Research on the Open Issues of Sichuan Provincial Government Data

Shan Pu

School of Government, Beijing Normal University, Beijing, 100875, China

Abstract: Opening government data is of great significance, which is conducive to improving the ability of government decision-making and the level of service, and deepening the transformation of government data resources into economic benefits. This paper chooses the open platform for Sichuan government data as the specific research object, combines the current and relevant policies and regulations issued by the country and Sichuan province, inspects its operation status of the platform for Sichuan government data opening, clarifies the current situation of Sichuan government data opening, and analyzes its problems in the four aspects: policy and regulations, the degree of government data opening, data security, management mechanism. By drawing lessons from the experience of the US government in data opening, this paper provides some new ideas and methods for Sichuan province government data opening, and puts forward relevant and developmental suggestions.

1. Introduction

At present, more than 80% of China's information and data resources are in the hands of government departments at all levels. In the era of big data, the government has a large amount of government data, many types of data, strong correlation, and relatively uniform statistical specifications, which are easy to manage and apply. Therefore, by opening up government data, we can fully exploit the great potential and value of government data, and bring new and sustainable growth points for the country's economic and social development. Since the promulgation of the "Action Plan for Promoting Big Data Development" in 2015, China has already established a certain foundation in the development and application of big data, possessing market advantages and development potential, and has pointed out the direction for the opening of government data in China. Governments at all levels have also achieved some results in the opening of government data. However, compared with developed countries such as Britain and the United States, China's government data is still in its infancy, and there is still much room for development.

In the era of big data, the opening of government data is the general trend. This paper takes the status quo of Sichuan provincial government data as a specific research object, combines China's current relevant policies and regulations, examines the operation status of its data open platform, clarifies the status quo of Sichuan provincial government data opening, and analyzes its opening in policies and regulations and government data. Problems in four aspects: degree, data security, and management mechanism. By drawing on the experience of US government data opening, it provides new ideas and methods for the opening of the Sichuan provincial government data, and proposes relevant developmental recommendations.

2. Definition of related concepts and research progress

2.1 Open government data and government data

Government data is a collective term for all data resources that are generated within the government or that are generated outside the government but have an impact on government activities, public affairs, and the general public. At present, there is no unified expression of the definition of open government data. In the "German Data Open" report, Germany pointed out that the opening of government data is the data held by public administration agencies and that the data can be used by third parties. The UK definition in the Open Data White Paper is data that can be

authorized for reuse in public information that has been publicly released. In China, the meaning of government data opening is also different. Some believe that the opening of government data is the further development of government information disclosure, data is the predecessor of information, and the opening of original data is a sign of the deep opening and utilization of government information resources. Foreign government data open research. Some believe that government data is open refers to the government's use of modern information technology to proactively own data that does not involve personal privacy and public safety. Free for all people.

2.2 Research situation

2.2.1 Foreign research situation.

Principles and standards for the openness of government data. The Open Government Working Group has proposed eight principles on the acquisition and use of public data. Dawes et al. believe that government information transparency should follow the two principles of "information custody" and "practicality". The value aspect of government data opening. Harrison et al. believe that the primary value that government data is open to government agencies is to make the government more transparent. Issues facing the opening of government data. Karr summarizes the three major issues facing the government's open data for public use. Government data is open to specific practice aspects. E.Bonson and others, from the perspective of the government and citizens, believe that it involves the process of data opening and the way of using it, and it needs to be based on legal provisions. It can be seen from the above research that foreign research mainly focuses on the principles and standards, values, problems and specific practices of government data opening.

2.2.2 Status of domestic research.

Conceptual aspects related to the opening of government data. Tan Jian believes that open data is a concept and practice. Xiaoming Hu believes that the opening of government data emphasizes the "data", especially the "open source". Jianying Lu discussed the development of the US government data openness. Analysis of the status quo of government data opening. Ruhua Huang and Chunying Wang analyzed 13 local government data open platforms in Beijing and Shanghai from four aspects: overall situation and data resource construction. Practical research on the openness of government data. Yaping Shen and Boya Xu proposed that the government data management system should be reformed from the institutional framework, laying the foundation for building a unified government data open platform. It can be seen that domestic scholars have also made certain research on the opening of government data. They mainly focus on relevant concepts, foreign experience, open status analysis and open practice.

3. The status quo and existing problems of Sichuan provincial government data opening

3.1 Open status

3.1.1 Status quo from relevant policies and regulations.

China is still in the initial stage of government data opening, and the state has not yet issued special policies and regulations. As of January 2019, only the "Regulations on the Information Disclosure of the People's Republic of China" and the "Government Information Disclosure Key Points" were related to the opening of government data. In August 2015, the State Council promulgated the "Outline for the Promotion of Big Data Development", which is the first authoritative and systematic document to promote the development of big data in China. In July 2017, the Ministry of Industry and Information Technology issued the "Big Data Industry Development Plan (2016-2020)", which emphasized the need to strengthen social governance and public service big data applications, and build big international data standardization. In 2017, "Guidelines for the Development of the 13th Five-Year Data Industry in Sichuan Province", it is proposed to build the "Four Great Highlands" of the country's important big data. This is the first time Sichuan Province has explicitly put forward opinions on the open sharing of data resources. These strategic plans and policies provide an opportunity for the good development of the big data

industry, and also lay a certain foundation for the follow-up of government data.

3.1.2 Status of Sichuan Provincial Government Data Open Platform.

At present, Sichuan Province has established the Sichuan Public Data Open Network (www.scdata.gov.cn). The government data disclosed on the website covers 22 topics such as education culture and safe production. The data comes from 20 departments including the Provincial Development and Reform Commission and the Provincial Economic and Information Technology Commission. As of February 21, 2019, the site has opened 23,657,724 data and 664 open data sets. At the data level, Sichuan Public Data Open Network is rich in data resources, covering 22 topics, including 51 provincial departments. From the data download format, Sichuan Public Data Open Network provides XML, XLS, CSV, JSON, XLSX and other formats. At the platform level. The platform provides a way to retrieve data resources by subject and rating, allowing users to quickly filter the data they need. At the data application level, the platform provides a large number of apps involving people's livelihood, which is convenient for users to process corresponding open data.

3.2 Problems existing in the open data of Sichuan provincial government

As far as the Sichuan Public Data Open Network is concerned, the website framework has been basically constructed, and the data resources have many themes. The provincial departments cover a wide range of functions, and the functional modules have also been launched. However, some functions remain in the planning aspect and have not been actually constructed. Sichuan government data open platform is still in the process of gradual improvement. There are mainly the following problems:

3.2.1 In terms of relevant policies and regulations.

China is currently in the initial stage of government data opening. There are no policies and regulations specifically aimed at opening government data. Sichuan Province also lacks more targeted policies and regulations to guide the development of related work. Most of the documents currently issued in Sichuan Province are aimed at the development of big data, and a small part of them involve the opening of government data. Relevant policies and regulations are shown in Table :

Table 1 Sichuan Provincial Government Data Open Related Policies and Regulations

Time	Name	Printing unit	Related information
2015	"Implementation Opinions on Accelerating the Development of Big Data in Sichuan Province"	General Office of the Sichuan Provincial People's Government	Accelerate the development of local laws and government regulations for big data in the areas of government information collection and control, sensitive data management, data quality, data exchange standards and rules, personal privacy, etc.; establish a big data collection and sharing mechanism for government and social interaction
2017	"Guiding Opinions on the Development of the 13th Five-Year Data Industry in Sichuan Province"	Sichuan Economic and Information Technology Commission	With the open sharing mechanism of data resources and industrial integration innovation as the core, we will strive to build the "Four Great Highlands" of the country's important big data.
2017	"Sichuan Province accelerates the work plan of "Internet + government services"	General Office of the Sichuan Provincial People's Government	Taking the opportunity of provincial government cloud application migration as an opportunity, the provincial departments will sort out the existing information resources and information resources, form a shared list and demand list, and establish a unified government information resource directory system.
2018	"Key Tasks of the Integration and Sharing of Government Information System in the Province in 2018"	General Office of the	Further promote the clean-up and integration of government information systems; comprehensively establish a provincial and municipal government information resource sharing exchange platform; complete the department's own government information system access and information sharing.
2018	"Sichuan Province Promotes Big Data Development Work Plan"	Sichuan Provincial People's Government	Strengthen the construction of big data infrastructure, promote the integration and sharing of resources; expand the scope of application of big data, improve the government governance capacity and the level of people's livelihood services; strengthen the security of big data and improve the level of security management.

The lack of special policies for the opening of government data is the main bottleneck for the opening of data for Sichuan provincial governments. Second, it is the existing policy that has not yet formed a system. The data opening of the Sichuan provincial government is still in the exploratory stage, but the background of big data and the policy planning related to the big data industry have already paved the way for the opening of government data.

3.2.2 Government data openness aspects.

From the perspective of Sichuan Public Data Open Network, although the number of open data is 23,657,724, compared with developed countries, open data is really lacking. As of February 21, 2019, Sichuan Public Data Open Network was visited 5,705,870 times, but the download volume was only 2,704 times. The public's use of the website is very small. At the same time, there is no fixed period for data updates, resulting in open data resources that cannot form a stable and valuable source of income.

3.2.3. Data security aspects.

Since government data involves the personal information of a large number of citizens, it may also violate the privacy rights of citizens when opening government data to create economic value. At present, there is no law on data privacy in China, and there is no standard norm in data security management, which also causes provincial departments to dare not open when opening data.

3.2.4 Management mechanism.

First, the organization and coordination mechanism is not clear. The competent department of information disclosure work of the Sichuan Provincial Government is the General Office of the Sichuan Provincial Government. However, the Provincial Development and Reform Commission is the lead department in the integration and opening up of government resources. This has resulted in unsynchronized work and inconsistent work. The second is the lack of coordination mechanisms between departments. In the process of data opening, the Sichuan provincial government lacks communication and coordination mechanisms among various horizontal agencies, and data resources cannot be shared across departments.

4. The experience and enlightenment of the US government data open platform

As a pioneer in the open practice of government data resources, the United States officially launched the world's first government data open network platform, data.gov, in May 2009, which has since set off a wave of open government data in countries around the world. The following experiences of US government data opening are available for reference in Sichuan:

4.1 Perfect laws and regulations guarantee protection.

The United States has achieved a series of results in data openness. One of the most important reasons is that it already has relatively complete laws and regulations. The US government's laws and policies on data liberalization mainly include three bills such as the Freedom of Information Act and two policies such as Transparent and Open Government. Under the perfect legal system, government data is open to evidence and can be relied upon.

4.2 Efficient policy implementation mechanism promotes openness.

In March and April 2009, the two positions of the Federal Government Chief Information Officer and Chief Technology Officer came into being. At the same time, the establishment of the Digital Service Innovation Center to assist various government agencies to develop data application interfaces has formed a networked working mechanism that will help improve execution capabilities. At the same time, in the implementation of the policy, the US government has also set up relevant monitoring agencies to strengthen the supervision of the data open process, and efficient policy implementation mechanisms have promoted the opening of government data.

4.3 Advanced technical means to ensure the construction of an open platform.

Since Data.gov was launched in 2009 and revised in 2011, the platform has upgraded more than 40 data sets initially opened to nearly 200,000 with advanced technology. On the Data.gov platform, the public can not only obtain a large amount of open data, but also use a series of data analysis and processing tools provided by the platform to analyze and process different formats and different types of data to meet their own needs for data resources.

5. Suggestions for promoting the opening of data for Sichuan provincial governments

The opening of US government data provides a reference for the opening of Sichuan provincial government data:

5.1 Establish and improve the data open legal system.

It is recommended that the central government enact legislation on data open as soon as possible to form a basic guarantee for data openness. At the same time, the Sichuan provincial government should also establish and improve the corresponding data open legal system in time for the more prominent data security, information disclosure, and citizens' personal privacy rights. Sichuan Province should also clarify relevant standards and standards for data resources, further improve the quality of data resources and improve work efficiency.

5.2 Accelerate the construction of government data open platform.

The promotion of the Sichuan Public Data Open Network should be intensified, and users should be actively involved in the process of opening government data to improve user utilization. Second, we should fully consider the needs of users and focus on opening high-value data that is closely related to public life. Third, the data standard format should be uniformly formulated to improve the metadata information of related data resources. Finally, we will improve the functional modules of the website to ensure the overall operation and benign development of the website.

5.3 Continuous innovation management mechanism.

Sichuan Province should set up a government function agency that plans to open government data. Under the premise of ensuring the interests of each department, cross-departmental cooperation, data sharing between departments, and improve the efficiency of government work. Sichuan Province should also set up a monitoring agency for government data opening, and adopt internal and external regulatory mechanisms to ensure data openness.

6. Conclusion

In the context of big data, the opening of government data is the general trend. This paper argues that Sichuan provincial governments should seize the opportunity of the booming big data industry, plan and coordinate the promotion of government data, and explore the potential behind government data so that the public can use it to create a bigger economy. value. We have reason to believe that the Sichuan provincial government will catch up in the future government data opening work and become a pioneer in the open work of domestic government data.

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