



# Research on the Realistic Dilemma and Governance Path of Platform Monopoly Under Digital Economy

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**Abstract.** Even if Internet platform businesses have made great progress, the issue of data monopolies has gained more attention. The fairness and effectiveness of society have been severely harmed by the monopoly of the Internet platform, and the platform economy's anti-monopoly has emerged as the key to promoting the steady and healthy growth of China's platform economy in the new era. Platform companies exhibit monopoly traits like quick growth cycles and fast expansion in the quest for monopoly profits, and these new traits and issues present new difficulties for monopoly control. Platform governance must adapt to the times, play to the benefits of digital governance, optimize the governance structure, investigate particular governance solutions for platform monopolies, and promote orderly competition and standardized development of large Internet platforms. The innovative path of anti-monopoly in the platform economy can be developed in four aspects based on comparing the governance experiences of data monopolies at home and abroad: first, establish a pluralistic co-regulation model under the system concept; second, promote the construction of talent teams with the need for regulation; third, improve the standards of the Internet platform-related market; and fourth, optimize the governance effect with internalization.

**Keywords:** Platform monopoly · Platform governance · Internet technology

## 1 Introduction

Platform economies have developed quickly in recent years due to the accelerated application of emerging technological paradigms like big data, cloud computing, and blockchain. "Soft platforms" like e-commerce platforms, mobile payment systems, and express logistics supported by Internet platform businesses have now taken on the role of the foundation of China's new economy. The "imbalance" of corporate social responsibility of online platforms appears under the general social impact. For instance, the "false gate" in Jingdong, the "unlicensed restaurant" in Hungry, the "trouble driver" in Drip Travel, the "huge data kill existing customers" on Taobao, etc. None of these occurrences goes beyond the conventional ideas of market failure and governance failure, underscoring the imbalance between the old paradigm of governance and the new business model and resulting in a crisis of public faith in social media platforms. [8]

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Platform governance has been put on the agenda and has become a hot topic in the international and interdisciplinary sectors as a response to a number of economic, social, and political issues related to the emergence of platforms (Yang Zhen & Chen Jin, 2020). Scholars have proposed a number of solutions to the platform anti-monopoly dilemma from the perspectives of regulation, policy, mechanism, and so forth. The majority of academic study at the moment is concerned with governmental regulation, and discussions of internet platform governance as a whole are rare. In order to comprehend the dynamics of platform governance, monitor the most recent platform governance challenges and issues and summarize and sort out the realistic dilemma of domestic Internet platform anti-monopoly issues within the Internet environment. Based on this, it provides a theoretical framework and pointers for the regulation of the digital economy and Internet platform governance. It also summarizes the experience pathways of Internet platform governance at home and abroad.

## 2 Ideas on the Management of Platform Monopoly in the Era of Digital Economy

Platform monopolies in the digital economy differ from traditional market monopolies, which have exclusive control over the supply and demand of a particular good or service. In bilateral markets, economies of scale and network effects create commensurate barriers to entry, lower transaction costs, and increase operational efficiency. [4] Platform monopolies are more vulnerable than conventional monopolies due to the dynamic nature of the digital market, which forces incumbent platform giants to maintain their monopoly through constant innovation (Li & Gao, 2021). To achieve “user lock-in,” “total price discrimination,” and other unfair competitive practices, platforms in fact forcibly collect user transaction data or unfairly reduce interoperability to maintain their competitive advantage. Maintaining the effectiveness and adaptability of regulation is necessary to promote market prosperity, as shown in Fig. 1.

In contrast to traditional market monopolies, platform monopolies in the digital economy require new regulatory concepts. By leveraging the dominance of their platforms in data, traffic, algorithms, and other areas, large Internet companies rely on and influence one another. [10] Platforms, data, and algorithms are three factors that have influenced the fundamental social and economic structures created throughout the Industrial Revolution (Zhou & Chen, 2019). Under the platform economy system, several market participants from the era of the industrial economy have emerged, and the digital platform has developed into a key traffic gateway. The value transformation of fundamental data has been made possible by algorithmic operations on the digital platform, which

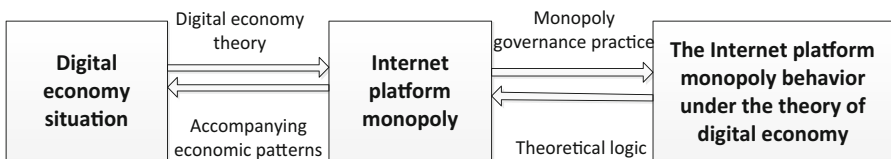
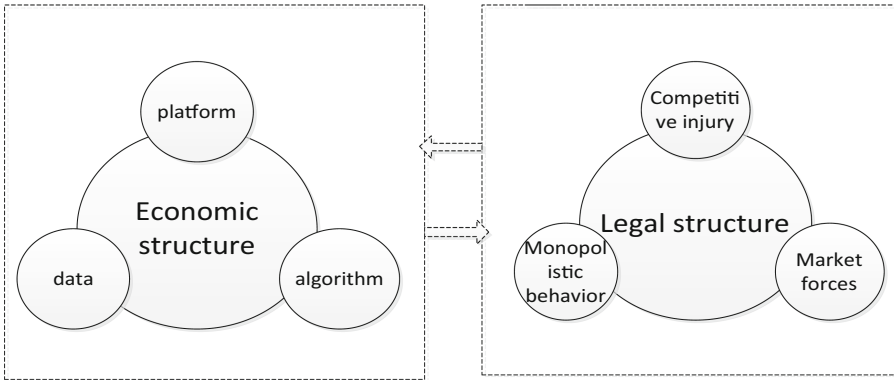


Fig. 1. Research Path of Internet Platform Monopoly in the Context of the Digital Economy



**Fig. 2.** Relation Chart of Three Economic Structures

serves as a vast, multi-real-time data collection platform. Platforms, data, and algorithms coming together have fostered a cross-market position and a new competitive landscape for the data market. Therefore, the reform of the theoretical antitrust system should begin with the three-dimensional competitive structure of platform economic topics, factors, and behaviors shown in Fig. 2.

### 3 The Realist Dilemma of Platform Monopoly Governance in the Digital Economy

#### 3.1 Manifestations of Data Monopolies

Via data monopolies, platformers create extra market abuses such as self-favoritism, bundling, and constrained trading. Restricted trading techniques specifically include covert suppression, traffic restrictions, and default search engines. For instance, “either one or the other” clearly influences the preferences and interests of customers while directly harming the trade prospects and financial interests of other e-commerce platform owners and e-commerce operators. The digital economy, in contrast to traditional bundling, places a greater emphasis on bundling than “selling,” such as the pre-installation of software on mobile devices. In the end, the Internet platform is mostly responsible for distorting competition on the platform by manipulating algorithms and other factors to increase the competitive advantage of its own goods and services. Platforms discriminate against their own businesses and those of third parties, leading to unfair competition. The Apple Store has different profit strategies for its own apps and those from other developers. With the development market concentration and vertical integration of platform business, platform enterprises may abuse platform management power more and more to enhance economies of scale and reap the benefits of network effect.

Digital platforms will amplify irrational customer behavior through the use of big data. Consumer psychological bias plays a greater role in the establishment of platform data monopolies, and customers are more likely to be induced by Internet platforms

and unable to make the best choices. The platform can influence customer behavior through its dominant position to strengthen its monopoly position. Jamie, L., and Jacob, L. S. (2021) found that “dark mode” is common on Internet platforms [9]. That is, Internet platforms deliberately confuse user choices in the user interface, making it difficult for users to express their actual preferences, or manipulating users to take certain actions. According to the reality of platform development, numerous shopping platforms encourage clients to shop by using various strategies including promotion. Information platforms and similar entities keep pushing users with the content they find interesting, creating an influence known as an “information vacuum”. There are platforms that leverage big data to analyze user behavior, which makes consumers reliant on and addicted to the platforms’ services and content. This demonstrates how the platform’s data monopoly has had a significant negative impact on users and the need for additional regulation.

### 3.2 New Challenges to Monopoly Governance in Internet Platforms

#### (1) Traditional path to recognition of market dominance blocked.

Market dominance is a key metric for assessing the presence of monopolistic behavior. Static methods of determining market dominance based on market share, price, and profit margins make it difficult to respond effectively to dynamic data competition. [2] This is a result of the intense secrecy and deception of Internet platform companies over commodity pricing (Feng Wang, 2021). They often use asymmetric information to manipulate consumer perceptions in order to obtain excess value, followed by control of pricing power. For example, online e-commerce companies have recently been found guilty of “big data killings” and creating fake offers on special occasions. However, due to the rapid mergers, joint ventures, part-time operations, and market penetration of Internet platform companies, market boundaries are blurred, and it is difficult to define its market dominance.

#### (2) Controlling the severity of antitrust laws is challenging.

Recognizing novel monopolistic activities is challenging, as is using conventional industry experience or widely used methods to predict the effects of such practices. On the one hand, [1]anti-monopoly regulation will affect how the market functions, reduce the efficiency of resource allocation, and lead to an unfair distribution of social welfare surpluses if the particularity of monopoly conduct under the new business form and model is ignored. That is, a “one size fits all” strategy by itself is not enough to solve the problem. On the other hand, allowing monopolistic behavior to flourish unchecked can lead to anarchic competition and harm consumer interests.

#### (3) Difficulties with the application of regulatory penalties.

The rule also mainly adopts pre-approval or filing, in-proces, and post-event supervision. The preliminary supervision is exhausted, and its effectiveness is constrained by the entry of many merchants, the normalization of cross-border innovation, and the prevalence of multi-platform operations. The administrative department must take action when a particular platform company or a particular type of platform company experiences

difficulties, although the preferred method is to use interviews to temporarily suspend the development of adverse public opinion. Some administrative interference indicates a lack of legal support; the “movement” of law enforcement is strongly colored. However, [3] most of the regulatory tools currently in use are post-facto penalties, particularly the passive approach that relies mainly on administrative sanctions (Marina Anisimova et al., 2021). Not only is it useless to punish the offender, but it is also challenging to convince others that the market’s self-evolving mechanism makes sense. It is simple to create ineffective regulation and even negatively impact the standing and reputation of the competent authorities by simply relying on the existing powers and tools of the regulatory authorities to manage a significant number of market irregularities.

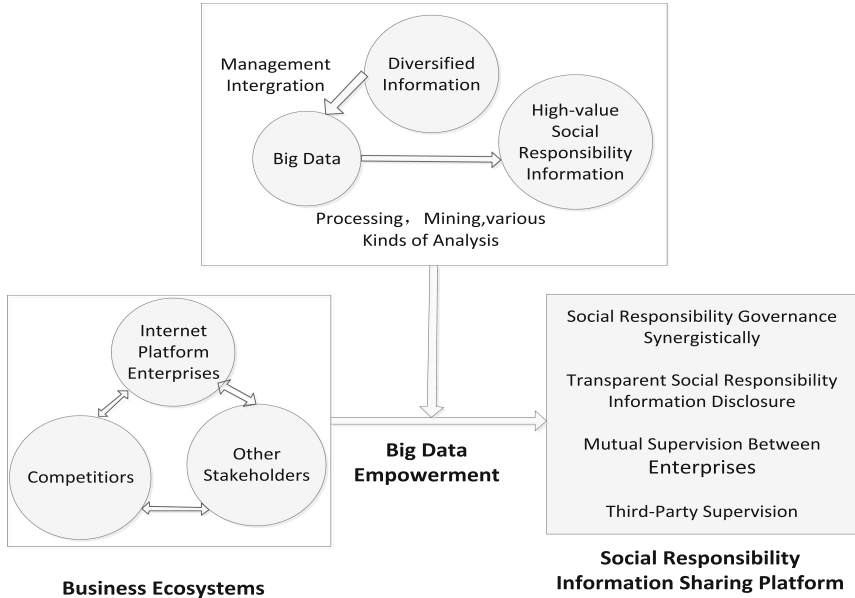
## **4 Implementation Path of Internet Platform Monopoly Governance**

### **4.1 Establishment of a Multi-governance Model Under a Systemic Concept**

Not only does the government need to act to manage the monopoly of the platform, [5] but it also needs to develop a multi-body, multi-dimensional, multi-level, multi-factor multi-governance concept and model that fully engages the platform, users, and other multiple topics in the governance of the platform (Gu, 2020). The platform’s external circle is composed of law enforcement, legal institutions, and social organizations, while its internal circle is composed of platform companies, customers, and merchants. Therefore, it is important to break down the barriers of the industry and reasonably delineate the boundaries of responsibility according to the services and content provided by the platform. Clarifying the legal status and civil, administrative, and criminal obligations of the Internet platform, providing it with appropriate governance rights, and realizing the connection between the new economy and China’s laws are necessary for a reasonable definition of responsibility boundaries. To establish a link between platform competition and the expansion of social welfare in general, the line of responsibility between platforms and platforms should be made clear. Clarify the responsibility boundary between platforms and non-platform enterprises, involving the definition of monopoly and the protection of the rights and interests of non-platform enterprises, to achieve synergy between the new economy and the traditional economy. Establish clear lines of accountability between platforms and users, recognize how platform growth and user needs are interconnected, and establish a fair and orderly business environment shown in Fig. 3.

### **4.2 Encourage the Development of a Talented Team in Accordance with Supervision Requirements**

The development of a talent team is essential to identify the anti-monopoly activities of platform economies, as well as to solve the theoretical anti-monopoly dilemma and encourage regulatory innovation. First, expand the platform economy by building an anti-monopoly talent team. A regulatory team suitable for the development of the platform economy should be established based on the anti-monopoly experience of the traditional industrial economy, using the scale of the development of the digital economy and the number of platform enterprises in different provinces as reference standards. [3] This will



**Fig. 3.** Multi-Governance Model of Platform Monopoly in the Context of Big Data Empowerment

ensure that the regulation of the platform economy moves from individual supervision to global supervision (Marina Anisimova et al., 2021). Second, build a team of supervisory experts in various anti-monopoly areas of platform economics. The anti-monopoly talent team provides effective regulatory services by identifying the causes of monopolies. The formation of an academic committee and an anti-monopoly expert committee for the platform economy. The development of a regular expert panel and academic committee, relying on high-end talents from all kinds of backgrounds in the anti-monopoly platform economy, gives full play to the arbitrary initiative of the expert team.

**4.3 Enhance Industry Standards for Internet Platforms**

[6] Enhancing the criteria for considering relevant markets is necessary to adjust to the rapid growth of the Internet and the digital economy (Lin, et al., 2022). First, [7] using the conventional approach of measuring market share based on sales is challenging due to the free operation mode of Internet platform operators (Yun, John M., 2018). Based on relevant international best practices and the current situation in China, we can consider adding new criteria when identifying relevant markets, such as user base, data scale, network effects, and mastery of essential facilities. Secondly, it is challenging to identify the relevant market due to the rapid and innovative growth of Internet platforms and the constantly shifting boundaries between different products. To address this situation, we might consider setting a time limit when identifying the relevant market and judging the relevant market within that time frame, which could significantly increase the certainty of the judgment results.

#### 4.4 Optimize Governance Effect by Intelligent Monitoring of Public Opinion

Responding to the economic anti-monopoly governance effect of the platform, it is necessary to switch from routine administrative communication to intelligent public opinion monitoring. In addition to opening up data levels and barriers in all aspects of operations, finance, taxation, and logistics, it also requires the establishment of standard anti-monopoly investigation, evaluation, identification, and punishment procedures. Modern technology must also be used to promote innovation and the development of intelligent regulation. [11] Realize effective data resource sharing between government, business, industry, and individuals over time and aggressively create a dual system of “modern intelligent surveillance + anti-monopoly team building” (Singh et al., 2020). In addition, it is important to actively supervise enterprises, encourage platform enterprises to use digital technology to manage the platform economy, promote the flexible application of social network scientific methods, text sentiment analysis, and real-time data monitoring on platform anti-monopoly, and achieve continuous optimization and improvement of the anti-monopoly governance impact of platform enterprises.

## 5 Conclusion

The regulation of Internet platform monopolies must be addressed immediately as the factors that lead to platform monopolies become more complex. These factors include the development of centralized networks, the facilitation of emerging information technology, and the impact of multilateral markets. This paper proposes a system for monitoring diversified Internet platform monopolies in conjunction with China’s experience with monopoly governance. It also creates an innovative anti-monopoly enforcement mechanism and devalues the significance of the relevant market definition and measurement of market power. This article, which is based on digital technology, makes some recommendations for boosting cooperation in anti-monopoly regulation, stimulating the development of talent teams, and raising market standards for Internet platforms. It provides theoretical support for promoting the healthy growth of China’s Internet platform economy.

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## References

1. Mao T, Zhang X Y. Platform monopoly and regulatory measures[C]//7th International Conference on Humanities and Social Science Research (ICHSSR 2021). Atlantis Press, 2021: 776–779.
2. Wang F. China’s Regulatory Framework for Dynamic and Personalized Pricing in the Digital Economy[J]. *Int’l J. Soc. Sci. Stud.*, 2022, 10: 1.

3. Anisimova M, Ruchkin A, Kot E, et al. Antitrust regulation as a stimulant innovation processes in the agricultural sector[C]//E3S Web of Conferences. EDP Sciences, 2021, 282: 07007.
4. Li J, Gao S. Platform Economy and Internet Platform Monopoly[J]. BCP Bus. Manag, 2021, 13: 160-163.
5. Zongwen G. Anti-Monopoly Regulation of Internet Enterprise Merger-Under the View of Rule of law[J]. Academic Journal of Humanities & Social Sciences, 2020, 3(1): 133-145.
6. Lin H, Feng X, Wu D, et al. Legal Governance of Internet Platform Monopoly Based on Big Data Analysis: A Review of Alibaba Case[J]. Mobile Information Systems, 2022, 2022.
7. Yun J M. Understanding google's search platform and the implications for antitrust analyses[J]. Journal of Competition Law & Economics, 2018, 14(2): 311-329.
8. Zhen Y, Jin C. Innovation and Governance of Corporate Social Responsibility in the Digital and Intelligent Era[J]. Journal of Shanghai University of Finance and Economics, 2020, 22(06): 33-51.
9. Luguri J, Strahilevitz L J. Shining a light on dark patterns [J]. Journal of Legal Analysis, 2021, 13(1): 43-109.
10. Zhou G, Chen K. Use Big Data+ Internet Thinking to Solve the Problem of Data Governance[C]//Journal of Physics: Conference Series. IOP Publishing, 2019, 1302(2): 022092.
11. Singh P, Dwivedi Y K, Kahlon K S, et al. Smart monitoring and controlling of government policies using social media and cloud computing[J]. Information Systems Frontiers, 2020, 22: 315-337.

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