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A Brief Introduction the Impact of Big Data on Basic Statistical Work

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Abstract

The arrival of big data has promoted the development of China's economy, changed all aspects of people's lives, and brought challenges to different social work. For grassroots statistical work, big data not only brings convenience for collecting, sorting and analyzing data, but also puts forward higher requirements for it. In the context of big data, it is a special challenge that grassroots statistical departments grasp the dividend of big data and use effectively big data to carry out statistical work.

Keywords

Big Data; Basic Statistics Work; Internet.

1. Introduction

In recent years, in the new development situation, the quality and technical level of the Basic-level statistical staff have profoundly affected the depth of statistical work. Under the continuous impact of the Internet and big data, the implementation and development of grassroots statistical work is also facing higher technical requirements and standards. How can we adjust and improve the specific content and methods of grassroots personnel work with the times, and improve the level of development of various statistical work and the guarantee of the quality of its work are all issues that we must seriously consider.

2. The Difference between Big Data and Government Statistics

There are fundamental differences between big data and local government statistical information in terms of sources and manifestations. First of all, big data mainly refers to the new data that is automatically generated by machines, such as web search, consumer purchase activities on shopping platforms, which are formed by big data statistics. The government's statistical data needs to arrange tasks from top to bottom, collect data from bottom to top, and finally summarize and analyze this data. Second, big data statistics have a high coverage rate, but government data coverage is limited. Finally, big data includes digital structured data and unstructured data, while government statistics are basically structured data. There are a wide range of big data sources, and the focus of data utilization is the deep mining and expansion of data, while the extension of government statistics is obvious, and the workload of collecting data is relatively large. However, big data is highly risky, and there are blank areas in relevant laws and regulations, while government statistical data is clearly protected by laws and regulations, and the risk is small, and the privacy protection of the interviewed units is extremely strong. [1]

3. Analysis of the Specific Situation of Basic-level Statistical Work in the Context of Big Data

First of all, in the current wave of network development and big data, there are still many new development opportunities for the big data statistics research work carried out by basic

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statistics staff. From the perspective of specific grassroots statistical management, the wide application of big data information technology will raise the standardization and management level of statistical work, and through the adoption of more scientific methods and working ideas, further improve the cross-connections between big data standards, so as to achieve the effectiveness of big data analysis. Accurately carry out all-round improvements, and under such a standardized work process and management philosophy, the basic statistical staff will maximize their functions.

Second, with the popularization and application of big data technology in the information age, the overall implementation and efficiency of Basic-level statistical work has also been further improved. Basic-level statistical practitioners can actively participate in statistical work and can make full use of the mobile Internet. Technical means to conduct large-scale data collection and analysis on it, the overall workload has also been further reduced, and many data analysis tasks can be directly completed through the basic information system in an all-round andautomated manner. In the process, the overall quality of statistical work has also been improved, and the difficulty of the problem has also been greatly reduced, ensuring the normal development and implementation efficiency of various statistical work, and reducing the investment in manpower and other costs. have to.

Third, in the current era of big data analysis, the grass-roots big data analysis and statistics work will continue to encounter certain difficult problems and challenges, which will all exist objectively. In the specific implementation of Basic-level statistics, it is difficult to make better use and adjustments based on the current state-of-the-art new technology and methods due to the inadequacy of the overall quality and ability of some staff members. In specific work, we need to participate in statistical work through big data, cloud computing and information technology, which will weaken the role of many statistical departments. This is also the characteristic of the new era that we are currently engaged in the field of basic statistics. How can we better exploit its technical advantages and give full play to it? This is also an important issue faced by those who are currently engaged in the field of basic statistics. [2]

4. The Big Data Background Poses Challenges to Basic-level Data Statistics

4.1. Under China's Traditional Planned Economic System, the Statistical Work of the Grassroots Government has Always been Guaranteed by the State's Coercive Force

However, under the socialist market economy, the environment in which government statistical work is located has undergone great changes. The traditional statistical system and methods also obviously lag behind. Especially with the emergence of the big data era, the deficiencies in the statistical methods and management systems of the grassroots government have definitely increased. In the context of big data, the statistical work of the grassroots government has entered a new dimension, and the statistical methods have been further flattened. The statistical department of the grassroots government is no longer the only one who collects and publishes data. A large amount of data is released and produced through the Internet and other emerging media. To a large extent, it has had an impact on the statistical methods and statistical systems of the grassroots government.

4.2. Big Data Weakens the Statistics Function of the Grassroots Government, and the Authority is Challenged

On the background of the era of big data processing, with the further development of computer technology and data mining technology, more and more private organizations and private companies have begun to collect, process, organize, and publish data. All agencies and departments have the ability to use the Internet to obtain and release data. Government

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departments are no longer the only data statistics units in the country, which, to a large extent, has led to the weakening of the data responsibilities of the departments. Massive statistical information of various platforms emerges in an endless stream, and the authority of Basic-level government data has also been challenged, which puts forward higher requirements for the credibility of government statistical data.

4.3. Challenges the Security of Statistical Data in the Era of Big Data

Most current government statistical data is reported by enterprises themselves on special reporting platforms, such as the "a set of tables" online direct reporting platform. After the data has been submitted, statistical departments at all levels process, review, and summarize it through the statistical LAN. The statistics department has not appointed a dedicated person to maintain the network and various office software. Such a data production model restricts data processing within the statistics department, which to a large extent can ensure the security of private data in business operations. The "sharing", "free", and "easy access" characteristics of big data can easily lead to the leakage of privacy of individual users' behaviors, habits and preferences. At the same time, relevant laws and regulations to ensure data security in the context of big data are also relatively empty . There is great uncertainty about whether the security and user privacy can be protected.

4.4. In the Era of Big Data, the Public Needs Better Statistical Services

Nowadays, the publication of some sensitive indicators such as housing prices, average wages and other data often arouses widespread concern and doubts from the public. The public's requirements for statistics are constantly increasing, the intensity of supervision continues to increase, and new requirements for statistical data are constantly being put forward. Therefore, the Basic-level statistical departments need to report the new economic development status in time, and the statistical data will follow wherever the economic development goes. Statistics services are no longer limited to simple data provision and message services, and require deeper services.

5. Opportunities Brought by Big Data to Government Statistics

5.1. Rich Statistical Survey Data Sources

Big data can provide very rich information for government statistics, which can greatly broaden the scope of statistical investigations and enrich data sources. Traditional statistical investigations only obtain data by assigning statistical tasks. The scope, representativeness and quality of the data are all With certain limitations, big data can provide massive data sources for government statistical surveys in three major areas: administrative records, business records, and Internet data.

5.2. Promote Information Sharing between Government Departments

For a long time, many government departments have accumulated a large amount of data and information in some administrative work such as registration, examination and approval and certification. However, due to the constraints of the management system and technical level. As a result, these large amounts of data information can only be monopolized by the department "privately", failing to form a standardized data information sharing mechanism between government departments. The era of big data requires the government to establish a unified inter-departmental platform for data acquisition, storage, analysis, and processing. So as to achieve the effective sharing of data of various departments, simplify the cumbersome statistical procedures, shorten the time of data production, so that the data can maximize the benefits in the fastest time, and at the same time can reduce the government's administrative costs.

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5.3. Improve Statistical Work Efficiency

Applying big data to government statistics, using big data technology to collect data information and dig deeper into the value of data can greatly reduce the workload of statistical investigations, shorten the data production cycle, and improve the efficiency of statistical work. Using big data generated by automatic recording on the Internet of Things and Internet devices to compare with statistical data can effectively reduce the probability of data errors. Good use of big data can effectively supplement and improve government statistical data, greatly improving the quality of statistical data, and then improving the standard of government statistics.

6. Summary

With the continuous development of information technologies such as the Internet and the Internet of Things, the wave of big data has swept all over the world. Nowadays, diversified big data has become a revolution in social production and life. In order to seek long-term development, grassroots statistical work must take the initiative to promote big data to a strategic height, and take the initiative to think about how to use it to coordinate the overall situation. The government statistics department should seize this opportunity, take advantage of the trend, continue to lay a solid foundation, use data sources, innovate working methods, and build service-oriented statistics in the era of big data.

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