

# Research on Big Data Helping Government Audit Improve Quality and Efficiency from the Perspective of Rural Revitalization

Ping Jiang<sup>1,\*</sup>, Zejiang Zhou<sup>2</sup>, Xiaoya Fan<sup>1</sup>, Min Li<sup>1</sup>, Shini Sun<sup>1</sup>

<sup>1</sup>School of Law, Anhui University of Finance and Economics, Bengbu, Anhui, China

<sup>2</sup>School of Economics, Anhui University of Finance and Economics, Bengbu, Anhui, China

\*Corresponding author: Ping Jiang (Email: 20193628@aufe.edu.cn)

**Abstract:** The field of rural revitalization has always been the focus of the supervision of audit institutions. At the first meeting of the Central Audit Committee, the General Secretary stressed that we should adhere to strengthening audit through science and technology. Since we strengthened the construction of audit informatization, the concentration and integration of audit data have been continuously strengthened, providing significant development opportunities for big data audit in the new era. With the continuous progress of poverty alleviation and rural revitalization strategy, big data technology has been widely used in audit work, and plays an irreplaceable role in special audit. The field of rural revitalization has always been the focus of audit supervision. With the continuous progress of poverty alleviation and rural revitalization strategy, big data technology has been widely used in audit work, and plays an irreplaceable role in special audit.

**Keywords:** Rural revitalization, Big data, Audit, Government.

## 1. Introduction

With the reform and opening up, China is accelerating to become a big country in digital economy and innovation. The development and progress of information technology will continue to promote world economic and social change. The management information system under the big data environment will become more and more intelligent, networked and integrated. The development of Internet technology and the wide application of management information systems in all walks of life are having a huge impact on the development of the audit industry, making the government audit also move from internal to external. The government audit business and audit mode are also undergoing tremendous changes, transforming to digitalization and networking, which brings great opportunities and challenges to the research, development and application of big data audit information systems [1].

In recent years, with the extensive application of modern information technology in all walks of life, a large number of data can be used by the audit department. Big data technology has a wide range of data types and faster data processing speed. It can process video, audio, pictures, text, geographic information and other files efficiently and quickly. It can also expand rapidly and dynamically according to the needs of data storage and computing. This provides important technical support for big data audit. Big data has played an irreplaceable supporting role in the implementation of poverty alleviation and rural revitalization strategies [2].

## 2. Big Data and Government Audit

### 2.1. Status analysis

At present, the rapid development of big data technology has led to changes in audit methods and models. Both the government and academia attach great importance to the application of big data technology in audit. The rapid

development of information technology such as big data and its application in government audit have brought great changes to the traditional government audit work from various aspects such as audit mode and audit efficiency.

In the big data environment, audit institutions are faced with an unprecedented increase in data volume and increasingly complex massive audit data. They need to use various reliable big data analysis technologies to conduct in-depth analysis and mining, efficiently complete audit information processing, and improve the quality and efficiency of government audit work. With a wide variety and complex structure, traditional audit methods have long been incompetent. Only by actively changing ideas and relying on big data and other information technologies, can we continuously innovate audit methods and government audit management models in the big data environment to accelerate the integration of audit business and information technology, so as to better serve the overall situation of national economic development, And give better play to the function of "economic examination" of the normalization of government audit activities. The development of big data audit cannot be separated from advanced big data analysis technology. At present, big data technology has been widely and practically applied in government audit, poverty alleviation and rural revitalization audit practice. The process of innovation in the method of audit supervision combined with "Internet plus" and big data technology has never stopped. After years of audit practice and continuous innovation of audit ideas, the current audit institutions have basically realized real-time sharing of related data, The analysis of specific audit doubts is mature and practical.

### 2.2. Big Data Helps Government Audit Improve Quality and Efficiency

From the perspective of the specific ways taken by audit institutions to organize and implement audit projects, the enabling of big data technology has significantly changed the

form of audit organizations. More and more regions have formed a unified big data audit supervision and management platform, and continuously accumulated audit experience in daily audit practice, continuously improved the platform functions, simplified the platform operation process, and lowered the threshold for using big data. Auditors from different departments can combine the business characteristics of departments and industries, give play to their own expertise, provide audit models and experiences of different business modules, and share them with all staff on the platform. Big data technology makes it possible to establish a unified audit supervision and management platform. The unified audit supervision and management platform also provides a carrier for big data technology enabling audit work, and promotes the continuous innovation of audit organization form.

From the perspective of audit coverage, the audit supervision and management platform built with big data technology connects the business systems of different departments, widely and timely collects data in key areas and key business links, and basically forms a data-driven audit skynet, which truly achieves full audit coverage.

From the perspective of audit cost, the application of big data technology in audit work has saved a lot of manpower, material resources and time costs, and the convenience and efficiency of audit work have been greatly improved.

From the perspective of audit clues, the application of big data technology in audit greatly enriches the sources of audit data and broadens the discovery channels of audit clues. Effectively reduce the dependence on paper account books in traditional audit, encourage auditors to adhere to the concept of big data, use big data thinking, jump out of the account book to see data, include all structured and unstructured data related to audit projects in the database, and use modern information technology to sort out and analyze, so as to find audit clues more easily.

From the perspective of audit results, the application of big data technology further reduces audit errors, reduces audit risks, promotes the preservation and application of audit results, facilitates the next audit, and shortens the working time of subsequent audits.

### **3. Analysis of Big Data Audit from The Perspective of Rural Revitalization**

With the continuous deepening of rural revitalization in China, the application of big data audit has been mature, but there are also some problems. For these problems, the following aspects can be improved and perfected in the future rural revitalization big data audit work.

#### **3.1. Limited funding projects for big data analysis**

Due to the different data bases and information technology applications of various rural revitalization authorities, more rural revitalization funds and specific rural revitalization projects have not been managed by standing books or information systems. In addition, the large number of rural revitalization tasks and the fragmented nature of agricultural related funds and projects have led to the inability of individual audit projects to collect data from the source, and thus unable to carry out big data audit analysis [3].

#### **3.2. Constraints of data standardization**

The standardization of data restricts the development of big data audit to some extent. At present, the data of most specific rural revitalization agriculture related competent departments are not standardized data. There are many types of data, and the data structure is different. The standardization of data processing is quite difficult. This, to some extent, restricts the deep and extensive application of big data in the special audit of rural revitalization. However, with the gradual completion and continuous promotion of the "Golden Audit Phase III" project of the National Audit Office, data collection and submission will be gradually standardized, and the difficulty of data collation and data cleaning caused by inconsistent data formats will be greatly reduced.

#### **3.3. The big data audit system is still imperfect**

From now on, the top-level design and operation specifications of big data audit are not sound. In the big data audit work in the field of rural revitalization, the problems caused by nonstandard operation and imperfect system are particularly prominent. Many specific agricultural funds and projects have no relevant operation specifications when conducting big data audit analysis [4]. Even in the same province and city, the operation methods of different audit institutions are different, which also brings a big obstacle to the big data audit analysis work in the field of rural revitalization.

#### **3.4. Problem countermeasures**

For the above problems, first, we can establish and improve the audit data resource sharing system. Develop a complete list of electronic data collected by specific agricultural related management departments in rural revitalization, conduct regular collection and online collection through the Jinshen Phase III big data platform, standardize the data format from the data entrance, and avoid late problems caused by inconsistent data structure or different standardization levels [5]. The second is to improve the long-term mechanism of sharing data analysis ideas and technical methods among audit institutions. With the help of big data platform, the big data analysis ideas and technical methods will be co created and shared in a wide range and in an all-round way, and a complete big data analysis operation specification information sharing mechanism will be formed within the audit system to achieve the goal of resource sharing, information exchange, method interoperability, and technology interconnection. Third, improve the organizational model of big data audit in the field of rural revitalization. Explore the in-depth combination of on-site audit and off-site audit, and create an interactive mechanism between overall data analysis and on-site decentralized verification. Improve the normalized organizational model of big data analysis and break the limitation that data analysis depends on audit projects or audit businesses.

### **4. Conclusion**

The application of big data in the field of rural revitalization audit has been improved and developed for more than ten years, and its main analytical methods and technical means have become increasingly mature, which has effectively promoted the improvement of quality and efficiency of the audit work in the field of rural revitalization, significantly improved the efficiency of the audit,

significantly expanded the coverage of the audit in the field of agriculture, and effectively improved the accuracy of the audit to find problems [6]. At the same time, it has revealed and prevented risks and hidden dangers that appear or may appear in the process of poverty alleviation and rural revitalization strategic tasks, and played a constructive role of audit in agricultural and rural work. The application of big data in the audit of agriculture related fields still needs to be constantly innovated, and the methods still need to be constantly developed. Only by constantly summarizing the experience gained in the audit practice, and constantly refining the new technologies and methods used in the audit practice, can we keep pace with the times and continue to develop, so that big data can continue to play a supporting role in the audit of rural revitalization, and open up more space for the development of the audit of rural revitalization [7].

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