

UNPACKING DIGITAL MONOPOLISATION: TRENDS, IMPLICATIONS & REGULATORY CHALLENGES

By Muskan Singh Bankura
UPES, Dehradun

ABSTRACT

Today, monopolies are ruling the internet¹. The use of digital technologies are bringing the global economy closer together². Increasing returns to scale in data gathering and processing give rise to a new form of monopoly³. A digital monopoly, as the name suggests, is a monopoly of the services on an online platform⁴. Digital monopolies are creating new challenges for regulators and antitrust authorities⁵. The idea that is the mantra of modern industry is monopoly which suggests a concern about the concentration of power and market dominance in certain industries. While we have seen that the emergence of digital technologies are able to improve the human welfare, we have also seen the unparalleled concentration of that technology into the hands of some of the global giants such as Microsoft, Google, Amazon, Facebook and Apple (Big tech). It's important to control the huge amount of power that Big Tech companies have. The news about how Facebook data affected the US elections shows us why this is so important⁶. So, this Article will analyse how and why the monopolisation of digital technology occurred and the article will also argue that what are the reasons for the ineffectiveness of laws to deal with some of the harmful effects of Big Tech monopolies.

"Digital monopolies thrive on network effects and data aggregation, enabling them to wield immense influence over markets and society⁷"

INTRODUCTION

¹ Zander Arnao, *Why Monopolies Rule the Internet and How Can We Stop Them*, THE GATE (Jan 4, 2022), <http://uchicagogate.com/articles/2022/1/4/why-monopolies-rule-internet-and-how-we-can-stop-them/>.

² Marus Overdiek, Thieb Petersen, *Digitalisation of Global Economy: Monopolies, Personalized Prices and Fake Valuation*, GLOBAL EUROPE, (Oct. 29, 2020), <https://globaleurope.eu/globalization/digitalization-of-the-global-economy-monopolies-personalized-prices-and-fake-valuations/>.

³ Simon Loertsc her, Leslie M. Marx, *Digital Monopolies: Privacy Protection or Price Regulation?*, 71 INT'L J. INDUSTRIAL ORG. (2020), <https://www.sciencedirect.com/science/article/abs/pii/S0167718720300461>.

⁴ Jaijit Bhattacharya, *Monopolies: Why India Must Develop Swadeshi Apps*, LINKEDIN (Aug 20, 2020), <https://www.linkedin.com/pulse/face-book-digital-monopolies-why-india-must-develop-bhattacharya>.

⁵ Simon Loertsc her, Leslie M. Marx, *supra* note 1.

⁶ Daniel McIntosh, *We need to Talk Bout Data: How Digital Monopolies Arise and Why They Have Power and Influence*, 23 J. TECHNOLOGY L. & POLICY 185, 185-213, (2019).

⁷ Muskan Singh Bankura, UPES, Dehradun.

The digital era is here, and its perks show us a glimpse of how it can make institutions fairer and give more people access to information, tools, and power⁸. Digital platforms are online business platforms that are facilitating commercial agreements between two or more sides of the same market, often buyers and sellers of the particular goods or services⁹. Different platforms have their respective business models and interact with their respective parties in different ways¹⁰. Some platforms sell products online like Amazon and Etsy, while some allow users to communicate with each other like Facebook, Instagram, advertisers with viewers of content on Youtube & Facebook, and some app developers with phone phone users like Apple & Google¹¹.

Each platform has their own rules to optimise these platforms for interaction¹². Key differentiators include the extent to which a platform depends on advertising income versus fees, its protocols for handling suppliers and content, and its rapport with consumers¹³. Extensive literature exists on the characteristics and functions of these platforms, widely agreeing that they provide users with significant advantages, there is no doubt that these digital platforms plays a ubiquitous role in the livelihood of the consumers and the businesses in the digital era¹⁴ and largely minimising the transaction costs of finding other parties to interact with them¹⁵.

Certainly, the rapid expansion of large Internet platforms has raised concerns among activists, scholars, and political figures regarding their impact on competition¹⁶. These concerns primarily revolve around two issues. First, certain companies (like Amazon) both directly sell to consumers and operate a platform connecting third-party suppliers with customers. The worry is that these platforms might engage in unfair competition by leveraging data from third-party sales to determine whether to create and sell competing products¹⁷.

Furthermore, due to network effects, numerous platform markets are characterised by one or two predominant players¹⁸. Certain proponents argue that this situation detrimentally impacts consumer well-being and innovation. Moreover, there are concerns that this dominant position becomes self-

⁸ Daniel McIntosh, *supra* note 6, at 186.

⁹ Joe Kennedy, *Monopoly Myths: Do Internet Platforms Threaten Competition*, INFORMATION TECHNOLOGY & INNOVATION FOUNDATION (July 23, 2023), <https://itif.org/publications/2020/07/23/monopoly-myths-do-internet-platforms-threaten-competition/>.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² Rinesh Andrews, *Monopolies in the Digital World*, LINKEDIN (March 8, 2024), https://www.linkedin.com/pulse/monopolies-digital-world-rinesh-andrews-w0bof?trk=article-ssr-frontend-pulse_more-articles_related-content-card.

¹³ Joe Kennedy, *supra* note 9.

¹⁴ Dwivedi YK, *Social Media: The Good, The Bad, and The Ugly*, (2018), https://scholar.google.com/scholar_lookup?journal=Inf+Syst+Front&title=Social+media:+the+good,+the+bad,+and+the+ugly&author=YK+Dwivedi&volume=20&issue=3&publication_year=2018&pages=419&doi=10.1007/s10796-018-9848-5&.

¹⁵ Joe Kennedy, *supra* note 9.

¹⁶ *Ibid.*

¹⁷ Joe Kennedy, *supra* note 9.

¹⁸ Tim Stobierski, *What are Network Effects?*, HARVARD BUSINESS SCHOOL (Nov. 12, 2020), <https://online.hbs.edu/blog/post/what-are-network-effects>.

perpetuating as the data collected by these platforms bestows upon them an advantage that their competitors are unable to surmount¹⁹.

This report shows that these worries are to a great extent lost²⁰. Stages make huge monetary worth. A long way from being lethargic monopolists that attempt to increment benefits by misleadingly diminishing stockpile, these organizations try to quickly develop²¹. They are continually enhancing to draw in new clients and hold the ones they have. To do this, they put colossal measures of cash in innovative work (Research and development)²².

While the platform business model offers significant potential benefits, the perceived risks are often exaggerated²³. These platforms encounter ongoing competition within the various markets they engage in, as industries they operate in are in a constant state of evolution. While there may be instances of competition between platform operators and third-party suppliers, the overarching incentive typically lies in attracting more suppliers rather than displacing any single one. Additionally, while data holds value, its significance is contingent upon its utilization. Merely possessing data is insufficient to safeguard an incumbent against a competitor offering a superior product²⁴.

This poses a crucial challenge in antitrust theory and practice as it transcends the current landscape dominated by a handful of prominent Internet-based corporations²⁵. Given the increasing significance of information technology, coupled with the frequent amalgamation of substantial fixed expenses, economies of scale, and network effects, the platform business model could indeed herald the forthcoming paradigm shift²⁶. Various sectors, including financial services, professional services, healthcare, and education, stand susceptible to potential transformation and upheaval through Internet-based platform business models, akin to the transformative impacts witnessed in the taxicab industry by Lyft and Uber, as well as in the movie business by Netflix and Hulu²⁷.

Large digital enterprises and their unique business models have prompted a variety of anti competitive concerns that have been brought forth before the CCI. These include unilateral and opaque policies on search rankings, and anti-competitive usage of aggregated data²⁸.

¹⁹ Joe Kennedy, *supra* note 9.

²⁰ Joseph Farrell & Michael L. Katz, *Competition or Predation?*, UNIVERSITY OF CALIFORNIA AT BERKELEY (August, 2001), <https://eml.berkeley.edu/~farrell/ftp/predation.pdf>.

²¹ *Ibid.*

²² Joe Kennedy, *supra* note 9.

²³ Burton Ong & Ding Jun Toh, *Digital Dominance and Social Media Platforms: Are Competition Authorities Up to the Task?* 54 IIC 527, 527-572, (2023).

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ Burton Ong & Ding Jun Toh, *supra* note 23.

²⁷ *Ibid.*

²⁸ *Report of the Committee on Digital Competition Law*, MINISTRY OF CORPORATE AFFAIRS (March 2024), <https://www.mca.gov.in/bin/dms/getdocument?mds=gzGtvSkE3zIVhAuBe2pbow%3D%3D&type=open>.
burnishedlawjournal.in

Against this backdrop, the Parliamentary Standing Committee on Finance presented the 53rd Report on “Anti-Competitive Practices by Big Tech Companies” before the Lok Sabha on 22nd December 2022 (Standing Committee Report)²⁹.

Current competition policy effectively addresses legitimate antitrust concerns³⁰. The existing statutes cover non-price aspects, including threats to innovation and fair business practices³¹. The primary goal of antitrust should remain the maximisation of consumer and societal welfare, rather than shielding companies from fair competition³². Separate policies are needed to address privacy, data security, and political power³³.

LITERATURE REVIEW

The current landscape of technology companies is characterized by their widespread involvement in various economic processes globally. Despite their dominant positions, these firms have evaded traditional monopoly limitations due to their rapid growth and innovative product organization, which policymakers fear could hinder technological advancement and national economic competitiveness³⁴.

A central concern revolves around whether these companies qualify as monopolies under existing antitrust laws, given their significant market presence and potential influence on society. U.S. courts typically assess a firm's market share to determine monopoly status, but no specific thresholds exist. Market share is crucial in evaluating a company's potential to acquire monopoly power³⁵.

Researchers have explored the relationship between macroeconomic stability, transparent governance, and antitrust policies, finding that stability fosters financial market development, while effective antitrust policies mitigate corruption and bureaucracy³⁶.

Studies on vertical mergers in the U.S. highlight the significance of the 2020 Vertical Merger Guidelines in reducing transaction costs and favoring vertical mergers over contractual alternatives. Analyzing the integration of IT platforms into mobile ecosystems reveals a shift towards decentralized services, leading to the technical integration of major digital platforms into most applications' source code³⁷.

²⁹ *Ibid.*

³⁰ *Ibid.*

³¹ *Ibid.*

³² *Ibid.*

³³ Joe Kennedy, *supra* note 9.

³⁴ Sergey Silverstoy, Vladimir Starovoitov, Dmitri Firsov, Yuri Krupnov, *Control of Platform Monopolisation in the Digital Economy: The Implication of Open Innovation*, 8 J. OPEN INNOVATION: TECH. MARKET AND COMPLEXITY (June 2022), <https://www.sciencedirect.com/science/article/pii/S2199853122000075>.

³⁵ Sergey Silverstoy, Vladimir Starovoitov, Dmitri Firsov, Yuri Krupnov, *supra* note 34.

³⁶ *Ibid.*

³⁷ *Ibid.*

German analysts attribute the rise of IT monopolies to network effects, market concentration, and personalized data usage. European competition authorities have taken actions against data-polies like Google, Apple, Facebook, and Amazon, aiming to address market dominance issues.

Canadian regulators also address the trend of digital monopolization, emphasizing privacy protection as a factor in assessing anti-competitive behavior³⁸.

In the U.S., monopolies are not automatically penalized, and dominant firms may not abuse their position unless they engage in specific anti-competitive practices³⁹.

The "cellophane error" concept underscores the importance of accurately defining relevant markets to assess market power, preventing overestimation of a company's dominance⁴⁰.

Several studies focus on digital monopolies, highlighting the dominance of major tech corporations like Alphabet, Apple, Amazon, Facebook, Microsoft, Alibaba, and Tencent. These companies leverage network effects and offer free products, effectively limiting market entry for competitors. However, comprehensive studies on digital monopolies remain limited, prompting the need for standardized metrics to classify companies as digital monopolies. This study aims to address this gap by establishing principles for identifying digital monopolies, targeting the international research community, antitrust agencies, and NGOs⁴¹.

IMPLICATIONS OF DIGITAL MONOPOLIES

Digital monopolies have significant implications across various aspects:

1. **Impact on consumer choice and innovation:** Digital monopolies can limit consumer choice by dominating the market and controlling the options available to consumers. Moreover, their dominance may stifle innovation as smaller competitors struggle to compete against the resources and market power of the monopolies. Consumers may face reduced variety and quality of products and services as a result⁴².
2. **Pricing power and market manipulation:** Digital monopolies often wield substantial pricing power, allowing them to dictate prices in the market without fear of competition. This can lead to higher prices for consumers and reduced market efficiency. Additionally, monopolies may engage in market manipulation tactics to maintain their dominant position, such as predatory pricing or bundling strategies that disadvantage competitors⁴³.

³⁸ *Ibid.*

³⁹ *Ibid*

⁴⁰ *Ibid*

⁴¹ Sergey Silverstoy, Vladimir Starovoitov, Dmitri Firsov, Yuri Krupnov, *supra* note 34.

⁴² Ozlem Bedre- Defolie, *How do we Stop Digital Market Monopolies? New Research From ESMT Berlin Gives Key Insights for Policy*, ESMT BERLIN (May 6, 2023), <https://esmt.berlin/press/how-do-we-stop-digital-market-monopolies-new-research-esmt-berlin-gives-key-insights-policy>.

⁴³ *Ibid.*

3. Labour market effects: Digital monopolies can impact the labour market in several ways. On one hand, they may create job opportunities through their own operations and the ecosystem of businesses that rely on their platforms. However, their dominance may also lead to labour market concentration, where a few large firms control a significant portion of employment opportunities, potentially reducing wages and job mobility⁴⁴.
4. Global market influence: Digital monopolies often operate on a global scale, exerting significant influence over international markets. Their actions and decisions can have ripple effects across borders, affecting competition, trade, and economic development worldwide. Moreover, their dominance may raise concerns about sovereignty and regulatory challenges for national governments attempting to manage their impact⁴⁵.
5. Network Effects: Network effects, prevalent in various online platforms and services, amplify their value as more users join. This phenomenon drives the growth and competitiveness of platforms like social media networks, communication services, online marketplaces, and cloud-based solutions. For example, on social media platforms, increased user participation leads to more content and interactions, attracting even more users. Similarly, in e-commerce, a larger user base on marketplaces like Amazon results in greater product selection and seller competition, enticing more users. Understanding and leveraging network effects are crucial for success in the internet-driven marketplace, as they fuel rapid growth and create value for both consumers and businesses⁴⁶.
6. Switching costs for consumers: Network effects create high switching costs for consumers, as they become increasingly reliant on a product or service as more users adopt it. Switching entails losing access to network benefits, such as connections and data, and may disrupt integrations with other services. Additionally, there's often a learning curve associated with adopting a new platform. These high switching costs reinforce consumer loyalty to dominant players, potentially stifling competition and innovation⁴⁷.
7. Entry barriers: Digital monopolies create significant entry barriers for potential competitors in various ways. These barriers include economies of scale, high capital requirements for technology and marketing, network effects that increase switching costs for consumers, limited access to valuable data, and regulatory complexities that favor established players. These barriers collectively hinder competition and innovation in markets, necessitating regulatory and strategic interventions to promote a more level playing field for new entrants⁴⁸.

Overall, digital monopolies can profoundly shape economic dynamics, affecting not only consumer welfare and innovation but also pricing, labour markets, and global economic stability. Addressing the economic implications of digital monopolies requires careful consideration of regulatory frameworks and antitrust policies to promote competition, innovation, and economic growth⁴⁹.

⁴⁴ Curt Hessler, *Monopoly Power in the Electronic Information Industry: Why, and So What?* UCLA SOL (June 29, 2003), <https://law.bepress.com/cgi/viewcontent.cgi?article=1010&context=expresso>.

⁴⁵ *Ibid.*

⁴⁶ Alex Chisholm, *Market Power and Online Platforms*, PARLIAMENT.UK (2016), <https://publications.parliament.uk/pa/ld201516/ldselect/1deucom/129/12907.htm>.

⁴⁷ Alex Chisholm, *supra* note 38.

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

GLOBAL RESPONSES TO DIGITAL MONOPOLIES

Governments and international organizations are increasingly scrutinizing the actions of Big Tech due to concerns regarding anti-competitive behavior, privacy violations, tax strategies, and their broader impact on democracy and society⁵⁰.

In the European Union, stringent regulations like the General Data Protection Regulation (GDPR) have been implemented, and antitrust investigations against companies like Google, Apple, and Amazon are ongoing. Recent legislative proposals such as the Digital Markets Act (DMA) and the Digital Services Act (DSA) aim to limit the influence of digital giants⁵¹.

In the United States, there has been a resurgence in antitrust scrutiny across different administrations, leading to significant lawsuits against Google and Facebook for alleged anti-competitive practices. Discussions about breaking up these companies have emerged, alongside calls to update antitrust laws to better address the complexities of digital markets. In 2022, the five largest tech companies, including Apple, Google, Meta/Facebook, Amazon, and Microsoft, faced lawsuits or investigations⁵².

China has also taken robust measures against its tech giants like Alibaba and Tencent to reduce their market dominance. This includes enforcing anti-monopoly laws, ensuring data security, and enhancing consumer protection measures⁵³.

DIGITAL MONOPOLIES AND COMPETITION LAW IN INDIA

India's current regulatory approach to competition issues operates on an 'ex-post' basis⁵⁴, wherein the Competition Commission of India can only intervene after anti-competitive behavior has been confirmed. However, there is growing advocacy for an 'ex-ante' framework, which would require companies to implement measures to prevent abusive anti-competitive practices proactively⁵⁵.

Start-ups in India are hopeful that the government will establish an ex-ante framework to address Big Tech's anti-competitive conduct preemptively, thereby creating a fairer competitive environment⁵⁶.

⁵⁰ Swathi Satish, *Digital Monopolies by Big Techs*, CLEARIAS (March 6, 2024), <https://www.clearias.com/digital-monopolies/>.

⁵¹ *Ibid.*

⁵² *Ibid.*

⁵³ Swathi Satish, *supra* note 42.

⁵⁴ *Report of the Committee on Digital Competition Law*, MINISTRY OF CORPORATE AFFAIRS (March 2024), <https://www.mca.gov.in/bin/dms/getdocument.mds=gzGtvSkE3zIVhAuBe2pbow%3D%3D&type=open>.

⁵⁵ Harshwardhan Sharma, *Status of India's Digital Competition Law*, INDIA BRIEFING (Dec. 8, 2023), <https://www.india-briefing.com/news/india-digital-competition-law-30506.html/>.

⁵⁶ *Ibid.*

Even digital news publishers, who have faced challenges in revenue sharing with Big Tech for digital news content, are looking to the enactment of an ex-ante framework to strengthen their position and improve their revenues⁵⁷.

PRIVACY AND COMPETITION LAW

The issues raised in the complaint regarding Google's practices⁵⁸, particularly regarding privacy and data access, have significant implications for competition in digital markets. Analyzing these concerns in the context of Indian competition law on digital monopolies reveals several key considerations⁵⁹.

Firstly, the observation that Google collects user data from publisher websites but does not share it with publishers highlights a potential barrier to entry for new entrants in the digital advertising market. Access to data is crucial for optimizing advertising strategies, and the lack of access puts non-Google ad exchanges and buying tools at a competitive disadvantage. Under Indian competition law, such practices could be scrutinized under Section 4 of the Competition Act, which prohibits abuse of dominant position. If Google's dominance in the digital advertising market is found to hinder competition by denying access to essential data, it could be deemed anticompetitive.

Secondly, the complaint's discussion of Google's privacy sandbox project, which aims to replace cookies with a different data collection system, raises concerns about the potential for Google to maintain or strengthen its monopoly power. While the privacy sandbox may enhance user privacy by eliminating individual tracking, it also enables Google to retain control over aggregated data, giving it a competitive advantage over rivals. This could lead to a further concentration of market power in Google's hands, posing challenges for competition authorities under Indian law to ensure fair competition and consumer welfare⁶⁰.

In the context of Indian competition law, the Competition Commission of India (CCI) has the authority to investigate and penalize anticompetitive practices, including those related to digital monopolies. The CCI could examine whether Google's data practices and the privacy sandbox project constitute abuse of dominance or anti-competitive agreements under Sections 3 and 4 of the Competition Act. Additionally, the CCI may consider market dynamics, barriers to entry, and the impact on consumer welfare when assessing the competitive effects of Google's conduct⁶¹.

Overall, the issues highlighted in the complaint underscore the importance of effective competition regulation in digital markets, particularly concerning data access and privacy. In India, addressing concerns related to digital monopolies requires a careful examination of market dynamics,

⁵⁷ *Ibid.*

⁵⁸ *Google and Alphabet v Commission*, (Case T-604/18), 2022.

⁵⁹ Giorgio Monti, *Taming Digital Monopolies: A Comparative Account of the Evolution of Antitrust and Regulation in the European Union and the United States*, 67 SAGE J. (Jan 19, 2022), <https://journals.sagepub.com/doi/full/10.1177/0003603X211066978>.

⁶⁰ *Ibid.*

⁶¹ *Ibid.*

competition law enforcement, and the promotion of competition and innovation to ensure a level playing field for all market participants.

FUTURE OUTLOOK AND CHALLENGES

1. **Potential Trends in Digital Monopoly Formation** :Numerous industries are still being shaped by digital monopolies, which are defined by their strong market positions in the digital realm. The merging and acquiring of tech titans is one possible trend in the establishment of digital monopolies. Tech giants like Google, Facebook, and Amazon, for example, can increase their market power in a variety of areas by acquiring smaller, innovative businesses (Brynjolfsson & McAfee, 2017; European Commission, 2020). Additionally, the development of platform-based business models opens the door for the formation of digital monopolies. According to Brynjolfsson and McAfee (2017), these platforms frequently serve as middlemen between consumers and service providers, giving them the opportunity to gather enormous volumes of data and gain substantial market influence⁶².
2. **Emerging Technologies and Disruptive Innovations**: In the context of the establishment of digital monopolies, the emergence of new technologies brings with it both opportunities and challenges. According to Brynjolfsson and McAfee (2017), technologies like blockchain, artificial intelligence (AI), and the Internet of Things (IoT) have the power to upend established market structures and allow new competitors to challenge established ones. Significant progress in automation, data analysis, and personalized services is being fueled by AI in particular, and this could enable smaller businesses to challenge well-established digital monopolies. In a similar vein, decentralized platforms such as blockchain technology lower entry barriers and promote competition across a range of industries. But digital monopolies' ability to concentrate talent and resources allows them to take advantage of new technology to further dominate the market. Companies like Google and Facebook, for instance, make significant investments in AI research and development, enhancing their competitive edge and securing their dominance in the industry. Companies like Google and Facebook, for instance, make significant investments in AI research and development, enhancing their competitive edge and securing their dominance in the industry⁶³.
3. **Regulatory Challenges and Opportunities**: The emergence of digital monopolies has drawn the attention of regulators from around the globe, sparking discussions about the best legal framework to deal with their market strength and maintain fair competition. Determining the limits of antitrust law in the digital age presents a regulatory issue since traditional measures of market dominance might not adequately reflect the dynamics of digital marketplaces (Stigler Center for the Study of the Economy and the State, 2022). Moreover, because digital monopolies operate beyond national borders and legal authorities, their global character makes regulation efforts more difficult. Coordinating regulatory agencies and working together internationally to harmonize methods to regulation across many regions continues to be a major problem (Stigler Center for the Study of the Economy and the State, 2022). In spite of these obstacles, regulatory

⁶² Erik Brynjolfsson & Andrew McAfee, *The Business of Artificial Intelligence*, HARVARD BUS. REV. (July 18, 2017), <https://hbr.org/2017/07/the-business-of-artificial-intelligence>.

⁶³ *Ibid.*

action offers chances to promote innovation and competition in the digital economy. Policies like those pertaining to data privacy, interoperability, and antitrust enforcement can help level the playing field and make room for new competitors to flourish alongside established digital monopolies⁶⁴.

4. Social and Economic Implications: The prevalence of digital monopolies has significant social and economic ramifications that affect every facet of society, including democratic procedures and employment markets. As their automation initiatives and platform-based business models alter employment trends and income distribution, digital monopolies' effects on labor markets are a cause for concern⁶⁵.

Concerns regarding inequality and the wellbeing of society are also raised by the concentration of economic power among a small number of digital behemoths. There are concerns over privacy, surveillance, and the commoditisation of personal information due to these corporations' capacity to harvest and monetise large volumes of user data (Stigler Center for the Study of the Economy and the State, 2022). Furthermore, discussions concerning the impact of digital monopolies on public opinion and election outcomes have been spurred by their influence on political discourse and democratic processes⁶⁶. The Stigler Center for the Study of the Economy and the State (2022) highlights the need for increased openness and accountability in the operations of digital platforms due to issues including algorithmic bias, filter bubbles, and misinformation⁶⁷.

In conclusion, prospective trends, developing technology, regulatory issues, and social and economic ramifications, all influence the future outlook for the establishment of digital monopolies⁶⁸. Even while digital monopolies continue to have a big impact on a lot of different industries, solving these problems calls for a multi-pronged strategy that includes government, business, and civil society players⁶⁹.

CASE STUDIES

MICROSOFT

The Microsoft antitrust case⁷⁰, initiated by the Department of Justice (DOJ) in 1998 and the European Commission (Commission) in 2004, targeted the tech giant for engaging in exclusionary practices to maintain its monopoly in the operating systems market. While the DOJ's focus was on preventing Microsoft from leveraging its dominance to stifle competition, the Commission's concerns centered around interoperability issues with work group servers and tying the operating system with Windows Media Player⁷¹.

⁶⁴ Erik Brynjolfsson & Andrew McAfee, *supra* note 46

⁶⁵ *Ibid.*

⁶⁶ Freiburger, P., & Swaine, M. *Fire in the Valley: The Making of the Personal Computer*. McGraw-Hill Education, (2000).

⁶⁷ Jimenez- Duran, Rafael, *The Economies of Content Moderation: theory and Experimental Evidence from Hate Speech on Twitter*, ECONSTOR (2022), <https://www.econstor.eu/handle/10419/266349>

⁶⁸ *Ibid.*

⁶⁹ *Ibid.*

⁷⁰ *US v. Microsoft Corp.*, 215 F. Supp. 2d 1 (D.D.C. 2002)

⁷¹ Giorgio Monti, *supra* note 58

The DOJ's settlement aimed to prevent Microsoft from continuing its anti-competitive conduct and foster competition in ancillary markets. In contrast, the Commission's interest in securing competition in the browser market emerged later, leading to a second case against Microsoft regarding the tying of Internet Explorer to its dominant operating system. The Commission highlighted barriers to switching browsers, contrasting with the situation in the U.S., where browser switching was more prominent⁷².

Retrospectively, the different approaches of the agencies suggest that the U.S. challenge was more effective, particularly regarding the browser market. While the Commission's focus on work group servers mirrored some remedies imposed in the U.S., the success of certain remedies varied. Overall, the case underscores the complexities of antitrust enforcement in the rapidly evolving tech industry, with different jurisdictions pursuing distinct angles to address competition concerns⁷³.

INTEL

In the Intel antitrust case⁷⁴, both the Federal Trade Commission (FTC) and the European Commission were aligned in their concerns regarding competition issues. Intel, the world's leading computer chip maker, employed various clauses in its distribution agreements to hinder competitors, particularly AMD. These clauses included offering benefits to computer makers in exchange for exclusive chip purchases from Intel or refusing to buy chips from other manufacturers, thereby foreclosing market access to rivals⁷⁵.

While both agencies expressed concerns, the Commission issued a prohibition decision accompanied by a substantial fine, whereas the FTC settled with Intel. However, the FTC settlement went beyond prohibiting these practices by also addressing other conduct. It required Intel to amend its behavior to facilitate market access for producers of Graphic Processing Units (GPUs) and resolve intellectual property licensing issues with its main rivals. This aspect of the settlement aimed to ensure that existing competitors could partner with third parties to create more formidable competition against Intel⁷⁶.

The FTC's settlement covered a broader range of conduct compared to the Commission's narrower focus, which is speculated to be influenced by several factors. One reason could be the FTC's interest in addressing GPU market competition, particularly with NVIDIA, a California-based firm, while the licensing issues may have been of greater concern in the United States, where the rivals were situated. Additionally, the Commission may have focused on commercial relations between Intel and its downstream customers as a key case to explain its newly formulated approach to assessing agreements, especially regarding rebates⁷⁷.

⁷² *Ibid.*

⁷³ *Ibid.*

⁷⁴ *Intel Corporation v Commission*, Case T-286/09 RENV.

⁷⁵ Giorgio Monti, *supra* note 58.

⁷⁶ *Ibid.*

⁷⁷ *Ibid.*

Intel appealed against the Commission's decision, prompting the European Court of Justice (ECJ) to reformulate its approach to Article 102 TFEU. However, a final ruling from the General Court is still pending more than a decade after the original decision⁷⁸.

GOOGLE ANDROID

In the Google Android case⁷⁹, the European Commission found that Google violated Article 102 TFEU by employing various practices to strengthen its dominant position in the market for general internet search services⁸⁰.

Firstly, Google tied its Google Search app with the Play Store, requiring OEMs to preinstall both apps as part of the Google Mobile Services (GMS) bundle. This bundling strategy hindered the ability of rival search engines to compete, as consumers tend to use preinstalled apps and could not uninstall the Google Search app, making switching less likely. Additionally, Google tied the Google Search app and the Play Store with Google Chrome, further solidifying its dominance and deterring innovation in the market for general search services⁸¹.

Secondly, Google imposed antifrAGMENTATION obligations (AFAs) on Android device manufacturers, preventing them from preinstalling competing search services unless they accepted these obligations. This hindered the distribution of Android forks, which posed a credible threat to Google's dominance, thus impacting consumer choice and innovation⁸².

Thirdly, Google offered exclusivity payments to OEMs and Mobile Network Operators (MNOs) if they preinstalled no competing general search services, deterring competitors from developing innovative features and infringing Article 102 TFEU⁸³.

Despite Google's procompetitive arguments, the Commission rejected them, as Google failed to demonstrate sufficient evidence justifying its conduct. Ultimately, these practices constituted a single infringement of Article 102 TFEU, reflecting concerns shared by both the European Commission and the DOJ regarding Google's exclusionary effects on competitors' search engine distribution channels. However, differences in approach between the two jurisdictions are evident upon closer examination⁸⁴.

CONCLUSION

⁷⁸ *Ibid.*

⁷⁹ *Google and Alphabet v Commission*, (Case T-604/18), 2022.

⁸⁰ *Ibid.*

⁸¹ Giorgio Monti, *supra* note 58.

⁸² *Ibid.*

⁸³ Giorgio Monti, *supra* note 58.

⁸⁴ *Ibid.*

The dominance of digital monopolies by Big Tech firms presents a multifaceted challenge that touches upon economics, technology, society, and law. These companies have undeniably contributed to significant advancements in innovation and convenience, revolutionizing communication, information access, and business. However, their entrenched market positions also raise critical concerns that demand a nuanced regulatory approach.

Striking a balance between fostering competition and safeguarding consumer rights is essential. Competition ensures a level playing field in the digital economy, enabling new entrants to challenge incumbents and drive innovation. However, unchecked dominance can stifle competition, reduce innovation incentives, and limit consumer choice, leading to higher prices and lower-quality products.

Beyond economics, Big Tech's influence extends to societal impacts, including data privacy, misinformation, algorithmic bias, and political power concentration. Addressing these concerns requires regulatory frameworks that prioritize consumer privacy, transparency, and accountability, alongside measures to prevent monopolistic practices.

Policymakers must adopt a holistic approach, considering economic dynamics, technological advancements, social implications, and legal frameworks. This may involve targeted regulations and antitrust measures to address specific market failures and anti-competitive behaviors while fostering an environment that encourages innovation, diversity, and fair competition. Additionally, international cooperation is crucial given the global nature of the digital economy and the cross-border reach of Big Tech firms.

In summary, achieving a balanced regulatory framework that promotes competition, innovation, and the protection of consumer rights and societal values is essential for shaping the future of the digital economy in a way that benefits all stakeholders. Policymakers must navigate these complex challenges with a comprehensive strategy to ensure that digital monopolies contribute positively to economic and social well-being.

BURNISHED LAW JOURNAL