# China Government Data Open Platform Evaluation Research

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**Abstract:** With the convergence and integration of big data, cloud computing, artificial intelligence and other information technologies with various industries, data as a new production factor that the whole society pays attention to, how to open and share has become a hot topic in our society. This article analyzes the relevant theories and practices of the evaluation of open government data platforms at domestic and overseas. Summarize the current situation of our country local government data open platform construction, find shortcomings and gaps, and propose corresponding improvement strategies.

## 1. Introduction

As a new industry,the big data industry has a good foundation for development in our country. But the level of openness and sharing of government data resources is still relatively low. As the main body of social management, the government owns 80% of the total resources. Therefore, to effectively promote the establishment of a big data sharing and integration open service mechanism, and to use the integrated and shared big data to improve the core competitiveness of enterprises and enhance the government's governance capabilities, this has become the direction of the development of government informatization in the age of big data. The evaluation of government open data platform is the key to the effective implementation of government evaluation. How to establish a scientific and rigorous evaluation index system and conduct in-depth analysis through empirical case studies are issues that open government needs to consider. This article hopes to use this analysis to understand the development status of our country's local government data open platform, find out problems and make targeted suggestions.

## 2. Government Data Open Connotation

Many scholars agree that open government affairs should comply with 8 basic principles: completeness, first-hand, timely, publicly accessible, machine-readable, non-discriminatory, non-proprietary, and exempt from authorization[1]. In short, anyone can freely use, modify and share data. Regarding the concept of open data, the standards of China and the international community are generally consistent. In my opinion, the government open data is not to present the data to the public intact, but to provide real-time access and data acquisition, allowing use and sharing. In addition, government open data should be universal and non-discriminatory. Open government data as a unique resource, the focus is that the national administrative organs use information technology that is closely related to national public affairs, original, complete, and uninterpreted government data, through the Internet platform, without involving state secrets. Open sharing with personal privacy. Anyone can obtain public data from the government through the open data platform anytime and anywhere. Through the use of these data, we can find out the problems of the government in the construction of the platform, and actively feedback these problems to government departments through interactive communication, which will help the government to transform its functions, improve people's livelihood, and promote economic development.

### 2.1 Background and Significance

Under the background that "Internet + government service" has gradually become a new round

of government service mode in our country. The government-owned data is closely related to the work and life of the public. In the information age, the value of data resources not only in analysis and application, but also in openness and sharing. Therefore, in order to promote the global development of the big data industry, the government must break the data barriers and vigorously promote data openness. At present, the establishment of a government data open platform is an important strategic measure for building an information society; it is also the only way to build a new smart city. Opening government data, first of all, is conducive to accelerating the transformation of government functions, improving government service efficiency and work transparency; second, it is conducive to leading economic transformation and promoting industrial upgrading; Finally, opening government data is beneficial to stimulating market innovation and enhancing the internal competitiveness of enterprises.

## 2.2 Research Status At Home and Abroad

Since the United States launched the first open government data platform-Data.gov under the influence of the "Open Government Directive" in 2009, building a fair, reasonable, open and shared data open platform has become a popular trend for government open data. Countries in the world regard open data platforms as an important window connecting the government and the public, so as to optimize government service functions, strengthen security guarantees, and promote data utilization. Immediately afterwards, the United Kingdom, Sweden, Canada, Singapore, South Korea, Brazil, India and other countries have also successively established government data open websites and formulated relevant legal standards.

Compared with the construction of government data open platforms in other countries in the world, China's data open platform construction started late, with a low degree of openness, and it is still in the preliminary exploration stage and mainly concentrated at the local government level. So far, a national government data open platform has not been established. Strictly speaking, the "China Government Open Information Integration Service Platform (govinfo.nlc.cn)" belongs to the scope of government information disclosure;In addition, its geographical distribution is mainly concentrated in the coastal economically developed areas, and remote areas are still under construction in the blank period. According to the "Report on China's Local Government Data Opening in the First Half of 2020", as of the end of April 2020, 130 provincial, sub-provincial and prefectural governments have launche data open platforms in China.

## 3. Typical Open Government Data Evaluation Practice

In the international community, open government data evaluation, as an emerging thing, is still in the exploratory research stage. Therefore, different evaluation projects have their own advantages in terms of evaluation objectives, evaluation objects, evaluation standards, evaluation methods, coverage and influence. However, although different evaluation projects have their own emphasis and differences in methods and evaluation systems, there are phenomena such as the multidimensionality of evaluation perspectives, the diversity of evaluation indicators, and the multiplicity of evaluation purposes. However, there are great similarities in key indicators, among which the evaluation of data is the focus of various evaluation systems, and there is even greater consistency in the selection methods and content.

At present, countries and related organizations in the world have formulated data open evaluation standards for different index systems. However, the most highly recognized government open data evaluation projects are: the United Nations government survey, the World Bank's Open Data Readiness, the World Wide Web Foundations Open Data Barometer, and the Open Knowledge Foundation's global openness Data Index (Open Data Index) and so on [2].

The main inspection indicators of the United Nations open government data research include four aspects: policy and regulatory framework, organizational structure, legal opening of data catalogs, and technical opening of data catalogs. Open Data Barometer (Open Data Barometer), mainly from the three aspects of readiness, execution and influence to set up an evaluation indicator system to objectively analyze the development of open data in various countries and its impact on

the economy, politics and society . It is worth noting that the World Bank's open data readiness is not only for governments of various countries, but also extends to regional and metropolitan governments, and even open data projects of individual institutions or departments [3].

Since May 2017, Fudan University and the Digital China Research Institute of the National Information Center have regularly jointly issued the "China Open Data Index" and the "China Local Government Data Open Report" to comprehensively evaluate the level of local government data openness in our country. The index is based on the actual conditions and development stages of open data platforms in various parts of our country. The index is constructed from four dimensions of base layer, data layer, platform layer, application layer and subordinate multi-level indicators. Many researchers have derived a complete evaluation system from the perspective of theoretical research or combing through mature evaluation projects;In addition, some researchers have started from a single point of view on the quality of open data, the privacy risks of open data, and the efficiency of open data utilization. Nowadays,our country's government data open platform is stepping towards the formal track development in an orderly manner. Although some parts of our country have achieved certain results in the establishment of government data open data network platform, there are still some shortcomings and problems. For example: open platforms lack good visual presentation and search functions, low data openness, inconvenient access methods, long data update cycles, lack of high-quality data applications and tools, lack of effective interactive communication and problem feedback, etc.

## 4. Summary

In order to continue to improve the openness of government data, we also need to make efforts in the following aspects:

(1) Strengthen the research and development of visualization technology and page display function. Combine basic technologies such as web search technology and knowledge base technology with data processing technology to provide a strong technical system support for the construction of the platform. Focus on strengthening platform integration, and provide as many types of data as possible from multiple departments. The most important thing is that the government should strengthen legislation and standardize the standards for platform construction.

(2) It is necessary to expand the open field, enrich the number of data sets, provide multiple types of data formats, and be guided by user needs to open up truly useful data. In addition, it is necessary to shorten the data update cycle, to make the data really come alive, and to continuously enhance the value of open data.

(3) The government should make full use of the data provided by the government data open platform, and establish high-quality data applications according to user needs. On the basis of providing data on the government data open platform, the application of these data is more important. Therefore, the government data open platform should provide data analysis tools, data open tools, and geographic information tools as much as possible to better improve user satisfaction.

(4) Improve the timeliness and effectiveness of the platform's interactive communication functions. The relevant government departments should review and disclose the information submitted by users, and make timely responses and adjustments, such as issuing questionnaires to improve the quality of website services, and data required by users. The demand feedback of the platform, the evaluation of the platform data quality and the opinions and suggestions on the overall construction of the platform [4]. The government should strengthen the awareness of active service, from open data to public understanding and feedback information, and form a good political civilian interaction cycle.References

Domestically, since Shanghai took the lead in launching the "Shanghai Municipal Government Data Service Network" in June 2012. The construction of the government data open platform is in full swing. Our country is now in the early stage of the construction of a data open platform. Therefore, it is necessary to summarize the successful paths and experiences of data open at home and abroad, and in the process of practice, continue to strengthen legislation, integrate resources,

standardize processes and services, and continue to improve the openness of government departments. The evaluation of the local government data open platform is a systematic project. In the absence of a large amount of objective data and standards, it is difficult to make an objective evaluation. Therefore, the government should establish a set of its own evaluation standards to conduct self-examination and self-examination in a timely manner.

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