REDEFINING DOMINANCE: THEORIES OF HARM AND ANTITRUST ENFORCEMENT IN DIGITAL PLATFORM MARKETS

Redefinindo Dominância: Teorias de Dano e a Aplicação do Direito Antitruste em Mercados de Plataformas Digitais

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Abstract: This article examines the role of dominant position and market power definitions in shaping effective theories of harm for digital markets. Drawing from the GS/ML v. Apple case in Brazil, it explores how the Administrative Council for Economic Defense (CADE) developed a qualitative and evidence-based approach to assess abuse of dominance in app distribution, payment systems, and digital content within the iOS ecosystem. The article then analyzes the limitations of traditional theories of harm and the challenges in operationalizing emerging ones - such as those based on data, innovation, ecosystems, and privacy. Finally, it argues that the control of anticompetitive conduct in digital platforms requires a structural shift in antitrust analysis, prioritizing multi-sided dynamics, network effects, and functional overlaps over conventional price and market share assessments.

Keywords: Antitrust; digital markets; anticompetitive conducts.

Resumo: Este artigo examina o papel das definições de posição dominante e poder de mercado na construção de teorias de dano eficazes para mercados digitais. A partir do caso GS/ML vs. Apple no Brasil, o texto explora como o Conselho Administrativo de Defesa Econômica (CADE) desenvolveu uma abordagem qualitativa e baseada em evidências para avaliar abuso de dominância na distribuição de aplicativos, nos sistemas de pagamento e no conteúdo digital dentro do ecossistema iOS. O artigo também analisa as limitações das teorias tradicionais de dano e os desafios de operacionalizar teorias emergentes — como aquelas baseadas em dados, inovação, ecossistemas e privacidade. Por fim, argumenta que o controle de condutas anticoncorrenciais em plataformas digitais exige uma mudança estrutural na

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análise antitruste, priorizando dinâmicas multilateralidades, efeitos de rede e sobreposições funcionais em detrimento das avaliações convencionais baseadas em preço e participação de mercado.

Palavras-chave: Antitruste; mercados digitais; condutas anticoncorrenciais.

1. Introduction

This article aims to investigate how defining dominant position and market power influences the choice and application of theories of harm in digital markets. By both legal-economic reasoning and enforcement limitations, the article seeks to reflect on more effective tools for assessing and remedying anticompetitive conduct in digital ecosystems. It proposes that a modern antitrust framework must evolve in parallel with the digital economy, integrating new parameters such as ecosystem effects, data control, and behavioural biases to ensure contestability and innovation.

Chapter 2 examines the Brazilian antitrust authority's investigation into Apple's alleged anticompetitive conduct following a complaint filed by Mercado Livre. The General Superintendence (GS) of Cade concluded that Apple holds a monopoly in the market for iOS and abuses this position in adjacent markets, and digital goods/services distribution. The investigation found substantial evidence of artificial barriers to entry, tying practices, and anti-steering rules, leading to GS's prosecution of Apple. The case illustrates the strategic use of legal-economic analysis and the importance of moving beyond traditional indicators like market share when evaluating dominance in digital markets.

In Chapter 3, the article discusses how theories of harm translate into anticompetitive conduct control in practice. The chapter highlights the inadequacy of traditional tools in dynamic and multi-sided digital environments, arguing for adaptations in relevant market definition, market power assessment, and remedy design. Using the *GS/ML v. Apple* case as a blue-

print, the chapter illustrates how Cade moved beyond quantitative thresholds to adopt a qualitative, evidence-based analysis. It emphasizes the importance of identifying specific business behaviours and integrating these into functional and structural assessments capable of withstanding judicial scrutiny.

2. GS/ML v. Apple in Brazil

On January 12, 2023, the Brazilian Antitrust Authority (CADE) opened an Administrative Inquiry to investigate violations of the economic order (AI), after Ebazar.com.br Ltda. And Mercado Pago Instituição de Pagamento Ltda (jointly, only "Mercado Livre", "ML" or "Plaintiff") filed a complaint against Apple Inc. and Apple Computer Brasil Ltda (later also "Apple Services Latam LLC", and, altogether, "Apple" or "Defendant"). The issue was whether Apple (iOS) centres were abusing their dominant position in the app's distribution market on iOS devices in Brazil *(*Administrative Proceedings […], 2022*)*.

i) The Complaint and Apple's defense line

The Plaintiffs reported two anticompetitive practices: prohibition on the distribution and/or commercialization of third-party digital services, and obligation to exclusively use Apple's own payment processing system (IAP).

ML stated that Apple, through rules contained in its App Developer Program License Agreement (DPLA) and App Store Review Guidelines, prohibits app developers from offering digital goods or services that will be used outside their own application in the iOS system. Based on this, they claim that this restriction has the following effects: (i) does not apply to Apple itself; (ii) prevents the emergence of other distributors of digital goods and services on iOS devices; and (iii) restricts the growth of developers of digital goods and services, for whom large-scale distribution of content is essential. Mercado Livre also added that Apple also prohibits, through anti-steering rules, the inclusion of buttons, external links, or other calls to action in apps that direct users to purchase mechanisms outside of Apple's In-App Purchase (IAP) system, or even from informing users about other purchasing options within the apps.

The Plaintiff also argued that Apple requires developers who sell digital goods or services within their iOS apps to exclusively use Apple's payment processing system. Under these circumstances, this obligation, combined with the ban on redirecting users to websites where such rules do not apply, constitutes tying (forced bundling). Moreover, Mercado Livre also argues that this is considered discriminatory (as it does not apply to physical goods), unreasonably raises costs for developers (due to Apple's "artificially high" commissions), gives Apple access to competitive sensitive information about the underlying transactions, and disintermediates the relationship between developers and their customers.

Mercado Livre also highlighted the existence of similar complaints in other jurisdictions (including the European Union, United Kingdom, Netherlands, Germany, Australia, South Korea, Japan, India, and Indonesia), which were considered by Cade's General Superintendence (GS) in its analysis.

Apple's defense line, though, argued that the Plaintiff filed a private dispute and that it did not hold a dominant position in Brazil, claiming that the iPhone accounted for less than 10% of all smartphones sold in Brazil (although this figure is accessible to the Defendant as lower than 10% in 2021). Apple stated that it has maintained the same business model since 2008, that its policies are intended to protect user privacy and security, and that developers are free to use multiple channels. The Defendant also claimed that its practices aim to prevent "*free-riding*".

ii) GS Investigation

The proceedings before Cade progressed from a Preparatory Procedure (PP) to an Administrative Proceeding (AP). Mercado Livre's complaint led Cade to start the PP on December 6, 2022. After the GS's order understanding that this PP's subject fell within the jurisdiction of the Brazilian Competition of Defense System (BCDS), the Authority opened an Administrative Inquiry (AI), on January 12, 2023. During the inquiry, information was collected from various developers and smartphone manufacturers. After more than one year producing evidence, GS filed an AP against

the Defendant, on November 25, 2024, for the purpose of imposing sanctions, accompanied by the issuance of a Preventive Measure[2]. The GS concluded that there was sufficient evidence of violations of competition law, materializing in the form of artificial barriers to entry and competitor development, as well as tying practices.

In the end, the GS's ordered, on June 30, 2025, to convict the Defendants, for the anticompetitive practices illustrated in items IIII, IV, VIII and XVIII of §3º of art. 36, as well as items I, II and IV of the *caput* of the same article of Law n. 12.529/2011, to fine Apple and to confirm the obligations imposed in the preventive measure previously determined as well as impose remedies aiming to resolve all the competition issues related to Apple's misconduct.

The Authority realized that Mercado Livre's complaint is supported by a prior complaint submitted to Cade through the "Clique Denúncia" platform (Case No. 08700.000271/2022-01), which accused Apple of adopting abusive and monopolistic practices by dictating how products and services must be formatted, determining which features and functionalities are permitted, unilaterally deciding which apps are allowed in the App Store, and charging annual fees. This prior complaint was attached to the case records to be jointly assessed.

Under the GS investigation, Cade's prosecutors had to analyse, produce all relevant evidence and submit an order that answered whether Apple (iOS) centres prohibited the distribution and/or commercialization of third-party digital services; and obligated potential competitors/consumers to exclusively use Apple's own payment processing system. Cade's prosecution should also answer if these practices resulted in an abuse of Apple's dominant position in the app's distribution market on iOS devices in Brazil.

The GS's investigation concluded that apple holds a monopoly in the national market for the non-licensable iOS mobile operating system and leverages this position in related markets. They also added that Apple's policies regarding the iOS ecosystem and the App Store amount to violations

[2] Later, this preventive measure was under the scrutiny of the judicial branch (Writ of mandamus n. 1097967-08.2024.4.01.3400), as well as Cade's Tribunal – under the Voluntary Appeal n. 08700.009932/2024-18 (*Apple v. ML/GS*). These proceedings are not subject of this article since the main goal here is trying to understand the applicability of multiple theories of harm to discipline bigness.

of Brazil's competition laws. These findings result from an in-depth analysis of Apple's conduct under the "rule of reason," balancing the company's claimed benefits against its anti-competitive effects.

When analysing Apple's dominant position, GS found that Apple holds a monopoly in the national market for the non-licensable mobile operating system iOS, as iOS is proprietary and exclusively compatible with Apple devices. No other operating system can be installed on iPhones. Competition from Android, as argued by Apple, was deemed indirect and insufficient to constrain Apple's market power in iOS. This is reinforced by the significant price gap between iOS and Android devices (iPhones are over three times more expensive, on average), high switching costs for users (monetary and non-monetary, such as loss of compatibility and digital content), and the lock-in effect (brand loyalty and low multi-homing across systems). For developers, GS understood that iOS and Android are not direct substitutes, given different programming languages, development costs, and user bases. iOS users are typically less price-sensitive and more likely to make in-app purchases. Developers incur additional operating costs on both platforms. Finally, GS concluded that Apple leverages its dominant position in iOS to gain advantages in related markets: app distribution, payment processing systems (IAP), and distribution of digital goods and services within the iOS ecosystem.

Cade's conclusion of the Defendant's dominant position was divided between the original market and the target markets of the conduct.

Regarding the Original Market, non-licensable mobile operating system (iOS), GS concluded that Apple is a monopolist in the national market for the non-licensable mobile operating system iOS. This conclusion is based on several perspectives: Mobile Device Manufacturers (OEMS), app developers, and operating system users.

To broaden GS's reasoning on the multiple factors related to the Original Market, first, it is relevant to understand that, under the perspective of OEMs, non-licensable systems (like iOS) are not substitutes for licensable ones (like Android), since iOS is not available for licensing by other OEMs. Historically, iOS has only been available on Apple's iPhones, whereas Android is used by various manufacturers such as Samsung and Huawei. It is not possible to install alternative operating systems on Apple devices, nor to install iOS on non-Apple devices.

From the perspective of app developers, there are distinct native programming languages for iOS (Swift) and Android (Java and Kotlin), which create a barrier to substitution. While there are tools for "simultaneous development" or migration using hybrid languages, there are still technical and strategic differences that make migration complex. Developers must create separate versions of their apps for iOS and Android to reach both user bases, which are distinct and complementary. The need to absorb additional costs for broader reach shows that iOS and Android are not substitutable from the developer's perspective. A 5 - 10% cost increase would not cause developers to drop support for either platform.

From the perspective of operating system users, their choice of operating system is tied to the device they buy, as iOS hardware and software cannot be purchased separately. iOS devices are generally launched in Brazil at prices significantly higher than most Android devices. In 2022, the average price of iOS devices was BRL 9,970 compared to BRL 3,238 for Android. There are considerable switching costs, both monetary (buying a new device) and non-monetary (loss of ecosystem compatibility, digital content, and learning curve). Multi-homing (using both systems) is uncommon due to high costs and the preference for ecosystem compatibility - reinforcing the lock-in effect. This effect has also been acknowledged by authorities such as the UK's CMA (United Kingdom, 2021) and Japan's JFTC (Japan, 2021). iOS users tend to be less price-sensitive and more likely to make in-app purchases. Losing access to them could result in disproportionately higher revenue losses compared to the number of users lost - indicating Apple's market power.

These different factors led GS to conclude that the competitive constraints between Android and iOS are indirect and insufficient to discipline potential abuses in the mobile operating systems market.

Later, GS had to deepen their reasoning on the necessary legal test to evaluate the Defendant's conduct in the targeted markets, such as app distribution, IAP systems, and digital goods/services on iOS. Their conclusion was that Apple holds a dominant position in the target markets of the conduct, because the closed and vertically integrated iOS ecosystem allows Apple to leverage its monopolistic position in the operating system to control related markets. This understanding is based on three business models

characteristics of iOS: the app distribution market, In-App Purchase (IAP) payment system market, and digital goods and services distribution market.

To further develop GS's argument on the diverse factors involved in the targeted markets, first, the App Store is the only store available for downloading native apps on iOS, and Apple prohibits sideloading in Brazil. Apple is therefore a monopolist in iOS app distribution. Foreign authorities, such as the European Commission, have similarly concluded that Apple has created "insurmountable barriers" to third-party app stores or direct distribution (European Union, [*s.d.*]).

The Defendant mandates use of its own IAP system for developers selling digital goods or paid apps. GS even distinguishes transaction processing services from app distribution services. While Apple claims IAP is an integral part of the App Store, GS sees this as a business choice rather than a technical necessity, especially since other processors are allowed for physical goods and in jurisdictions like the EU (under the DMA). Then, GS understands that mandatory use of IAP, combined with anti-steering rules (which prohibit informing users of alternative payment methods within the app), restricts competition and user/developer choice. GS's final analysis even holds that there is evidence that Apple suppressed demand for alternative IAP systems by blocking apps using external or self-managed payment methods.

GS goes on to define the relevant market as the distribution of digital goods and services on the iOS operating system. The investigation revealed that web app distribution is significantly inferior to native apps in terms of features and user experience, limiting its substitutability. Therefore, Apple imposes functional restrictions on web apps via mandatory use of its WebKit engine, limiting performance. Apple itself acknowledges that in-app purchase mechanisms increase the likelihood of user purchases. Even with exceptions like the Reader Rule and Multiplatform Rule, Apple's anti-steering policies prevent developers from informing users of lower prices or other purchase methods inside the app, weakening the effectiveness of alternative channels.

In the end, GS had strong evidence setting to conclude that other distribution channels (browsers, social media, email marketing, other operating systems) are not effective substitutes for in-app distribution on iOS.

The determination that Apple holds a dominant (and in some cases monopolistic) position in its iOS ecosystem and related markets forms the basis for the charge of abuse of dominance – as abovementioned – was a result of consecutive legal-economic tests. The Defendant's behaviours subject to GS's analysis (such as prohibiting alternative distribution mechanisms, mandating use of IAP, and enforcing anti-steering rules) are viewed by the Authority as the creation of artificial barriers to entry and growth of competitors, as well as tying practices. GS then argues that Apple has both the ability and the incentive to impose artificial barriers that prevent market entry and hinder competitor development. The authority also understood that Apple's reasoning based on security and privacy are not enough to override competition law, especially since less restrictive means to achieve these goals exist – as demonstrated by Apple's own compliance with the Digital Markets Act (DMA) in the European Union.

To file the order to Cade's Tribunal, after thorough investigation, the GS concludes that Apple's practices effectively close entire markets (app distribution, IAP systems, and digital goods/services distribution on iOS) to competition, removing the freedom of choice from both developers and users. One of the most important evidence pieces of the evidence were the DLPA (Apple Inc., [*s.d.*](a)) and App Store Review Guidelines (Apple Inc., [*s.d.*](b)) – as well as the market information acquainted under the GS's investigation.

iii) Takeaways from the case

The substantial evidence provided by GS and the Plaintiff was important to identify the following anti-competitive practices: artificial barriers to entry and rival development, anti-steering rules, banning of third-party content sales, tying (as bundling). Respectively, GS's investigation identified that Apple prohibits: sideloading (app installation outside the App Store) and third-party app stores, making the App Store the only native app distribution channel for iOS; buttons, external links, or any calls to action within apps that lead users to alternative purchase mechanisms outside of Apple's IAP system, or even informing users about them. In addition, the investigation also identified that Defendant prevents developers from offering third-party digital goods or services within their iOS apps, as well as requires use of its own IAP system for developers selling digital goods or

services within iOS apps. GS also concluded that app distribution and payment processing was distinct services that could be offered separately. Their understanding is that Apple's tying practice is a business decision to preserve commission revenues, not a technological necessity. This limits choice and blocks competitors in the IAP market.

In the context of the GS's investigation into Apple and the iOS operating system, the concepts of dominant position and market power were central to the final determination of the alleged violations of the economic order. Many of the legal-economic tests conducted by the authority relied on identifying plausible and viable scenarios in which competitors could potentially access and challenge Apple's market position and significance. As previously noted, the various anticompetitive practices identified had distinct scopes: some assessments were more expansive, such as those applied to verticalized markets, while others were more limited in scope, particularly the analysis of the primary (original) market. The question to be stressed in this article is the importance of setting a definition of dominant position and market power and their influence in deciding which theory of harm will be able to discipline bigness effectively.

3. From Theories of Harm to Anticompetitive Conducts Control

Traditional antitrust tools have proven insufficient in addressing the challenges posed by digital platforms. Their analytical methods –based on linear production chains and unidirectional markets– are ill-suited to the dynamics of digital platforms. Moreover, the length of antitrust investigations presents an obstacle in highly dynamic markets, where harmful effects may occur irreversibly.

Antitrust analysis must evolve to account for the specific characteristics of digital platform business models and to ensure competition and contestability in digital services (Shapiro, 2021). These characteristics may require revisiting key areas such as relevant market definition, market power assessment, merger control, scrutiny of anticompetitive conduct, and the design of remedies imposed by authorities (Pfeiffer, 2025). As merger control and theories of harm were extensively discussed in the previous chapter, this chapter will focus on potential revisions to the remaining areas.

As displayed in the "*Guia H*" (Brazil, 2016), the Relevant Market (RM) is traditionally defined as the set of economic agents, both consumers and producers, who effectively react to and limit the decisions of a company resulting from a concentration operation in relation to pricing strategies, quantities, quality, among others. The delimitation of RM is a useful tool for analysis, but not an end in itself. The identification of possible competitive effects may involve the evaluation of conditioning factors that are sometimes outside the pre-defined relevant market, and the delimitation of the RM does not bind Cade, as the market is dynamic. Cade can define the limits of RM or leave them open, especially when concentration is low in all possible scenarios, considering different geographic and/or product delimitations.

When defining RM, the following dimensions are considered: product and geographic (Pfeiffer, 2025). The first, from the perspective of demand, refers to goods and services that consumers consider to be substitutable due to their characteristics, prices and use. To assess this substitutability, Cade examines the possibility of consumers shifting their demand to other products, considering various factors, such as customer profiles. The second refers to the area in which companies offer their products or consumers search for merchandise (goods or services) within which a monopolist will be able to profitably impose significant price increases. To do this, Cade uses criteria such as sales location, purchasing habits and distance from consumers (Pfeiffer, 2025).

In digital markets, however, many of these definitions face serious challenges (Falco, 2024). The great level of changes in consumer habits, price notion and time to purchase brought by economic digitalization demands authorities to look deeper than the surface (Robertson, 2020). That being said, authorities around the world can deepen their understanding of the platform's business model, identifying which services share interconnected pricing structures and demand. In complex ecosystems, it is necessary to assess how adjacent services influence and are influenced by the group's broader offerings. The definition must consider multi-sided interactions and services, focusing on understanding supply and demand dynamics and the capacity of conduct or market concentrations to influence variables and harm competition, without requiring a precise market boundary.

Under the debate of Market Power, the Brazilian antitrust authority systematically holds, in her cases, that a company (or a group of companies) has market power if it is able to keep its prices systematically above the competitive market level without losing all its customers. In an environment in which no firm has market power, it is not possible for a company to set its price at a higher level than the market, because if it did, consumers would naturally look for another company to supply them with the product they want, at the competitive market price (Brazil, [n.d.]). Before we try to understand the potential necessary reviews on market power analysis, we should highlight that, already in 2021, Cade's Department of Economic Analysis already pin-pointed that "following the OECD's suggestion and presenting a 'clear analytical framework to assess dominance' is an extremely difficult task to consider in abstract terms, without knowing beforehand who is engaging in a certain anticompetitive conduct, who is being harmed and what a the conditions or circumstances in which the practice was perpetrated". The department goes on also to hold that antitrust analysis could also not be mainly based in market share or other mathematical criteria – since they can bias the analysis and leave out essential information (Brazil, 2021).

Having this background, when analysing digital markets, assessing the nature and magnitude of network effects (direct, indirect, positive, and negative), including ecosystem size, demand homogeneity, and scale effects on both supply and demand (including multi-homing), plays a fundamental role. Amplifying features, such as economies of scope, fixed and sunk costs, must be considered (Pfeiffer, 2025). The analysis must also map government interventions that impact relevant sides of the market, as these rules shape the ability to acquire or abuse dominance. The combination of supply and demand scale economies creates positive feedback loops, leading to accelerated growth and potential "winner-takes-all" scenarios that should be prevented by antitrust authorities (Falco, 2024).

The abovementioned features are key to understanding how antitrust authorities can reshape the control of anticompetitive conduct. In *GS/ML v. Apple*, for example, the process of assessing Apple's dominance in the market, the hypothetical existence of market power and the likelihood of exercising market power, initially involved defining the relevant market in terms of both product (analysing the markets of origin and target of the

conduct under investigation) and geography. Cade then assessed the company's dominant position and market position. GS's conclusion was that, above all, the company was capable of unilaterally or co-ordinately altering market conditions - not limiting itself, nor extensively trying to bring some mathematical argument associated with a hypothetical market share analysis. All the analysis conducted was not only qualitative but was also supported by a large body of evidence that made this type of analysis capable.

This is a very well-rounded example that the light in the end of the tunnel to control anticompetitive conduct in digital markets involves analysis that move beyond classical notions of price levels and horizontal/vertical relations, focusing instead on multi-sided pricing structures, functional overlaps between stakeholders, and the management of network effects. Focus on specific behaviours, including self-preferencing[3], tying (bundling)[4], exclusivity agreements and price parity clauses[5], collection and use of third-party data[6], and risk from default rules[7], offers authorities way out to strengthen their legal tests – making decisions stronger when subject to judicial scrutiny (Falco, 2024). This happened in the *GS/ML v. Apple* case. When the administrative process was initiated, GS applied a preventive measure so that Apple would stop the practices that were being analysed in the administrative process (Brazil, 2023). Under civil writ of mandamus number 1097967-08.2024.4.01.3400, filed against Cade, the court of first instance granted security so that the preventive measure would not be applied (Folha de S.Paulo, 2025). Subsequently, the Federal Regional Court of the 1st Region (TRF-1) overturned the first instance decision and reinstated the preventive measure imposed by GS (Brazil, 2025a). The measure was also the subject of scrutiny by the Cade' Tribunal, which, as the body

[3] Particularly concerning in vertically integrated platforms with privileged access to rivals' data and restrictions on multi-homing.
[4] Relevant in platforms with strong network effects and complex ecosystems leveraged across multiple digital platforms and services.
[5] Important in business models that depend on attracting and retaining key or differentiated service providers.
[6] Given the competitive advantage conferred by large, proprietary and historical datasets, attention is needed when platforms use data from third parties - including competitors.
[7] Default settings (e.g., default apps, search engines, or systems) can restrict access to strategic distribution channels and digital markets, such as operating systems, mobile devices, and browsers.

before which voluntary appeals can be lodged against preventive measures applied by GS, also decided to maintain the preventive measure until the administrative process was judged by Cade (Brazil, 2025b).

Finally, authorities may understand, for the long run, that simply suspending conduct or imposing fines may be insufficient, given the scale of potential harm and the structural interdependence of complex ecosystems. Authorities face significant challenges in ensuring remedy effectiveness, monitoring compliance, and addressing information asymmetry (Falco, 2024).

To effectively regulate theories of harm that contribute to the regulation of digital platforms must be adapted and expanded to address the unique economic characteristics of this sector, given that traditional antitrust tools are inadequate for their dynamics. The challenges digital platforms pose to antitrust alter firms' competitive strategies and the variables relevant to competition analysis. Platforms are characterized by network effects, multi-sided markets, data intensity, and the formation of complex ecosystems (Pfeiffer, 2025).

4. Conclusion

The article sought to demonstrate that accurately defining dominant position and market power is essential to selecting the appropriate theory of harm - especially in the context of digital platforms. The evolving nature of these markets demands legal frameworks that reflect economic complexity, structural interdependence, and technological fluidity. By tracing the trajectory from legal theory to enforcement practice, the article reflects on valuable tools that antitrust authorities can use and develop to discipline digital "bigness" more effectively - while remaining attentive to evidentiary constraints and the balance between intervention and innovation.

Under reviewing *GS/ML v. Apple* case, Chapter 2 concluded that Apple holds a monopolistic position in the market for the non-licensable iOS operating system and uses this dominance to control related markets. This conclusion was based on a multifaceted legal-economic analysis that accounted for user lock-in, switching costs, technical incompatibility, and developer dependence. The GS reasoned that Apple's ecosystem strategy

creates artificial barriers to entry and limits user and developer choice - ultimately harming competition. The use of legal tools such as the DPLA and the App Store Review Guidelines as evidence exemplifies a shift toward qualitative analysis rooted in structural dynamics rather than formalistic market share indicators.

This article demonstrated the urgent need to review how competition authorities approach anticompetitive conduct in digital markets. Traditional models based on linear chains and price-based competition are increasingly obsolete. Instead, authorities must adopt a flexible framework that incorporates dynamic variables. The *GS/ML v. Apple* case was presented as a model for this approach, showing how preventive measures, qualitative analysis, and a focus on platform behavior can result in more resilient enforcement. The chapter underscored that the effectiveness of competition policy now hinges on the ability to go beyond legacy definitions and tools.

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