

# Innovation of Social Public Management Mode in the Era of Big Data

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**Abstract:** In the era of big data, the new round of information technology innovation has provided extremely rich data analysis tools and information resources for social public management. This enables relevant departments to more accurately analyze social phenomena, understand public needs, evaluate policy effects, gradually overcome difficulties such as information fragmentation and digital poverty, improve the service level of social public management, and innovate public management models. Therefore, focusing on the new opportunities and challenges brought by digital technologies such as big data and the Internet, this paper discusses the basic path to promote the digital transformation of social public management in the new era, with a view to giving scientific play to the guiding function of big data, and strengthening the digital and information construction of social public management.

**Keywords:** “Big Data Era; Social Public Management; Innovation Strategy”

In the new era, public management plays an irreplaceable role in maintaining social order and promoting social progress. Currently, the era of big data fully embodies the value and advantages of digital technology and information technology. Therefore, utilizing big data to innovate social public management models and actively building digital and information-based social public management and decision-making models can better enhance public welfare and protect the interests of the public. Therefore, social managers should fulfill their responsibilities when conducting public management and handling public affairs, fully attach importance to the integration of big data and social public management, and promote the continuous innovation of social public management models.

## I. Challenges faced by social public management in the era of big data

The traditional service methods, institutional mechanisms, and service processes of social public management are difficult to adapt to the social changes brought about by information technology, which in turn poses a series of challenges to the innovation of social public management models in the new era.

### 1. The digital divide exacerbates social inequality

Big data takes the Internet as the carrier, mainly collecting data from the network platform. In this way, how to collect data and information from those who are absent in the era of big data is a prominent social issue in the information age, namely the digital divide. As the most prominent difference in current society, the digital divide is an important factor affecting social fairness and equality. Especially for most people in rural areas, they are unable to use smart phones, the Internet and other information media to reasonably express their demands in the information age, which makes it difficult to provide corresponding decision-making information to social public management. For example, smart cities built on digital technology will undoubtedly widen the urban-rural gap and lead to new social inequalities. Moreover, big data not only fails to solve the prominent social problem of data divide, but also affects the equality of basic public services. People in urban and rural areas will enjoy public services with huge disparities due to their identity differences. This will further exacerbate the barriers and estrangement between urban and rural areas. Therefore, in the era of big data, innovating social public management models first requires attention to the issue of digital divide, that is, strengthening the radiation range of information data networks in rural areas and further improving the level of informationization construction in rural areas.

### 2. Big data exacerbates the risk of privacy breaches

Big data, as an effective means of processing massive amounts of information, has improved the convenience of social public management and services. However, under the influence of the big data wave, new risks of privacy breaches have emerged in current society, and information security cannot be guaranteed. With the help of science and technology, Internet technology has been deeply integrated with all walks of life, making the whole society face huge information security challenges. Big data makes data stored in the cloud easier to access and retrieve. If there are errors in the process of information processing and application, it will increase the risk of data leakage and lead to information failure. Therefore, how to deal with the information security threats brought by the big data era is a key issue that urgently needs to be addressed in current social management work.

## II. The realistic path of innovating social public management models in the era of big data

### 1. Establish a big data mindset and implement precise management

In the era of big data, further innovation in information technology has effectively improved the efficiency of information extraction. This is extremely advantageous for the innovation of social public management models. However, due to the long-term influence and constraints of traditional thinking, public managers at this stage cannot keep pace with the development of the times, and it is difficult to update management methods and service means by using big data, the Internet and other technologies. Most managers still rely on their own experience and feelings to make decisions and provide public services to society. This relatively traditional work mode is difficult to adapt to

the development trend of the big data era and cannot meet the new needs arising from social public management,

Social public management involves a wide range of fields, and under the influence of digital technology, the frequency of various events has increased dramatically. Relying solely on past work experience makes it difficult for managers to address current new issues in a targeted manner. Therefore, personnel engaged in social public management should establish a big data mindset and have a correct understanding of the value of big data in innovating public management models. China has a large number of Internet users. The data information resources provided by these user groups on the Internet are important information that affects the decision-making of public administration departments. Therefore, relevant departments should do a good job in promoting and training information technology, and incorporate it into the scope of public management to improve the comprehensive ability of management personnel to use big data technology to collect, organize, and analyze data. This can encourage them to analyze the current public opinion environment more deeply and comprehensively, providing decision-making support for reviewing public affairs. In short, guiding public administrators to develop a big data awareness and establish a big data mindset can help achieve refined management and scientific decision-making by leveraging the advantages of information technology.

#### 2. Build a resource sharing platform to enhance management efficiency

Under the influence of digital technology, the functions of public management departments are undergoing profound changes. This requires relevant personnel to deeply explore and analyze the management and service functions of big data in the process of participating in social management. However, most management departments still use traditional operating and management models. This fundamentally affects the improvement of management efficiency and service quality of public management departments, which is not conducive to making scientific and rational decisions, resulting in serious waste of information resources. Therefore, in the context of digitalization, public management and service departments must innovate traditional management concepts and methods, and form a joint force to handle social public affairs through organic linkage between various departments and their staff.

Specifically, first of all, we need to change the traditional mindset of “going it alone” and use tools and means such as information technology and big data to build an integrated resource sharing and management platform, in order to optimize communication and interaction between departments, achieve information sharing and interconnection. By utilizing information technology to create a central database and unify various platforms, information from different departments and aspects can be effectively aggregated. Once any problems arise in public management work, various departments can quickly respond, coordinate, communicate, and respond effectively. Secondly, establish a comprehensive information management mechanism to ensure that each department can share and access publicly available information. During this process, we encountered the issue of information partitioning, which involves scientifically dividing key work tasks based on the effectiveness of external and internal network information. At the same time, by improving relevant information management regulations and regulating the behavior habits and work patterns of management personnel, it helps to accelerate the exchange and circulation of information, fully demonstrating the value and role of big data in social public management. This can promote innovation in the mode of public management and effectively enhance management efficiency.

#### 3. Strengthen the cultivation of data talents and improve service levels

In the era of big data, relying solely on existing information technology hardware and platforms is difficult to completely solve the current public management problems in society. High quality talents play an important role in the construction of work in various fields. For innovative social public management models, it is crucial to build a high-level team for data analysis and management. Therefore, in the face of various challenges and opportunities brought by the big data era, in order to effectively exert the effectiveness of public governance, relevant departments must attach importance to talent training and increase efforts to train talents. Only by improving the literacy and level of public management talents can they better cope with various changes in public management work in the new era, improve work efficiency and service level. In the era of big data, talent development mainly focuses on efficient collection, judgment, and analysis of various data and information, with a focus on improving talent's ability to control big data technology, and thus building a talent team with digital skills, experience, and knowledge reserves to cope with various complex problems that may arise in practical work.

Firstly, relevant institutions must innovate personnel training models, enhance the comprehensive literacy of the social public management team, and enable them to adapt to the development and changes of social public management work in the new era. At the same time, strengthen the communication and interaction between public management personnel and industry experts and scholars, and encourage their participation in talent training work, providing more advanced management experience to management personnel in order to further enhance their public management and practical operation abilities. Only in this way can we effectively improve the information literacy of talents. Secondly, strengthen humanistic education, that is, cultivate the service and responsibility awareness of relevant personnel, fully mobilize their subjective initiative to participate in social public governance, and sincerely provide comprehensive public services to the general public. In addition, relevant personnel should actively follow the trend of the times, continuously learn advanced digital technologies, improve their own big data storage theory, and enhance their big data thinking level. Finally, in order to improve the level of information technology work of public management personnel, relevant institutions need to carry out technical training in data analysis, statistics, computer technology, and software development and use. This helps cultivate versatile, innovative, and comprehensive talents to meet the constantly changing needs of social public management.

#### 4. Build a public management platform and allocate social resources reasonably

With the support of 5G technology, the construction of smart cities in China has entered a white hot stage. To enhance the contribution

of participating in the construction of smart cities, various departments should strengthen the construction of social public management information collection and application platforms, in order to improve the efficiency of data collection and utilization. In the era of big data, the innovation of social public governance models requires the processing of massive amounts of data. Actively establishing an information collection and management platform can leverage the driving role of big data to promote the sustainable and healthy development of social public management models. Specifically, public management departments should improve the efficiency of public opinion collection and enhance information service platforms by renovating street light micro base stations. This will facilitate the channels for the public to obtain information and help improve their enthusiasm and initiative in participating in social public management. At the same time, when collecting public opinion based on social public management information and application platforms, public management agencies should also organize other online channels to collect public opinion. In short, the effective utilization of information network platforms can effectively identify inappropriate information and avoid misleading the public with erroneous information. Moreover, scientific analysis of the current status of public resources by public management institutions can allocate social public resources reasonably and reduce the blindness of information diffusion.

In addition, to improve the transparency of social public management activities, management departments should directly utilize relevant information online. The deepening development of the socialization process on the internet has led people to pay increasing attention to online public opinion issues. In response to this, public management departments can build specialized data collection and analysis platforms for online public opinion, timely understand social public opinion, analyze public information, and further strengthen social supervision to deeply analyze the overall development and loss of public resources. By filtering relevant data information, scientific support can be provided for decision-making, and the full utilization and optimization of data resources can be achieved.

### III. Conclusion

With the comprehensive introduction of the big data era, data has shown irreplaceable value in the process of innovating and optimizing social public management models, such as providing precise and scientific decision-making information for social management. From the current situation of public management in society, public managers are unable to effectively utilize the value of big data technology and lack a deep understanding of big data, resulting in a lag in the handling of public events. Therefore, correctly identifying the management benefits brought by big data and utilizing information technology to carry out refined, transparent, and scientific governance can help comprehensively promote the innovative construction of social public governance models in the era of big data, and improve the level of social public management and services.

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