

Research on the Policy Text of Makerspace Space Based on Nvivo: Taking Zhejiang Province as an Example

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ABSTRACT

Taking Zhejiang Province's maker space policy as the research object, with the help of nvio software, through the selection of samples, word frequency statistical analysis and coding analysis, the maker space development factor model is constructed. In view of the lack of supporting service system for policy implementation in the construction process of maker space, the government pays more attention to manufacturer space development policy than to efficiency. Finally, the paper proposes to establish a policy supporting service system to improve the service effectiveness of maker space.

Keywords: *Maker space, Policy, Qualitative research, Grounded theory.*

1. INTRODUCTION

Policy is the basic tool of governing the country, and public policy is the main means for the state and government to realize their functions. [1] In order to comply with the new trend of mass entrepreneurship and innovation, and further play its supporting role in the national economic development, the State Council of China formulated the document "guidance on the development of mass entrepreneurship space to promote mass innovation and entrepreneurship" in March 2015, which officially kicked off the construction of mass entrepreneurship space. In order to further improve the service level of maker space and promote the new normal development of China's economy, the State Council of China formulated the document "opinions of the State Council on promoting the high-quality development of innovation and entrepreneurship and creating the upgraded version of" entrepreneurship and entrepreneurship "in September 2018, and maker space construction officially entered the high-quality development stage. Driven by the strategic decision-making of innovation driven development in China, provincial governments have successively issued a series of policies to accelerate the development of mass innovation space in various regions and improve the service quality of innovation and entrepreneurship.

In recent years, the research on maker space policy has gradually become a hot topic of government decision-making departments and academia. Different scholars interpret and analyze the maker space policy from different perspectives. Based on the three-dimensional perspectives of policy tools, value attributes and life cycle, Cui (2019) constructs the policy analysis framework of maker space, and points out that the policy system should pay more attention to the coordination and moderation of policies, and pay more attention to the suggestions of stimulating market vitality. [2] From the perspective of policy tools, Xu (2019) used quantitative research method to analyze 159 public innovation space policy documents according to the research idea of policy type policy time regional city. [3] Professor Lei (2017) used the content analysis method to make a quantitative analysis on the policies related to supporting the development of maker space in Shanghai [4]. Wang (2019) studied the local policy of maker space in Shanghai from the perspective of dependent multi-layer network, formed the supply framework of maker space, and put forward policy suggestions for the development of maker space in Shanghai. Based on the grounded theory, this paper adopts qualitative research method, with the help of nvivo11 qualitative analysis software, through the analysis of 30 policy texts of Zhejiang maker space, summarizes and summarizes continuously, and finally summarizes seven core concepts. On this basis, it

constructs the maker space development element model and discusses each element. The relationship between them can provide theoretical support for the follow-up research.

2. SELECTION AND STATISTICAL ANALYSIS OF POLICY TEXTS

The selected texts of Zhejiang maker space policy are all from public data, which are mainly obtained from the official websites of Zhejiang Provincial People's government, PKULaw and the platform for collection,

Table 1. Zhejiang maker space policy document

No.	Policy document name	Date of publication
1	General office of the Zhejiang Provincial People's government "Implementation Opinions on accelerating the development of maker space and promoting entrepreneurship and innovation"	2015
2	Zhejiang Provincial People's government's "Implementation Opinions on vigorously promoting mass entrepreneurship and innovation initiative"	2015
3	General office of the Zhejiang Provincial People's government "Implementation Opinions on accelerating the development of science and technology service industry"	2015
4	General office of the Zhejiang Provincial People's government "Notice on printing and Distributing" three years growth plan for small and micro businesses "(Zhejiang 2015 to 2017)"	2015
5	Zhejiang Provincial People's government's "Opinions on further promoting the steady and innovative development of the province's economy"	2015
6	Zhejiang Provincial People's Government "Opinions on Supporting Mass Entrepreneurship and Promoting Employment"	2015
7	General Office of Zhejiang Provincial People's Government "Implementation Opinions on Promoting Innovation and Entrepreneurship Education in Higher Education Institutions"	2016
8	General Office of Zhejiang Provincial People's government "Opinions on vigorously promoting agricultural science and technology innovation and entrepreneurship"	2016
9	Zhejiang Provincial People's government "Notice on printing and accelerating the construction of the" Internet plus "action plan for the world's technological innovation heights"	2016
10	Zhejiang Provincial People's government's "Implementation Opinions on promoting high quality development of innovation and entrepreneurship and creating an upgraded version of" entrepreneurship and innovation"	2019
11	General Office of Zhejiang Provincial People's government "Implementation Opinions on comprehensively optimizing the construction of development zones, promoting the deepening of reform, opening up and innovative development of development zones"	2018
12	General Office of Zhejiang Provincial People's government "Implementation Opinions on innovating investment and financing mechanism in key areas and encouraging social investment"	2015
13	General Office of Zhejiang Provincial People's government "Opinions on Further Strengthening the construction of technology market system and promoting the transformation and industrialization of scientific and technological achievements"	2015
14	General Office of Zhejiang Provincial People's government "Reply on the pilot scheme of science and technology system reform in Hangzhou high tech Industrial Development Zone (Binjiang)"	2015
15	Zhejiang Provincial People's government "Notice on Zhejiang Internet plus action plan"	2016
16	Zhejiang Provincial People's government's "Notice on made in China 2025 Zhejiang action plan"	2015
17	General Office of Zhejiang Provincial People's government "notice on printing and distributing the 13th five year plan for talent development of Zhejiang Province"	2016
18	General Office of Zhejiang Provincial People's government "notice on printing and distributing action plan for accelerating the development of new material industry in Zhejiang Province (2019-2022)"	2019
19	General Office of Zhejiang Provincial People's government "Implementation Opinions on cultivating invisible champion enterprises by operation Kitty Hawk"	2019
20	Zhejiang Provincial People's government's "Implementation Opinions on vigorously developing e-commerce and accelerating the cultivation of new economic power"	2015
21	Zhejiang Provincial People's government's "Notice on printing and distributing the outline of the 13th five year plan for national economic and social development of Zhejiang Province"	2016
22	General Office of Zhejiang Provincial People's government "several opinions on promoting the construction of Hangzhou West science and technology innovation corridor"	2016
23	General Office of Zhejiang Provincial People's government "notice on printing and distributing the 13th five year plan of major construction projects in Zhejiang Province"	2016
24	Department of culture of Zhejiang Province "Opinions on accelerating the cultural construction of Characteristic Towns"	2016
25	General Office of Zhejiang Provincial People's government "notice on printing and distributing the 13th five year plan for the development of service industry in Zhejiang Province"	2016
26	General Office of Zhejiang Provincial People's government "Notice on printing and distributing the policy of reducing the burden and cost of enterprises in Zhejiang Province (the first batch in 2019)"	2019
27	Zhejiang Provincial People's government's "Notice on printing and distributing the implementation plan of promoting big data development in Zhejiang Province"	2016
28	Notice on printing and distributing the 13th five year development plan of advertising industry in Zhejiang Province (2016-2020)	2016
29	General Office of Zhejiang Provincial People's government "Opinions on promoting the innovation and development of small and micro enterprises"	2018
30	Zhejiang Provincial People's government's "Several opinions on comprehensively accelerating scientific and technological innovation and promoting high quality development"	2018

at all levels. Based on the theory of innovation elements, A structural model of the development elements of crowdsourcing space is formed, as shown in Figure 2.

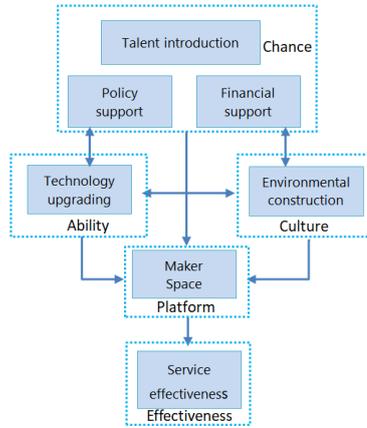


Figure 2. Development element model of maker space

Ability. Competence refers to the comprehensive innovation and entrepreneurship capabilities of the entire organization, such as technological and business knowledge and capabilities such as achievement transformation capabilities, information technology application capabilities, and technology research and development capabilities. In the process of innovation and entrepreneurship, technological innovation is the most valuable core competitiveness. Promote the technological innovation and construction of maker space, which is directly reflected in the effectiveness of maker space's social services. Innovation and entrepreneurship opportunities have a positive effect on innovation and entrepreneurship capabilities, and innovation and entrepreneurship capabilities are the prerequisite for identifying entrepreneurship opportunities.

4. MODEL RELATIONSHIP ANALYSIS

4.1. Ability is the Core Force to Promote the Development of Maker Space

The essence of maker space is to promote

Table 2. Statistical table of support policy codes for elements of maker space capability

Parent node	Secondary level node	Coding reference points	Third level node
Technology upgrading (153)	Industrial Development	21	Develop the service industry, enhance the competitiveness of enterprises, cultivate new material leaders, enterprises to carry out innovation, develop e-commerce, encourage the development of rural e-commerce, develop e-commerce enterprises, cultivate high-tech small and medium-sized enterprises, develop tourism, cultivate high-tech enterprises, and promote Upgrade of the main body of small and micro enterprises, development goals of science and technology enterprises
	Enterprise Development	28	
	Technology R & D	25	
	Transformation of scientific and technological innovation	26	
	Green manufacturing	10	
	Information Technology Support	43	
	Policy measures	15	
	System reform	25	
	Simplify the process	16	

entrepreneurship and technological development, and technological advancement is an essential element in the development of maker space. Sorting by the number of reference points of secondary node coding includes information technology support, enterprise development, transformation of scientific and technological innovation achievements, technology research and development, green manufacturing, and the development of emerging industries (see Table 2). With the advent of Open Innovation 2.0, information technology has attracted much attention. In the "Several Opinions of the People's Government of Zhejiang Province on Comprehensively Accelerating the Development of the Quality of Science and Technology Innovation Promotion Draft", it is proposed to promote the application and integration of information technology in various industries. Therefore, the information technology support node The number of references is the largest, reaching 43. A new round of innovation driven by digital technology and "Internet +" has given birth to new technology research and development, realizing the transformation of scientific and technological achievements, and promoting the development of enterprises. The emerging industries characterized by green and intelligence are focusing on Shape the competitive landscape and enhance economic competitiveness. The adjustment of economic structure under the background of "mass entrepreneurship and innovation" has been realized, a new engine of development has been created, and a new driving force for development has been enhanced.

5. CONCLUSION

Maker space is an innovation and entrepreneurship service platform, and its ultimate goal is to achieve value co creation among multiple subjects. The development and value realization of maker space are closely related to the development policy of maker space. Through the analysis of policy documents, combined with the innovation element theory, this paper constructs and explains the development element model of maker space. Through the lack of supporting service system in the current policy implementation of maker

space, this paper puts forward policy suggestions on establishing policy supporting service system and improving the service effectiveness of maker space.

6. MAIN PROBLEMS AND SUGGESTIONS

In order to promote the good development of maker space and form a good atmosphere for mass entrepreneurship and innovation. Zhejiang Province has issued a series of supportive policies to help the development of maker space, but there are also some problems. Combined with the coding analysis of the policy text, this paper puts forward policy suggestions for the main problems existing in the development policy of maker space.

Main problem: The policy implementation lacks a supporting service system, and the government pays more attention to investment than effectiveness in the development policy of maker space.

In order to promote the development of maker space, the state and local governments have issued a series of policies and measures to encourage all sectors of society to participate in maker space construction. China's maker space has entered a situation of rapid growth and blooming. However, in the process of rapid development of maker space, there are still problems such as insufficient number of maker space with scale, brand quality and profitability. Through the analysis of the policy documents of maker space in Zhejiang Province, it is found that the government pays less attention to the brand building, marketing service mode and service standard system of maker space, which is due to the lack of corresponding supporting service policies. For example, the national and local government's "opinions on supporting public entrepreneurship and promoting employment" put forward a series of incentive measures to encourage professional and technical personnel in Colleges and universities, scientific research institutions and other institutions to start their own businesses, such as leaving their jobs without pay, enjoying the same title evaluation and promotion, which has great attraction. However, from the current implementation effect, it is not ideal. Even the researchers with entrepreneurial intention are in a wait-and-see state. The reason is that the supporting services for policy implementation are not in place, leading to the prospective entrepreneurs in the system looking forward and backward. For another example, in 2008, the central government promulgated the "opinions on the implementation of the plan for the introduction of overseas high-level talents" (referred to as the "thousand talents plan"), but there are still very few talents returning to China for development.

Policy suggestions: Establish policy supporting service system to improve the service effectiveness of maker space.

We should develop a precise investment mechanism from a global perspective. In 2020, the National People's Congress and the National People's Congress proposed to focus on people's livelihood and employment issues, and the protection of people's livelihood and employment must stabilize the development of small and medium-sized enterprises, so it is necessary to increase investment support. Investment in innovation and entrepreneurship involves all aspects of the in-depth development of the crowd-creation space, such as the introduction and training of talents, and investment in technological innovation. "Investment" under the new crown pneumonia epidemic should be scientifically planned, accurately diagnosed and accurately classified under the guidance of the country's makers' space development policy, and adopt different investment measures according to different types of talents and maker spaces.

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