platform dependency reflects the complete reliance of business actors on platforms as the gatekeepers of market access, the designers of algorithms, and the controllers of data flow. MSMEs lack both the technical expertise and legal means to intervene in these systems, and this information imbalance creates an unequal position. Even in promotional activities, MSMEs have limited autonomy because the algorithmic ranking system determines who appears on the front page and who remains hidden. As a result, competition does not take place on a level playing field and instead intensifies inequality among business operators.

Fifth, the urgency of digital legal reform is a key issue that emerged from the discussion. Existing regulations such as Law Number 5 of 1999 are no longer sufficient to respond to the challenges of the digital market. A more adaptive and responsive legal approach is needed, one that addresses issues such as algorithmic transparency, system audits, fairness in data distribution, and the protection of small business operators. The state needs to establish an independent institution responsible for overseeing platform practices, including obligations for platforms to provide appeal mechanisms, penalty reporting, and transparency in recommendation systems. Without such regulation, the relationship between MSMEs and platforms will remain unequal, and the digital marketplace will never become genuinely competitive or fair.

Furthermore, it is necessary to initiate a new legal framework known as Digital Competition Law, which does not only regulate market structures but also the digital behaviour of large corporations. Within this context, it is important to formulate norms concerning algorithmic transparency, the obligation for independent audits of product ranking systems, and the right of business actors to obtain clear explanations regarding system-imposed penalties and other automated decisions. Such measures would restore the principle of accountability in the digital economy, which has often been obscured by technical jargon and system complexity.

Sixth, from a methodological perspective, this study highlights the importance of an interdisciplinary approach in analysing the dynamics of the digital economy. A legal approach alone is insufficient, as is a purely conventional economic approach. There is a need for

integration between legal studies, digital economics, and the sociology of technology in order to grasp the nature of power, dominance, and inequality within platform ecosystems. In doing so, policy recommendations can be grounded not only in legal rationality but also in the empirical experiences of business actors and the social realities they encounter. This research opens up a space for critical reflection on the dominant narrative of digital transformation, which is often assumed to bring about evenly distributed economic progress. In reality, without inclusive policy design and strong regulation of platform dominance, digitalisation may instead widen the gap between small enterprises and large corporations. In this regard, the government must uphold the principle of digital justice, ensuring that all business actors, regardless of their size, have equal rights and opportunities to access the digital market.

Finally, this discussion leads us to a fundamental conclusion: the digitalisation of the economy is not a neutral process, nor does it automatically bring justice or efficiency. Without proper regulatory intervention and active participation from stakeholders, digitalisation may in fact deepen inequality and reinforce the dominance of a small number of actors over an economic ecosystem that ought to be open and inclusive. This study provides preliminary evidence that the grand narrative of digital transformation must be critically reassessed, placing the interests of small business actors and the principle of justice at the centre of future digital development.

Limitations

Although this study offers a significant contribution to understanding the unequal relationship between MSMEs and digital platforms within the context of competition law in the digital economy era, several limitations must be acknowledged. First, the scope of this research is confined to the city of Bandung and specific MSME sectors such as culinary, fashion, and handicrafts. As a result, generalising the findings to other regions or sectors must be approached with caution. The dynamics of MSME interaction with digital platforms in other areas, such as cities with more limited digital infrastructure or business sectors based on services and agriculture, may exhibit different patterns. Furthermore, due to time and resource constraints, only fifteen business actors were interviewed, whereas a broader exploration might have revealed more complex variations in experience and adaptive strategies.

Second, methodological limitations also emerged in the effort to directly access and measure the impact of platform algorithms on MSME performance. Since platform algorithms are proprietary and cannot be publicly audited, the analysis is interpretive in nature, relying on narratives from MSME actors and expert perspectives. This presents a challenge in establishing causal links between platform system policies and the specific harms experienced by business actors. Consequently, this research is more descriptive and exploratory rather than confirmatory, and it opens opportunities for further studies using collaborative approaches involving academics, regulators, and platform providers to strengthen empirical evidence and to develop more accountable models for algorithmic auditing.

Conclusion and Recommendations

This study concludes that the relationship between MSMEs in the city of Bandung and digital platforms demonstrates a form of structural dependency that creates an imbalance of economic power within the digital ecosystem. Digital platforms do not merely serve as tools for distribution and marketing, but also act as market regulators with full control over algorithms, product visibility, and penalty systems. This imbalance affects not only economic aspects but also fosters

a power relationship that disadvantages small business actors, ultimately undermining the principles of fair competition. This reality suggests that the conventional antitrust legal paradigm is no longer adequate for understanding market dominance in the digital era.

Based on these findings, it is crucial for the government and competition authorities to undertake regulatory reforms that are responsive to the dynamics of the digital economy. The revision of Law No. 5 of 1999 must incorporate new dimensions of digital power, such as algorithmic control, visibility discrimination, and platform intervention in pricing and promotional strategies. Furthermore, a new legal framework is needed that emphasises system transparency, fair access to the digital market, and protective mechanisms for MSMEs, which form the backbone of the local economy. These efforts must be accompanied by strengthening the capacity of regulatory bodies to understand and independently audit digital technologies.

On the other hand, MSMEs must also be supported in enhancing their digital literacy, both in technical and legal aspects, so that they can better understand the risks and rights associated with platform use. Collaboration between local governments, universities, and civil society organisations is essential in building a digital ecosystem that is more equitable and inclusive. This study serves as a reminder that economic digitalisation is not a neutral process, but rather an arena of power contestation that requires ethical, regulatory, and structural interventions in order to produce genuine economic justice. Further research is recommended to expand the scope to other sectors and regions, and to explore the potential for collective resistance among small business actors against platform dominance in greater depth.

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References

- Abubakar, L., & Handayani, T. (2022). Penguatan Regulasi: Upaya Percepatan Transformasi Digital Perbankan Di Era Ekonomi Digital. *Masalah-Masalah Hukum*, 51(3), 259–270. <https://doi.org/10.14710/mmh.51.3.2022.259-270>
- Abushgair, K., Abueed, O., Mistarihi, M. Z., & Abueed, S. (2025). From Ergonomics to Embodiment : Redesigning Welding Workstations for Posthuman Learning Environments. *Journal of Posthumanism*, 5(12), 828–849. <https://doi.org/https://doi.org/10.63332/joph.v5i5.1608>
- Alfian, F. B., & Murniati, R. (2023). Implementasi Bukti Tidak Langsung Dalam Penyelesaian Perkara Hukum Persaingan Usaha. *Jurnal Persaingan Usaha*, 3(2), 106–119. <https://doi.org/10.55869/kppu.v3i2.94>
- Asmah, A., & Rompegading, M. (2024). A New Mode of MSME Empowerment Creating a Strong Indonesian Economy (Perspective on Business Competition Law). *Journal of Progressive Law and Legal Studies*, 2(02), 133–141. <https://doi.org/10.59653/jplls.v2i02.710>
- Astuti, A. K., Wibowo, S., & Juwono, E. (2023). The Influence of Digital Technology Adoption

- by Small and Medium Enterprises and Online Consumer Behavior on the Success of E-Commerce Platforms in Bandung City. *West Science Journal Economic and Entrepreneurship*, 1(04), 153–159. <https://doi.org/10.58812/wsjee.v1i04.392>
- Baker, J. B. (2021). Protecting and Fostering Online Platform Competition: The Role of Antitrust Law. *Journal of Competition Law & Economics*, 17(2), 493–501. <https://doi.org/10.1093/joclec/nhaa032>
- Cahill, D., & Wang, J. (2023). Convergence in Approaches Taken by Both East & West to Tackle Digital Platforms Anti-Competitive Practices. *Academic Journal of Nawroz University*. <https://doi.org/10.25007/ajnu.v1n1a1941>
- Cahyono, N. F., 'Uyun, K., & Mukaromah, S. (2023). Etika Penggunaan Kecerdasan Buatan Pada Teknologi Informasi. *Sitasi*, 3(1), 482–491. <https://doi.org/10.33005/sitasi.v3i1.334>
- Fadli, M. R. (2021). Memahami Desain Metode Penelitian Kualitatif. *Humanika*, 21(1), 33–54. <https://doi.org/10.21831/hum.v21i1.38075>
- Fatimah, S., & Ludfi, L. (2024). Navigasi Hukum Di Era Fintech Syariah: Tinjauan Literatur Dan Regulasi. *Idealita*, 4(1), 41–52. <https://doi.org/10.62525/idealita.2024.v4.i1.41-52>
- Fitriiono, R. A., Supanto, Budyatmaja, W., Ismunarno, & Parwitasari, T. A. (2023). Formulation of Customary Criminal Law From the Perspective of Judges in Legal Findings. *Journal of Law and Sustainable Development*, 11(11), e759. <https://doi.org/10.55908/sdgs.v11i11.759>
- Gu, Q. (2023). The Choice of Anti-Unfair Competition Law and Anti-Monopoly Law Regarding Platform Economy: A Study of the Digital Platforms in China. *Creative Economy*, 7(1), 18–24. <https://doi.org/10.47297/wspcewsp2516-251903.20230701>
- Guo, W. (2023). *Digital Economy Platform Construction and Operation Driven by Big Data*. 517–523. https://doi.org/10.2991/978-94-6463-222-4_56
- Hantao, W. (2024). Regulation of the Platform: Maintaining the Balance Between Competition and Innovation. *International Journal of Frontiers in Sociology*, 6(2). <https://doi.org/10.25236/ijfs.2024.060211>
- Haqqi, H. (2023). The Government's Policy in Encouraging the Global Competitiveness of Indonesian MSMEs Through the Digital Ecosystem. *Journal of Economics Management and Trade*, 29(8), 66–76. <https://doi.org/10.9734/jemt/2023/v29i81115>
- Hartono, J., Rosyadi, J., & Nugraha, X. (2021). Analisis Penggunaan Algoritma Harga Sebagai Bentuk Perjanjian Penetapan Harga Di Indonesia. *Jurnal Hukum Bisnis Bonum Commune*, 37–49. <https://doi.org/10.30996/jhbhc.v4i1.4499>
- Judijanto, L., Wahyudi, R., & Surya, R. (2024). Analysis of the Effect of Digitalization on the Profitability of Telecommunication Companies in Indonesia. *West Science Business and Management*, 2(01), 37–45. <https://doi.org/10.58812/wsbm.v2i01.718>
- Kartikawati, D. R. (2024). Digital Transformation and Business Competition Challenges Comparative Analysis of Antitrust Law. *Journal of Progressive Law and Legal Studies*, 2(03), 163–170. <https://doi.org/10.59653/jplls.v2i03.877>
- Khoerunsiya, Z. P., Yustiana, T., Sofyana, A., & Febrianto, A. S. (2023). The Effect of Digital Transformation on the Business Strategy of SMEs in the City of Bandung. *Majalah Bisnis & Iptek*, 16(1), 63–71. <https://doi.org/10.55208/dafsxq14>
- Khuan, H., Maulana, Y. S., Triwijayati, A., Rengganawati, H., & Arifin, Z. (2023). Adaptation and Innovation Strategies in Facing Business Challenges: A Case Study in the Digital Industry. *The Es Economics and Entrepreneurship*, 2(01), 36–42. <https://doi.org/10.58812/esee.v2i01.126>
- Khumairok, M. (2023). Regulasi Hukum Perbankan Dalam Menghadapi Tren Inovasi Fintech

- Dan Keberhasilan Industri Perbankan Di Era Society 5.0. *Jurnal Multidisiplin Indonesia*, 2(7), 1719–1731. <https://doi.org/10.58344/jmi.v2i7.335>
- Kölbel, T., & Kunz, D. (2020). *Mechanisms of Intermediary Platforms*. <https://doi.org/10.48550/arxiv.2005.02111>
- Kunder, S. S., Ronald, B., & Rajesh, S. (2022). Consumer Protection Under Competition Law Highlighting Relevant Market Issues Under Digital Market. *International Journal of Health Sciences*, 11752–11762. <https://doi.org/10.53730/ijhs.v6ns5.11054>
- Lemos, T. de M. e., & Resende, G. (2023). *Nascent Competition and Killer Acquisitions in Digital Markets: A Decade of Acquisitions by Big Tech*. <https://doi.org/10.21203/rs.3.rs-3793931/v1>
- Lianos, I. (2022). Value Extraction and Institutions in Digital Capitalism: Towards a Law and Political Economy Synthesis for Competition Law. *European Law Open*, 1(4), 852–890. <https://doi.org/10.1017/elo.2023.2>
- Lv, H. (2023). E-Commerce Consumer Behavior Analysis Based on Big Data. *Journal of Computational Methods in Sciences and Engineering*, 23(2), 651–661. <https://doi.org/10.3233/jcm-226628>
- Marvi, R., Foroudi, P., & Cuomo, M. T. (2024). Past, Present and Future of AI in Marketing and Knowledge Management. *Journal of Knowledge Management*, 29(11), 1–31. <https://doi.org/10.1108/jkm-07-2023-0634>
- Meng, Z. (2023). A Review of the Phenomenon of Algorithm-facilitated Systematic Price Discrimination. *Advances in Economics, Management and Political Sciences*, 48(1), 296–302. <https://doi.org/10.54254/2754-1169/48/20230466>
- Nishu, A., Tat, H. H., Kumarusamy, R., & Hafiz, N. (2025). Entrepreneurial Marketing and SME Performance : The Mediating Role of Process and Product Innovation in Bangladesh. *Journal of Posthumanism*, 5(5), 2163–2186. <https://doi.org/https://doi.org/10.63332/joph.v5i5.1608>
- Nuraziza, S., & Sudirman, W. F. R. (2024). Keseimbangan Antara Inovasi Teknologi Dan Kepatuhan Regulasi: Tantangan Dalam Mengintegrasikan Artificial Intellegence (AI) Dalam Manajemen Keuangan. *Money*, 2(1), 47–57. <https://doi.org/10.31004/money.v2i1.21438>
- Ohlhausen, M. K., & Rossen, B. (2022). Privacy and Competition: Discord or Harmony? *The Antitrust Bulletin*, 67(4), 552–561. <https://doi.org/10.1177/0003603x221126140>
- Pakula, O. (2021). The Streaming Wars+: An Analysis of Anticompetitive Business Practices in Streaming Business. *Ucla Entertainment Law Review*, 28(1). <https://doi.org/10.5070/lr828153859>
- Pfeiffer, R. A. C. (2019). Digital Economy, Big Data and Competition Law. *Market and Competition Law Review*, 3(1), 53–89. <https://doi.org/10.7559/mclawreview.2019.315>
- Posumah, N. H., & Moridu, I. (2023). Revitalisasi Industri Keuangan: Tinjauan Atas Perkembangan Terkini Fintech Di Jawa Barat. *Jurnal Akuntansi Dan Keuangan West Science*, 2(03), 195–204. <https://doi.org/10.58812/jakws.v2i03.656>
- Ramli, T. S., Ramli, A. M., Permata, R. R., Ramadayanti, E., & Fauzi, R. A. (2020). Aspek Hukum Platform E-Commerce dalam Era Transformasi Digital. *Jurnal Studi Komunikasi Dan Media*, 24(2), 119. <https://doi.org/10.31445/jskm.2020.3295>
- Reuschl, A. J., Tiberius, V., Filser, M., & Qiu, Y. (2021). Value Configurations in Sharing Economy Business Models. *Review of Managerial Science*, 16(1), 89–112. <https://doi.org/10.1007/s11846-020-00433-w>
- Riyadi, R., & Larasaty, P. (2021). Ketimpangan Ketimpangan Akses Terhadap Teknologi Informasi Dengan Pendekatan Human Opportunity Index (Hoi). *Seminar Nasional Official Statistics*, 2020(1), 560–570. <https://doi.org/10.34123/semnasoffstat.v2020i1.419>

- Rusmanto, W., & Permatasari, A. (2023). *Building a Digital Bureaucracy Through the Implementation of Collaborative Governance in the Regional Government of Bandung City*. 544–556. https://doi.org/10.2991/978-2-38476-104-3_52
- Sheth, J. N., Jain, V., Roy, G., & Chakraborty, A. (2022). AI-driven Banking Services: The Next Frontier for a Personalised Experience in the Emerging Market. *The International Journal of Bank Marketing*, 40(6), 1248–1271. <https://doi.org/10.1108/ijbm-09-2021-0449>
- Stefanus. (2023). Implikasi Legal Market Power Assessment Dalam Big Data Pada Era Ekonomi Digital. *Jurnal Persaingan Usaha*, 3(1), 65–74. <https://doi.org/10.55869/kppu.v3i1.105>
- Sun, S., Dong, S., Wu, Q., & Tian, X. (2023). How to Survive in the Shadow of Sharing Economy Giants: Business Model Innovation for Small and Medium-Sized Platforms. *Sage Open*, 13(3). <https://doi.org/10.1177/21582440231196800>
- Suryadarma, F. R., & Faqih, M. (2024). Regulasi Fintech Di Indonesia: Mendorong Inovasi Dan Melindungi Konsumen Dalam Ekosistem Digital. *Jurnal Ilmiah Mahasiswa Perbankan Syariah (Jimpa)*, 4(1), 117–126. <https://doi.org/10.36908/jimpa.v4i1.320>
- Susanti, K. H. (2024). Tantangan Dan Peluang Perbankan Syariah Di Era Digital Dalam Pertumbuhan Berkelanjutan. *Persya*, 2(1), 13–19. <https://doi.org/10.62070/persya.v2i1.53>
- Wang, Y. (2024). The Dilemma and Practice of Anti-Monopoly Law Regulation in the Digital Economy Era. *Lecture Notes in Education Psychology and Public Media*, 53(1), 65–70. <https://doi.org/10.54254/2753-7048/53/20240038>
- Wu, Y. (2023). Is Data-Monopoly Banned by Antitrust Law? Antitrust and Digital Economy in the US: Ideas, Institutions, Decisions and Impacts, 1998-2023. *Studies in Social Science & Humanities*, 2(3), 37–49. <https://doi.org/10.56397/sssh.2023.03.06>
- Yuspin, W., & Wicaksono, A. (2023). Telaah Yuridis Perlindungan Konsumen Dalam Kegiatan Investasi Aset Kripto Di Indonesia. *Dih Jurnal Ilmu Hukum*, 85–98. <https://doi.org/10.30996/dih.v19i1.7886>
- Yusuf, D. (2024). Antitrust Laws and the Future of Market Competition. *Journal of Modern Law and Policy*, 4(3), 1–13. <https://doi.org/10.47941/jmlp.2163>
- Zhang, J., van Gorp, D., & Kievit, H. (2023). Digital technology and national entrepreneurship: An ecosystem perspective. *Journal of Technology Transfer*, 48(3), 1077–1105. <https://doi.org/10.1007/s10961-022-09934-0>