

Research on Big Data Driven Innovation of Public Management Mode

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Abstract. Big data has the characteristics of large quantity, diversified data, low value density and fast speed. It provides unique and brand-new thinking through technology, and establishes our learning innovation, scientific and technological innovation and management innovation. With the arrival of the big data era, the modernization of government governance capacity has put forward realistic needs for big data, but there are still many specific directions worth in-depth study. In the future, government governance driven by big data should further clarify the concept and core value of big data from the perspective of government governance, focus on the research of big data application in specific governance areas, pay attention to the research of government big data platform construction, and deepen the technology driven research of big data on deepening government system reform. In the era of big data, for public managers, their information literacy will have a great impact on the actual work efficiency and significance. This paper analyzes the important role of information literacy from the perspective of the development of the times and the specific work needs of public managers. Today is an era of big data. Data sharing and data change the future. Nowadays, data is affecting our lives. With the popularization of the Internet and the development of network technology, an era of big data aggregation with huge quantity, unprecedented scale, and extremely fast generation and update speed contains unprecedented social and commercial value. The Internet has changed people's lives. At the same time, network information is also changing people's psychological activities. It is also necessary to focus on analyzing the difficulties of the current network public opinion guidance model, and put forward scientific suggestions on how to establish a sound public opinion guidance mechanism. It is hoped that the research in this paper can further optimize the existing public opinion guidance model and provide an important guarantee for stabilizing the network environment.

Keywords: Big Data; Public Management.

1. Introduction

Now, in the era of computer data analysis, which is widely used and rapidly developed, big data technology, as the source of data and information retrieval, has gradually increased its impact on public management [1]. Under the current data background, the innovative public management model emerged at the same time, providing efficient and fast technical support for public services, enhancing the ability to deal with public opinion crisis, and also meeting the needs of people's actual life [2]. As data resources and information capital, big data has a significant impact on public management innovation, and an accurate public management model has emerged [3]. Big data technology provides opportunities to improve the scientific decision-making level and service ability of public management, meet the personalized needs of the people and improve the social risk management ability. Public management faces practical challenges in achieving good social governance and improving governance quality [4]. To this end, we must reflect on the value system, decision-making system and governance direction of public management to respond to the changing environment of big data and fully tap the development potential of big data in public management [5].

With the explosive growth of information in the age of big data, it seems that free access to information is more convenient, but in fact, for professional intelligence and R&D personnel, the noise is increased, and accurate positioning is difficult, and finding effective information requires a lot of time and energy [6]. In this new normal, on the one hand, higher requirements are put forward for our information and intelligence workers' ability to retrieve, obtain and organize information [7]. At this stage [8]. The data processing of various information resources makes everything in social life more scientific, refined and personalized [9]. For public management, as it involves people's social

life order and other aspects, opportunities and challenges in the era of big data coexist. The complexity of the data form is increasing, the speed of data generation is accelerating, and the ability of data analysis and processing is also improving. The age of big data requires us to collect, process, analyze and apply data when dealing with various matters. The introduction of big data has made significant changes in various elements of the traditional progressive public management decision-making model, which is reflected in: public management decision-makers have moved from "behind the scenes" to the front of the stage and their professionalism has been greatly improved; The data source has evolved from small structured data to complex large unstructured data; High tech tools and technical means to support public management decision-making [10].

2. Planning and Implementation of Work Driven by Big Data

2.1 Big Data Driven Development of Public Management Mode

The advent of the big data era has had a huge impact on all walks of life, and the government, as the master and manager of a large number of data resources, is also regarded as the main driver of big data. From the structure with vague boundary between public management and political management to the structure with clear boundary between public management and political management; From focusing on the management of people to the management of data and using big data to serve people; From passive public decision-making to active optimization decision-making based on big data. The number of data people are concerned about and contacted with is increasing day by day. The acceleration of data updating speed and the enhancement of data processing capability indicate the coming of big data era. Cultivating and improving the information literacy of public managers can not only better reflect the value of data information and provide effective help for the specific work of relevant units or organizations, but also provide more comprehensive and high-quality data information, so that its social value can be better reflected and promote social development and progress.

If we want to realize the public interest, we must let the public appeal be fully and reasonably expressed. Therefore, the government, as the undertaker of public responsibility, has the obligation to create more reasonable channels and platforms, so that citizens' demands can be expressed, so that good communication can be achieved between citizens and between citizens and governments, so that both parties' concepts of public management can be constantly updated. The characteristics of social group psychology and behavior in the information age. The arrival of the information age has changed people's lives and has also had an important impact on people's mental activities. During the transition period, important decisions and adjustments in society will lead to various contradictions, making the current public management face many new challenges. In the age of big data, society needs to constantly innovate the theory and method of public management, effectively play a leading role and promote practical development. We should not only deeply analyze and actively explore the relevant theoretical framework, but also recognize the advantages and disadvantages of the theory. The data questionnaire on public management is shown in Table 1:

Table 1. Public Management Questionnaire:

Management compliance rate	First-tier cities	Second-tier cities	Third-class cities
Mass life	75.56	65.73	41.56
Socioeconomic	78.34	71.54	57.83
Foreign trade	76.17	52.12	45.32

This change trend led by big data will profoundly affect the reflection on traditional management concepts, the pursuit of improving public sector governance performance and the exploration of governance models in the field of public management, and will trigger theoretical changes and reform practices in public management worldwide. The benign development that can promote the

development and utilization of scientific and technological information resources will certainly produce a huge boost.

2.2 Challenges and Development of Big Data Work

Big data mainly refers to the comprehensive integration of massive data to make it have a certain data storage performance, analysis performance and management performance. It is a good data set. Big data is not only a sign of the times in the actual development of the information society, but also a new thing. The use of big data to optimize the policy implementation environment of local governments, integrate policy implementation resources, enhance the resultant force of policy implementation, reduce the constraints of the external environment of policy implementation, can effectively prevent the "medium obstruction", "low efficiency", "out of shape" and "lookism" phenomena in the implementation of policies, and improve the policy implementation of local governments. A magazine pioneered the concept of big data, and then the ideas of the big data era began to develop in a blowout style. They began to be widely concerned and applied in various fields of social life, and changed the development direction and mode of science, technology, culture, politics, economy, life and so on in today's society at an extremely fast speed. The arrival of the age of big data has changed this presentation mode. More and more unstructured data, such as web pages, videos and pictures, blend with each other, and gradually form complex data forms in this process.

Nowadays, with the rapid development of the times, a more complete information and data era has gradually emerged, and the scope of public management has also produced very obvious changes, which has also had more and greater impact on the development of public management discipline, so that promoting the development of public management discipline has become a more important work within the scope of public management. The future development of public management decision-making based on big data will have the following trends: specialization and diversification of public management decision-making subjects; Flattening the organizational structure of public management decision-making; Quantification and predictability of public management decision-making environment; Sensitivity and scientificity of public management decision-making scheme; Outstanding forward-looking public management objectives. The government has the resources to collect a large amount of data, so it is regarded as the main provider of data information. The rapid improvement of the ability of governments at all levels to collect, analyze and disseminate information is changing the public management of the whole country. In the view of these scholars, the impact of big data on human thinking is only reflected in "changes in the thinking of understanding data", "changes in the thinking of collecting data" and "changes in the thinking of analyzing data". At this stage, China's big data has a strong development momentum. It has been applied in many areas of government governance, such as smart cities, education, public transport, public health care, community management, crisis management, targeted poverty alleviation, and has built big data platforms such as "travel cloud".

3. Innovation Research based on Public Management Mode

3.1 How to Organically Combine with Big Data under the Public Management Mode

Through the real-time and dynamic update of massive big data data resources and transparent and open government service platform, it has brought a positive interaction between the government and the people, and promoted the scientific and democratic process of government decision-making. At the same time, it is inevitable that the Chinese government will be unable to use big data for governance. The coexistence of opportunities and challenges also requires the government to reasonably grasp and effectively respond. For information management, it has the characteristics of openness. Some key service functions are usually displayed in the public network environment, especially the reflection of the social service functions of the relevant government agencies depends on the public information environment. However, in the real society, the appeal of public interest is difficult to be expressed and integrated accurately.

Under the traditional social operation mode, there are a lot of information omissions and transmission efficiency problems in the process of information transmission, which can no longer meet the increasingly high demand of public management with the progress of the times. The network is an inclusive "melting pot". In real life, people are increasingly dependent on the network. Therefore, the process of information transmission in the network will affect many elements of the psychological behavior of relevant social groups, which means that the entire network psychological behavior has a certain "infectivity" in the process of transmission, and the transmission speed is very fast. Big data is a new generation of revolutionary information technology with data as its essence. In the process of data mining, it can drive technological innovation. As an important driving force for the change of the times, today's life is changing and developing because of the arrival of big data. There is no unified definition of the meaning of big data in the academic community. But we can be sure that big data is an information explosion phenomenon formed by the revolutionary progress of information technology. It is something that can be done on the basis of excluding small-scale data in an "unprecedented" way. At this stage, there are many competitive factors among enterprises. It does not simply mean that products or services have certain advantages, but whether enterprises have core competitiveness. It is an invincible advantage for enterprises in the market and is difficult to be surpassed by other enterprises. In the age of big data, data resources are very important. The optimal configuration, optimal integration and maximum utilization are the keys for enterprises to win the competition.

3.2 Future Work under Public Management Mode

In the traditional decision-making mechanism, some leaders of local governments are often easy to make decisions based on their own experience. The lack of grasp of objective data leads to high decision-making error rate, serious lag, low transparency and other phenomena, which violates the scientific development law of economic society. In the era of big data, local governments should change traditional decision-making methods and make full use of big data to establish an effective scientific decision-making mechanism. First, the era of big data is an era of explosive development of knowledge. The traditional knowledge architecture system and its dissemination and acquisition methods have undergone significant changes. Massive data resources constitute a modern knowledge system; Second, information technology in the age of big data has become the key to development. We must use information technology and its products to analyze and process the massive information data that can be obtained in the age of big data, and screen out useful information. The questionnaire about big data in social life is shown in Table 2:

Table 2. Questionnaire on the Application of Big Data in Social Life

Application penetration rate	Developed region	Suburban area	Remote area	Poverty-stricken areas
Urban construction	76.54	87.45	61.42	54.17
Road maintenance	82.75	75.31	60.45	56.61
Data storage	91.34	56.79	45.17	66.31
Educational resources	94.31	77.73	75.33	70.83

Although China has entered the era of big data, the penetration rate of big data is far from the expectation. There are still many organizations that have not incorporated big data into their common office tools. Many managers lack a correct understanding of big data, so they do not attach importance to big data technology. Although big data technology can make the operation of public management affairs more efficient, managers still have the problem of conservative thinking and fail to make big data a method to assist office work in actual business work. In the process of the development of public management discipline, there is also a responsibility element that cannot be ignored, that is, the training and education of relevant talents. This element can cultivate relevant talents for the future development of public management discipline, and provide them with certain human support and talent security. Public management is a subject influenced by the times. It is also important to change

the concept and idea of talent training according to the actual situation and characteristics of the times in the training and development of talents related to public management. Scientific management decision-making is an important goal of public management decision-making reform. With the in-depth development of Internet technology, big data has begun to enter the field of public management decision-making. In today's society, a huge amount of data is generated at every moment, making it possible for public management decisions to become scientific with comprehensive and detailed information, as never before. Big data is a double-edged sword, which can not only bring about the flow of information, but also cause the leakage of privacy. To address such risks, government departments should establish an effective risk assessment mechanism. When dealing with data on trade secrets, people's privacy and national security, they should use information desensitization technology to ensure the security of big data, otherwise many legal problems will arise.

4. Conclusion

Big data drives public management from a closed management structure to an open management structure. Traditional public management is subject to public power, and the operation of public power objectively has the characteristics of closeness, such as the so-called confidentiality, national security, etc. The participation of social organizations and market organizations is relatively low. For the government, big data is not only a new technical tool to improve governance capacity and improve the efficiency of public service supply, but also a technical driving force to promote government system reform and improve governance capacity. Since ancient times, the ability of technological innovation to promote and reshape economic development and political reform has experienced repeated practice tests. Respecting technological development and actively responding to the development opportunities brought by technological change are effective driving forces for enterprises and governments to promote their own ability. By analyzing the necessity of improving the information literacy of public managers, this paper sums up the relevant contents of information literacy training of public managers, and puts forward effective ways to strengthen their own information literacy. The application of big data will greatly affect the development strategy and direction of the government. The application of big data can not only change the structure and mode of public communication, but also improve the development level of the economy and the competitiveness of the industry, laying a foundation for the development of China's economy and other undertakings. Therefore, we must forward-looking combine decision-making with the development of big data in Qilian, In order to solve the problem of resource allocation of human, material and financial resources in reality. The network has changed people's lives and people's dependence on the network is deepening. Therefore, the psychological behavior of the masses in the information age has a direct impact on the security and stability of the whole society.

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