

Policy Research on Promoting the Development of Internet Platforms from the Perspective of Policy Tools

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Abstract

As a new mode of digital economic development, Internet platform has become an important grasping hand to promote the construction of a new development pattern, governments at all levels have promulgated a series of targeted policies. Taking the Internet platform policy as the research object in 2015-2020, the two-dimensional analysis framework of the development link of the network platform is constructed. The study found that since 2015, the annual volume of relevant policies is more stable and more and more inclined to multi-subject joint text distribution; To be able to introduce different support policies for Internet platforms of different nature; It is possible to make comprehensive use of supply-oriented, environmental and demand-based policy tools, but there are problems of uncoordinated use; It can start from the development of network platform and use policy tools in a targeted manner, but it lacks continuity.

Keywords

Internet Platform; Policy Tools; Network Platform Development Links; Text Quantitative Analysis.

1. INTRODUCTION

Internet Platform is a digital form of information technology service enterprise that promotes interaction between supply and demand groups with different elements, also known as online platforms or internet providers. Internet platforms can be divided into two types: one is commercial internet platforms. This type of internet platform often adopts a "free+paid" business model, where the purpose of free is to attract users to enter the platform while paying is to achieve profitability; The other type is social attribute internet platforms, which are hosted by the government and mostly adopt a free operating model, and do not provide services to the public for profit. In recent years, the number and scale of both types of platforms have been rapidly expanding, which has also sparked a series of risk suspicions. As an important subject of effective platform governance, the government must strictly examine its characteristics, development stages, and various demands, and increase policy guidance, support, and regulatory efforts.

For both individuals and businesses, internet platforms have rapidly developed into the central point of daily life. The current research on internet platforms mainly focuses on four aspects: firstly, research on platform regulation, mainly exploring how internet platforms transition from an unregulated state to a regulated state. In the old era, participants in cyberspace were addicted to "liberalism" and "anarchy", but the term "cyberspace" originally

meant control. With the rapid growth of user numbers and the continuous emergence of development issues, many of the "freedoms" that online platforms initially possessed will be subject to government regulation and constraints. The second is the research on the development strategy of the platform. Internet companies should clarify the positioning of intermediary platforms, and promote the circulation of goods and value creation by building channels for the mutual connection and transaction between the supply and demand sides of consumer goods. Fan Xiaoming et al. empirically analyzed the impact of platform multi ownership strategies on merchant performance based on resource dependence theory. Research has pointed out that multi ownership strategy is a business strategy for selecting multiple internet platforms and an important way for businesses to achieve performance. Thirdly, from the perspective of antitrust research, the large-scale evolution of online platforms has led to a series of negative effects such as data abuse and competition restrictions, making them the targets of antitrust law enforcement. Liu Yun believes that the anti monopoly goals of online platforms should have three characteristics: phased, standardized, and pragmatic; Kong Xiangjun believes that the anti monopoly goals of China's internet platforms should not be singular, but should reflect the characteristics of diversity. The combination of politics, policy, and the rule of law is crucial. Fourthly, research from the perspective of policy reform. Frick proposed a policy reform proposal to replace the platform's self-regulation model with a joint supervision model combining Command and control supervision and self-regulation in view of the evolution of the Internet platform's regulatory model; Wu Qingjun et al. put forward suggestions on labor policy reform to protect workers' labor security rights, work autonomy, Collective bargaining rights and emphasize equal rights and obligations in response to the lack of protection of workers' rights and interests in the employment market on the Internet platform, but there is still a gap between the formation of a mature reform plan.

From this perspective, there is relatively rich research in the domestic academic community on the differences in the attributes of current internet platforms, changes in regulatory status, possible multi attribute strategies for enterprises entering, antitrust goals, and policy reform explorations. However, there is relatively little research on policies to promote the development of internet platforms, especially what kind of internet platform policies can maximize their effectiveness, There is even less research on the shortcomings of current support policies that combine effective markets with promising governments and how to improve them. Based on this, this article conducts a textual quantitative analysis of policies related to internet platforms from 2015 to 2020, in order to provide reference for the construction and improvement of the overall policy system of internet platforms.

2. POLICY ANALYSIS FRAMEWORK AND RESEARCH DESIGN

2.1. Analysis framework from the perspective of policy tools

The theory of policy tools emerged in the 1980s. In the past decade, academic interest in political tools has reignited. Scholars have pointed out that the selection of policy tools is crucial for policy formulation, and the combination of policy tools can affect the effectiveness of policy implementation. Different researchers divide policy tools into different types based on their own understanding of them. Arno š T Vesel ý By summarizing existing experience, the autonomy of policy tool selection is proposed, which means that people's judgment of policy tools plays an important role in the selection of policy tools. From the current research, there are numerous categories of policy tools that have high selectivity. According to the degree of government intervention in the provision of public goods and services, policy tools are divided into voluntary, mixed, and mandatory types by Howlett and Ramesh; Schneider and Ingram classified policy tools into authoritative, motivational, capable, persuasive, and learning types based on policy implementation methods. As the target of policy tools, Internet platforms are

more suitable for the analytical framework of supply, demand and environmental policy tools proposed by Rothwell and Zegveld .

2.1.1 X-Dimension: Policy Tools

According to the network analysis framework proposed by Roswell and Zegveld based on the impact of policy tools on the target system, this paper divides policy tools into three types: supply type, demand type and environmental type (see Figure 1). Among them, supply oriented policy tools have a driving effect on the development of internet platforms. It refers to the government increasing its support for the platform through measures such as financial investment, talent cultivation, and provision of functional services, supporting the platform in improving its management level and creating more value; Demand-based policy tools have a driving effect on the development of internet platforms. It refers to the government promoting the application of internet platforms in various industries by purchasing technology or services from internet platform enterprises. And encourage the platform to expand talent introduction channels through investment or other means, thereby improving the efficiency of platform promotion and service provision; Environmental policy tools have a protective effect on the development of internet platforms. It refers to the government creating a favorable environment for the development of internet platforms through development planning, tax incentives, and other policies, thereby indirectly promoting and ensuring the development of internet platforms.

2.1.2 Y-dimension: Network platform development link

Internet platforms have different policy needs in different stages of development, therefore the corresponding types of policy tools vary. In the platform development stage, the lack of funds, technology, and supporting facilities often delays the development process, leading to the loss of opportunities and waste of resources. At the same time, the government approval process in the platform development process is relatively cumbersome, so it is necessary for the government to provide functional services as a "green channel". Based on this, supply oriented policy tools are more useful in the platform development stage; In the stage of platform commercialization promotion, environmental policy tools such as tax incentives and financial support are more useful; In the stage of platform market expansion, in addition to preferential policies provided by the government, cooperation between the platform and government functional departments, such as government promotion, government procurement, and other demand oriented policy tools, is more useful. Based on the above discussion, the development of internet platforms is divided into three stages: platform research and development, commercialization promotion, and market expansion, and a two-dimensional analysis framework is constructed (see Figure 2).

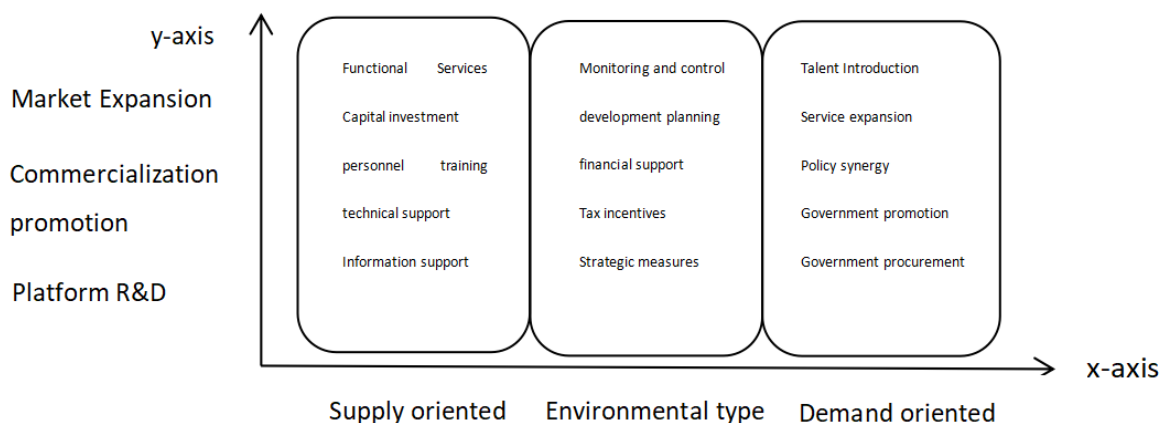


Figure 2. 2D Analysis Framework for Internet Platform Policies

2.2. Internet Platform Policy Text Selection and Coding

2.2.1 Policy Text Selection

Table 1. Statistical Table of Internet Platform Policies from 2015 to 2020

Time	Policy type	number	Representative documents	
			Issuing unit	Policy Name
2015	Opinion type	9	10 departments including the People's Bank of China	Guiding Opinions on Promoting the Healthy Development of Internet Finance
	Notification class	3	National Taxation Bureau	Notice on Printing and Distributing the "Internet plus Tax" Action Plan
	Planning	2	the State Council	National Informatization Plan for the 13th Five Year Plan
2016	Opinion type	9	7 departments including the People's Bank of China	Implementation Opinions on Financial Assistance in Poverty Alleviation
	Notification class	1	People's Government of Xinjiang	Notice on Fully Implementing Online Approval for Investment Projects
	Method class	1	Seven departments including the Ministry of Transport	Interim Measures for the Administration of Online Booking Taxi Business Services
	Planning	1	the State Council	13th Five Year Plan for Market Regulation
2017	Opinion type	8	9 departments including the Ministry of Transport	Guiding Opinions on Encouraging and Regulating the Development of Internet Rental Bicycles Regarding the impact of internet platforms and various trading venues
	Notification class	1	Special rectification of internet financial risks Work Leadership Group Office	Notice on Cooperation in Engaging in Illegal and Irregular Business to Carry out Cleaning and Rectification
	Legal category	1	The Standing Committee of the National People's Congress	Law of the China on the Promotion of Small and Medium sized Enterprises
	Planning class	1	Ministry of Civil Affairs	Action Plan for "Internet+Social Organizations (Social Work, Volunteer Services)"
2018	Opinion type	6	19 departments including the National Development and Reform Commission	Guiding Opinions on Developing a Stable Digital Economy and Expanding Employment
	Notification class	4	Ministry of Industry and Information Technology	Notice on Issuing the Implementation Plan for the Cultivation Project of Industrial Internet APP
2019	Opinion type	9	12 departments including the Ministry of Commerce	Guiding Opinions on Promoting Commodity Trading Market and Developing Platform economy
	Notification class	3	Ministry of Industry and Information Technology, China Development Bank Ministry of Industry and Information Technology, Emergency Management Department	Notice on Accelerating the Promotion of Industrial Energy Conservation and Green Development
	Planning class	1	Technology, Emergency Management Department	Industrial Internet+Safety Production Action Plan
2020	Opinion type	8	23 departments including the National Development and Reform Commission	Implementation Opinions on Promoting Consumption Expansion and Quality Improvement, Accelerating the Formation of a Strong Domestic Market
	Notification class	4	Ministry of Industry and Information Technology	Notice on Accelerating the Development of Industrial Internet

On July 4, 2015, the State Council issued the Guiding Opinions on Actively Promoting the Action of "Internet plus", and more and more network platform enterprises began to emerge, forming an Internet Platform economy model with Chinese characteristics. Therefore, this article selects six complete annual internet platform policies from 2015 to 2020 as the research object for quantitative analysis of the text. Text data mainly comes from the law and regulation retrieval system in the Peking University's legal sense and magic weapon database, which retrieves normative documents on Internet platforms, Platform economy, e-commerce, new formats, smart cities and green credit issued by central ministries and commissions such as the State Council, the National Cyberspace Office, the Ministry of Science and Technology, and the Ministry of Industry and Information Technology, supplemented by normative documents issued by some provinces and municipalities directly under the Central Government, The relevant documents released by various provinces and municipalities directly under the central government also play a role in verifying the saturation of coding. When selecting policy texts, the following criteria are mainly considered: firstly, strictly comply with normative document standards, namely the "three unified" standards of unified registration, unified numbering, and unified publication; The second is that the document is still in its validity period at the current stage, and whether it is valid is indicated in the retrieval system; Thirdly, it is closely related to internet platforms and provides a certain amount of textual explanation in the document.

Finally, 72 valid texts were compiled, including 47 documents issued by various national ministries and 25 documents issued by provinces and municipalities directly under the central government (see Table 1).

2.2.2 Policy Text Coding

According to the selected policy text and based on Grounded theory coding technology, the relevant clauses in each policy are taken as a content analysis unit. Sort according to the time of publication, with the latest issue numbered 1, and so on. For the content in the policy text, number it according to the "serial number - chapter - specific terms" and generate a table of policy text content analysis unit numbers (see Table 2).

Table 2. Table of Unit Numbers for Policy Text Content Analysis

Serial Number	Policy Name	Content Analysis Unit	number
1	Industrial Internet+Safety Production Action Plan	2.1.14 Build an industrial internet platform for key industries, develop a safety production model library, toolset, and industrial APP, and cultivate a group of industry system solution providers and service teams.	1-2-1-14
2	Opinions on Accelerating the Development of New Consumption with New Business Forms and Models	5. Support internet platform enterprises to extend and expand offline, accelerate the digital transformation and upgrading of traditional offline business formats, develop personalized customization and flexible production, promote efficient integration of online and offline consumption, collaborative linkage of large and small enterprises, and integrated development of the entire upstream and downstream chain.	2-5
72	Implementation Opinions on Deepening the Development of Industrial Internet	3.4 Accelerate the cultivation and introduction of a group of high-end composite talents based on the development needs of the industrial internet industry.	72-3-4

Note: Due to space limitations in this article, the numbers "3-71" are omitted

2.3. Statistical Results of the Application of Policy Tools on Internet Platforms

By conceptualizing and Abstraction the specific terms in the policy text, six supply type policy tools are obtained, which are functional services, capital investment, talent training, technical support, information support and supporting facilities construction; Five environmental policy tools were identified, including monitoring and control, development planning, financial support, tax incentives, and strategic measures; There are five demand based policy tools, namely talent introduction, service expansion, policy collaboration, government promotion, and government procurement. Furthermore, a two-dimensional analysis framework is constructed as shown in Figure 2, and a policy tool frequency statistical table is drawn through frequency statistics (see Table 3). Through frequency statistics, it can be seen that many policy clauses use three policy tools: supply based, environmental based, and demand based. This indicates that the government's support for internet platforms is multi-channel and parallel, guiding and regulating the healthy development of internet platforms from the top-level design.

Table 3. Frequency Statistics of Policy Tools on Internet Platforms

Tool Type	Tool Name	Policy Unit Code	frequent and continuous	frequency	amount to
Supply oriented	Functional Services	8-1-1, 8-4-3, 28-2, 31-3-1, 32-3-1, 39-4-1, 48-14	7	4%	30%
	Capital investment	13-2-3, 26-3-6-2, 32-3-3, 34-3-2, 36-4-2, 39-4-2, 54-4-4, 67-2, 63-4-3, 64-3-2, 68-3, 70-3-2, 71-5-2, 72-3-3	14	8%	
	personnel training	28-26, 31-4-6, 39-3-6, 40-5-4, 55-9, 63-4-5, 64-3-3, 65-27, 70-3-3, 71-5-4, 72-3-4	11	7%	
	technical support	6-3, 12-2-1-1, 13-2, 39-3-3, 40-4-2	5	3%	
	Information support	8-4-2, 49-29, 53-36, 54-2-5, 55-3, 57-12, 65-21	7	4%	
	Construction of supporting facilities	28-20, 31-4-3, 31-4-5, 48-5, 48-6, 58-4	6	4%	
Environmental type	Monitoring and control	2-14, 3-12, 8-2-3, 17-1, 17-2, 17-4, 18-6-2, 27-44, 28-5, 28-7, 28-24, 30-2, 30-20, 43-1, 43-4, 44-1, 44-2, 45-2, 48-6, 48-12, 49-29, 49-30, 54-1-1, 66-4-5, 69-3-4, 70-3-4	26	16%	43%
	development planning	1-2-1-14, 8-3-2, 25-1-1, 28-22, 39-3-1, 47-9, 48-3, 48-7, 48-8, 50-9, 52-19, 58-4, 59-11, 62-4-2	14	8%	
	Financial support	5-5, 8-4-3, 9-17, 20-15, 28-25, 31-4-2, 32-3-2, 42-3-2, 46-4-2, 64-3-2, 65-27	11	7%	
	Tax incentives	13-2-3, 32-3-2, 39-4-2, 64-3-2	4	2%	
	Strategic measures	4-4, 5-2, 27-34, 30-10, 31-3-2, 31-4-1, 34-2-1, 39-3-5, 39-4-5, 44-4, 48-4, 48-10, 48-11, 48-13, 55-4, 56-5, 58-4, 60-12	18	10%	
Demand oriented	Talent Introduction	39-3-6, 40-5-4, 65-27, 67-9, 68-8, 70-3-3, 71-5-4	7	4%	27%
	Service expansion	2-5, 13-4, 26-3-4-2, 40-4-4	4	3%	
	Policy synergy	8-4-3, 48-4	2	1%	
	Government promotion	7-8, 8-2-5, 10-5-16, 11-3-1-2, 11-4-1-3, 14-2-1, 15-30, 16-3-16, 18-4-6, 19-3-4, 21-2-7, 22-2-6-2, 22-2-7-3, 23-2, 24-7, 26-2-1-3, 26-2-6-1, 26-2-9, 26-2-10-1, 26-2-11, 29-2, 35-2-1, 36-3-9, 37-2-6, 38-1, 38-2-2, 51-11, 61-4	28	17%	
	government procurement	11-4-1-3, 13-2-3, 33-5-4, 41-8-5,	4	2%	
amount to			168	100%	

Source: The author compiled the data based on two-dimensional distribution, and the results were taken as approximate values

3. POLICY ANALYSIS OF INTERNET PLATFORMS BASED ON POLICY TOOLS

3.1. Overall analysis

3.1.1 The annual publication volume of policy texts is relatively stable

Since the "Internet plus" initiative was proposed and promoted in 2015, many industries have carried out innovative attempts of "industry+Internet". The combination of the Internet and advanced manufacturing has formed the industrial Internet, promoting the optimization and transformation of traditional manufacturing industries; The Internet and healthcare industry have formed an Internet healthcare model and established a smart healthcare service system; The Internet plus Agriculture Internet agriculture model has achieved the intelligent and information-based development of China's agriculture, reshaping the traditional sales and circulation methods of agricultural products. Behind many attempts is the government's macro level support. Since 2015, although there have been fluctuations in the number of policy publications on internet platforms, the overall stability has been relatively stable (see Table 1). The stable policy issuance and implementation have given internet platform enterprises and entrepreneurs the confidence to strive. Based on specific policies, targeted platform construction and research and development are carried out, and commercial promotion is carried out with the support of government financial support and tax incentives, in order to save costs To achieve the creation of economic and social value for platform enterprises under the dual guarantee of risk reduction.

3.1.2 Policy text publishing units present multi subject characteristics

There are many entities that publish policies on internet platforms and many of them adopt the method of joint publication (see Table 1). The necessity of joint publication lies in the diversity of the fields involved in internet platforms, such as the Ministry of Transport's involvement in traffic safety issues and the Market Regulation Bureau's involvement in fee refund issues. The joint publication of multiple entities also reflects the promoting role of internet platforms as technical support for the overall development of the country. The State Council is the government agency with the highest frequency of issuing policies on internet platforms, providing the most policy support for the development of internet platforms. From the perspective of other publishing entities, departments such as the Ministry of Education, the Ministry of Civil Affairs, the Ministry of Finance, and the Ministry of Agriculture and Rural Affairs are actively trying to achieve two-way linkage with internet platforms and achieve the transformation of traditional industries through the internet. This trend has greatly promoted the application scope of internet platforms, promoting them to create greater social value and provide better and more convenient services.

3.2. Two dimensional analysis of internet platform policies

3.2.1 Policy tool dimensions

From Table 3, it can be seen that the policies issued by the government for internet platforms comprehensively utilize three types of policy tools: supply oriented, environmental oriented, and demand oriented. Among them, environmental policy tools account for the largest proportion, with a frequency of use of 43%; Supply oriented policy tools take second place, with a usage frequency of 30%; Demand based policy tools account for the least proportion, with a usage frequency of 27%. It can be seen that the government mainly uses environmental policy tools to ensure the development of internet platforms, but overall, the utilization rate of the three policy tools is relatively high, reflecting the support concept driven by the government's diverse and collaborative efforts.

Firstly, among supply oriented policy tools, the frequency of capital investment and talent cultivation is relatively high, at 8% and 7%, respectively. This indicates that in promoting the development of internet platforms, the government is more inclined to provide support by encouraging the construction of talent training systems and allocating special funds. The support for talent cultivation mainly includes the comprehensive implementation of talent policies, the overall promotion of the talent team construction of the Platform economy, the encouragement of colleges and universities to vigorously cultivate Internet professionals, and

the development of various industry university research cooperation with platform enterprises; The fund input support mainly includes making overall use of the existing special financial funds, supporting the construction and application demonstration of "Internet plus" related platforms. The government's expanded authority reflects the diligent and pragmatic governance philosophy, creating a harmonious policy environment for internet platforms.

Secondly, among environmental policy tools, the frequency of monitoring, regulation, and strategic measures is relatively high, at 16% and 10%, respectively. This indicates that the government tends to adopt a "carrot+stick" incentive policy in ensuring the development of internet platforms. "Carrot" refers to a series of strategic measures issued by the government, such as improving the Social Credit System and supporting platform enterprises to establish credit self-discipline organizations. The "Carrot" platform ensures the healthy development of technology, information, resources, and other development strategies. The "big stick" refers to the government's monitoring and control of internet platforms, such as investigating and punishing illegal activities in accordance with the law, and improving monitoring and tracing mechanisms. The "big stick" ensures the legitimate development of the platform, and requires the platform to follow the right and clear path from the legal and regulatory levels through punitive measures, in order to shape a good business environment and improve the quality and level of industry development.

Finally, government promotion has performed outstandingly in demand based policy tools, with the highest utilization rate, accounting for up to 17%. The high proportion indicates that in promoting the development of internet platforms, the government tends to contribute in a proactive and participatory manner. Government promotion refers to the government expanding the audience and scope of use of internet platforms by encouraging other industries to build or use internet platforms, or by relying on internet platforms to build information systems and share data.

3.2.2 Dimensions of Network Platform Development Links

This article is based on the starting point of research innovation, taking the network development process as the Y dimension, and adopting a three-step approach of platform research and development, commercialization promotion, and market expansion. Statistical analysis found that there are a total of 56 policy unit codes in the platform's research and development stage, accounting for 34% of the overall policy; There are a total of 68 policy unit codes in the commercialization promotion stage, accounting for 40%; There are a total of 44 policy unit codes in the market expansion stage, accounting for 26% (see Figure 3). From Figure 3, it can also be seen that the platform has a higher demand for supply oriented policy tools during the research and development stage, an higher demand for environmental policy tools during the commercialization promotion stage, and a higher demand for demand oriented policy tools during the market expansion stage.

Firstly, there are three basic requirements in the platform development stage: considering the need for funding for research and development costs; Considering the level of research and development that requires technology; Considering the need for talent in research and development capabilities. From the perspective of supply oriented policy tools, capital investment, talent cultivation, and technical support effectively compensate for the three major shortcomings of internet platform enterprises in terms of capital, talent, and technology, thereby promoting the development of internet platforms.

Secondly, in the stage of commercialization and promotion, from the perspective of environmental policy tools, tax incentives help the platform save promotion costs; Development planning helps to clarify development goals; Financial support includes two aspects: first, the government encourages financial institutions to innovate and develop financial products and services that meet the financing needs of enterprises related to the Platform economy; second,

it encourages the platform itself to carry out financial services, such as online banking, online insurance, online fund sales, online consumer finance and other financial businesses. Financial support helps to address the financing needs of the platform; The most important thing is monitoring and regulation, which helps to protect the basic rights and interests of consumers, standardize the development means of platform enterprises, and thus ensure the healthy development of Internet platforms in the stage of commercialization and promotion.

Finally, in the stage of market expansion, the rapid development of enterprises makes talent cultivation speed unable to keep up with talent demand. From the perspective of demand oriented policy tools, talent introduction strategies can help enterprises quickly acquire high-quality talents; Government promotion, service expansion, and government procurement help to increase the platform's customer base and expand its scope of use; The importance of policy coordination plays an important role in cross regional expansion. The government will strengthen policy communication by promoting domestic and international exchanges and cooperation in Platform economy regulation and services, which will help create good external conditions for platform enterprises to go global.

y-axis ↑				
Market Expansion	28-26, 32-3-3, 39-4-1, etc	13 items such as 8-2-3,31-4-2,67-2, etc	23 items such as 8-4-3, 41-8-5, 68-8, etc	44 articles in total
Commercialization promotion	12 items including 8-1-1,70-3-3,72-3-4 . etc	45 items including 4-4, 31-3-2, 69-3-4, etc	11 items such as 2-5,16-3-16, 71-5-4	A total of 68 articles
Platform R&D	Articles 6-3, 8-4-3, 39-3-3, etc.	21 items such as 1-2-1-14, 27-34, 71-5-2. etc	13 Articles 7-8, 23-2, 70-3-3, etc	56 articles in total
	Supply oriented	Environmental type	Demand oriented	x-axis →

Figure 3. 2D Analysis of Internet Platform Policy Tools

4. CONCLUSION AND SUGGESTIONS

4.1. Research Conclusion

After conducting a textual quantitative analysis of policies related to internet platforms, the following conclusions are drawn:

(1) From the perspective of policy tools, the government's policy support for internet platforms comprehensively utilizes three types of policy tools: supply oriented, demand oriented, and environmental oriented. The adoption of cross use support means of various policy tools reflects the high scientificity and Empathy of government decision-making. At the same time, research has found that governments have different emphasis on the selection and use of policy tools. From the text analysis and statistical table data, it is more inclined to use government promotion to drive development, monitoring and control to ensure development, and capital investment to promote development. From a specific context perspective, the different emphasis on policy support for commercial and social internet platforms is due to different considerations of the nature of the platform, which is a control strategy that is specifically analyzed for the government's specific situation. Taking monitoring and regulation

as an example, the promoting effect of platform multi ownership strategies on merchant performance indicates the harmfulness of platform "two choices". However, in real life, the phenomenon of "two choices" is repeatedly prohibited, which stems from the profit seeking nature of commercial platforms. Therefore, the government focuses on using monitoring and control measures for commercial internet platforms, with the aim of regulating the legitimacy of platform development.

(2) From the perspective of the development of internet platforms, the government's policy support for internet platforms comprehensively considers the policy needs of platform research and development, commercial promotion, and market expansion. Internet platforms have different needs for policy support in different stages of development, and the government's different considerations of the platform's development stage when issuing policies can help improve the pertinence and effectiveness of policy support. Commercialization promotion is in the middle stage of platform development, and is an important part of realizing the value transformation of platform enterprises' research and development achievements. It is also a solid foundation that platform enterprises must establish before entering the stage of market expansion. The number of platforms in the commercial promotion stage is relatively large, and environmental policy tools are also the most commonly used in policy support. At the same time, the demand for policy tools in different development stages of online platforms is not singular. Due to the special technical and economic attributes of the Internet platform and the massive investment of funds, many development problems such as "Big data killing", Data breach and disorderly expansion have arisen in the stage of market expansion [19]. For comprehensive internet platforms with a wide range of services and a large user base, preventing their barbaric growth, guiding their contribution to social value, and valuing the fundamental interests of users are crucial. Therefore, environmental policy tools also need to be constrained by monitoring and regulation.

(3) From the perspective of promoting the sustainable development of internet platforms, the government's policy support for internet platforms still needs improvement. From a quantitative perspective, although the number of policies issued in each year is relatively average, the overall quantity is relatively small; From the perspective of legal effectiveness, the majority of policy texts issued by the government are based on opinions, and the legal effectiveness of opinions is relatively low compared to laws, regulations, and rules, so the scope of application is relatively small; From the perspective of sustainability, the use of policy tools such as talent introduction, policy coordination, technical support, and information support has not been continuously promoted, and these aspects have important value for the development of the platform; From the perspective of specific implementation, the comprehensive reflection of policies from top-level design to practical scenarios is not sufficient.

4.2. Policy recommendations

(1) Expand the application of supply oriented policy tools and fully leverage their driving role. Supply-based policy tools have a more direct promotion effect on the early stage of platform development. Although most of China's internet platforms are in the stage of commercial promotion and market expansion, there are still many emerging internet platforms emerging. For example, industrial internet platforms have shown initial advantages in data intelligence, but the constraints of high investment costs, long return cycles, and lack of core technology have left many enterprises still in the investment stage. To promote its development, it is necessary to increase policy support for such platforms, such as funding and technology. At the same time, during the period of platform promotion and expansion, it is also inseparable from the promotion of supply oriented policy tools such as talent cultivation and functional services. Especially as the primary productive force, the support for talent cultivation must be given top priority.

(2) Improve the optimized combination of environmental policy tools and fully leverage their protective role. Environmental policy tools have dual attributes of encouragement and rectification. Only encouragement without rectification can lead to disorderly development, and vice versa can lead to development suppression. The development of things has two sides, and the government needs to see this essence clearly. Therefore, while strengthening monitoring and control, it is also necessary to provide policy support such as tax incentives as comfort. The use of environmental policy tools needs to be optimized to fully leverage the dual effects of protection and regulation. Specifically, tax incentives need to expand their coverage and deepen their intensity, and development planning needs to be more detailed and practical, that is, not to set high goals or cultivate a culture of slackness.

(3) The structural characteristics of balanced demand oriented policy tools, fully leveraging their driving role. From the perspective of the use of demand based policy tools, the government has the highest promotion utilization rate, while talent introduction, service expansion, government procurement, and policy synergy utilization rates are all relatively low. The importance of government promotion cannot conceal the advantages of other policy tools. In today's globalized economy, the issue of how to go global should be given top priority, such as policy coordination. For internet platforms, going global means walking with dignity, entering foreign markets with high quality and standards, and walking with safety. They cannot enter policy forbidden areas. Policy synergy helps to achieve consistency in the domestic and international market policy environment, incentivize platform enterprises to develop international operations, provide services to more users in different regions, and further enhance their influence.

REFERENCES

- [1] Computer Law & Security Review Parasol; Max- 《The impact of China\'s 2016 Cyber Security Law on foreign technology firms, and on China\'s big data and Smart City dreams》 -2017
- [2] 《World Intelligent Congress (WIC2018)》 -2020
- [3] Wang, Jiazhuo G.; Xu, Hongwei; Ma, Jun; Zhang, Yexia; Chen, Zhi- 《Financing from Masses || The Policies and Regulations of Crowdfunding Industry》 -2018
- [4] 《5g network, data center What will the new infrastructure change? | jqknews》 -2020 《100 FAQs about Shanghai's 28 Policy Measures》 -2020
- [5] Food Control Lijie Yang; Yongzhong Qian; Chen Chen; Fang Wang- 《Assessing the establishment of agro-food control systems based on a relevant officials' survey in China》 -2012
- [6] Jiang, Chunxia; Yao, Shujie- 《Chinese Banking Reform || 》 -2017
- [7] Capital Markets Law Journal You; Chuanman- 《Recent Development of FinTech Regulation in China: A Focus on the New Regulatory Regime for the P2P Lending (Loan-based Crowdfunding) Market》 -2018
- [8] 《Introducing VeChain's Drug and Vaccine Traceability Solution | VeChainThor Blockchain》 -2020
- [9] 2019 3rd International Conference on Computer Engineering, Information Science and Internet Technology (CII 2019) Jianqiang Li- 《Hash Algorithm Optimization for Long-span Digital Currency Transactions based on Multi-constraint Optimization》 -2019
- [10] 《New infrastructure construction deployment is to bring opportunities and transformation to chemical industry in China - Industry Insights - Chemical information》