



Integration Analysis of Enterprise Cost Accounting Management and Audit Based on Big Data Information Technology

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Abstract. In order to improve the overall level of enterprise accounting and audit, this paper studies the integration of enterprise cost accounting management and audit based on big data information technology. By obtaining the development status of accounting management and audit, this paper deeply investigates and studies the practice of the integration of cost accounting and audit in Chinese enterprises. Using big data information technology to analyze and predict the economic situation, using advanced audit information as the audit management object, further build the theoretical system of enterprise cost accounting management and audit integration, and formulate accounting objectives and audit standards at the level of accounting management and audit integration for enterprise production cost rate. Complete the integration of enterprise cost accounting management and audit based on big data information technology. Summarizing the results of the integration of enterprise cost accounting management and audit, it is concluded that big data does not mean to change the causal relationship between the existing accounting and audit business transactions, but focuses on the scientific development and comprehensive utilization of the integration of accounting and audit. This research provides an effective reference for the integration of enterprise cost accounting management and audit.

Keywords: Big data information technology · Enterprise cost · Accounting management · Audit integration · Economic situation · Theoretical system

1 Introduction

At present, the research on the organic integration of enterprise cost management accounting and enterprise audit, the existing accounting related theoretical research at home and abroad is mainly carried out from the two perspectives of accounting and audit. And the practical application research of the integration of cost accounting management and audit is relatively few, the purpose and effect of the integration are not clear, and the integration mode and ideological system need to be further improved. Some foreign value chain management accounting research has been gradually introduced into the management and operation of Chinese enterprises, which is very concerned by all sectors of society. In short, with regard to the integration of enterprise cost accounting

management and audit in China, most of the existing domestic audit studies still stay at the level of audit theoretical analysis. There are many overlapping problems in the research theoretical results, most of which are general contents, and the detailed analysis and research combined with the actual theory is slightly insufficient. In practice, the accounting management of many enterprises in China is still in the stage of extensive bookkeeping and reporting. The implementation of a company's resource management is not detailed enough, the application of management accounting is relatively lack, and the communication with financial accounting is not smooth. In view of the above problems, this paper will carry out research and analysis.

2 Development Status of Accounting Management and Audit

Accounting management and audit development is a major decision of the CPC Central Committee to carry out audit work in depth. It is proposed to deeply implement the integration of audit and help promote economic reform, and public investment audit is the only stable and universal way. In this regard, the formulation of cost standards requires a lot of human and financial resources. We should not only learn foreign advanced cost accounting methods and principles, but also deeply study enterprise practice, deeply investigate and study the cost accounting practice of foreign enterprises, and fully absorb and learn various suggestions. Combine the advanced cost accounting methods and principles with the cost accounting practice of Chinese enterprises to formulate a cost accounting system suitable for the development of Chinese enterprises. On the one hand, establishing a complete audit accounting standard system is the basis for formulating audit accounting standards, providing theoretical support for audit accounting practice and the specific contents of cost accounting standards [1]. Whether accounting standards can achieve the expected goal is a risk problem, and the implementation of audit accounting standards will also cause unexpected problems. These uncertainties pose risks to the implementation of accounting management and audit standards. The formulation and implementation of accounting management can price public utility products and provide reliable cost calculation standards. It can help standardize the cost accounting practices of state-owned enterprises and provide traceable costs. Some enterprises find their own shortcomings in audit management, so they need to conduct in-depth research and analysis on the existing management model and cost management direction. Therefore, if there are deficiencies in the development of audit, the enterprise will face huge risks. In order to control this risk, the management department of the enterprise needs to make real-time decision-making and reform. The performance audit of state-owned enterprises provides a standard for product pricing and cost audit. Taking Zhejiang Province as an example, Zhejiang province carried out a large-scale performance audit of state-owned enterprises in 2007, and conducted a special audit investigation on the business performance of 16 provincial group companies from 2004 to 2006. In 2008, a special audit investigation was conducted on the operating income of state-owned capital of 9 provincial group companies in 2007. In these aspects, the application of cost accounting standards can reduce transaction costs and reduce the risks caused by the lack of cost information. In addition, the formulation and implementation of cost accounting standards will help Chinese enterprises deal with international anti-dumping litigation. Therefore, the expected

benefit of the cost accounting standard should be greater than the expected cost. On the other hand, when designing and implementing the integrated cost accounting and audit standards, we need to start with the cost-benefit principle to minimize the losses brought by the standards and increase the benefits brought by the cost accounting standards. Over the years, accounting management has made some theoretical achievements, and many aspects such as target cost, liability accounting, standard cost, performance evaluation, performance measurement, activity-based cost and value are still under research [2]. These findings lay a theoretical foundation for introducing and popularizing advanced cost accounting and control methods and formulating cost accounting standards. The establishment of target cost accounting method and standard cost accounting method provides a researchable example for the dissemination of advanced cost accounting and management methods, but there are still unsolved problems in the development of enterprise cost accounting management and audit.

3 Integration of Enterprise Cost Accounting Management and Audit

3.1 Big Data Information Technology Analysis and Prediction of Economic Situation

In the era of big data, every link of enterprise cost should avoid cost risk. In order to truly give full play to its accounting management and audit functions, in addition to reasonably predicting a realistic budget, it is also necessary to completely combine budget preparation, implementation and analysis for evaluation. Integrate and apply all link technologies to form an effective cycle of “control feedback evaluation” sustainable technology improvement. Budget management needs to establish a close logical relationship with reward and punishment system, financial strategy and other factors. In some aspects, it needs to become the core management of government financial departments or other budget management institutions, not just a budget. According to the areas where the country needs to monitor costs, China needs to formulate cost accounting standards, which is based on China’s economic system, culture and cost calculation theory, provides a good basis for formulating cost calculation standards, and uses advanced audit information as the object of audit management. Digital paperless audit department is very suitable for audit under big data. In the 5g data age of information interconnection, the analysis and audit services of enterprise big data have more competitive advantages. As the business department with the highest degree of information application, enterprises can be automatically captured by the enterprise big data automatic audit system through countless blind areas. The sample size during audit is roughly the same as that of the whole audit, so as to effectively reduce the risk during audit sampling to the greatest extent. Internal financial audit has gradually developed into a part of the basic project of internal informatization in Chinese enterprises [3]. The audit department is deeply aware of the importance of the transformation and development of investment audit, firmly grasp the steady progress of investment audit services, system construction, data collection, human resources team, big data information technology and the integration of investment audit, and consolidate the foundation of the transformation and development of investment audit. The principle of traditional computer electronic audit method

is to analyze and verify audit data through data collection, analysis and transformation of various electronic audit data models, and form a model by establishing a multidimensional analysis audit method using query data, which is used to process and analyze audit data. With the wide application of big data analysis and processing technology, the analysis method of audit management database can gradually carry out confirmation data analysis, and change to data shifting and mining data analysis. The traditional economic audit mainly focuses on finding practical problems quickly and predictably and analyzing China's economic development. Therefore, it is necessary to wait until relevant events take place to form a certain scale, collect sufficient data and carry out analysis and investigation.

3.2 Establish the Integrated Theoretical System of Enterprise Cost Accounting Management and Audit

To study the construction of the theoretical system of the integration of cost accounting management and audit of state-owned enterprises, we first need to preliminarily specify that China's state-owned enterprise operating cost system and accounting standard system should have a basic institutional theoretical structure. Then, based on the design of the standard system, the accounting objectives and audit standards are formulated at the level of accounting management and audit integration for the production cost rate of an enterprise. Due to the different requirements of production cost accounting standards in various departments in China, a single cost accounting standard cannot meet the different requirements of cost accounting norms in economic life. Therefore, it is necessary to establish a multi-level integrated accounting system of cost accounting management and audit. The cost accounting standard system can be divided into three levels: general cost accounting standards, special department cost accounting standards and industry cost accounting rules. Among the three levels of the cost accounting standard system, the general cost accounting standard is in an advantageous position on the basis of principles, which plays a guiding role in accounting and audit cost accounting standards and sub industry cost accounting rules [4]. According to different principles and methods, it must also meet the special requirements of departments or industries. Based on this, this paper establishes an integrated theoretical system of enterprise cost accounting management and audit based on big data information technology, as shown in Fig. 1.

In Fig. 1, the first part includes the accounting environment, cost accounting objects and cost accounting assumptions. The environment in which the accountant is located determines the cost accounting object and cost accounting assumptions. The second part is the purpose of cost accounting, the principles and elements of cost accounting, and the identification, measurement, collection, distribution, report and disclosure of cost elements. Cost accounting objectives determine the principles of cost accounting and cost accounting elements. The general principle of cost accounting management refers to the reasonable measurement, confirmation, collection and reasonable distribution of cost accounting elements. The first part is the basis of the second part. This part mainly studies the various components of the theoretical system of cost accounting management standards. At this stage, high-quality internal risk audit based on big data has increased the operating costs of many enterprises. Big data analysis and audit technology need

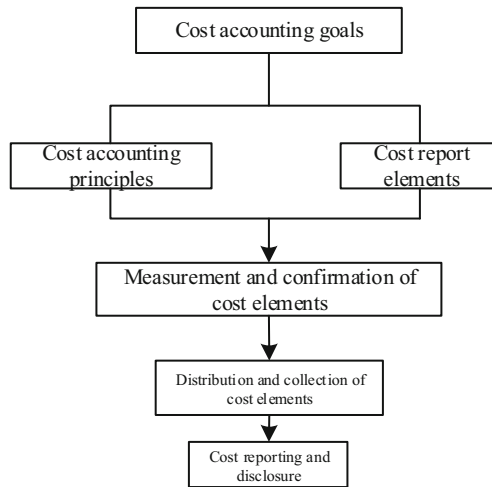


Fig. 1. Integrated theoretical system of enterprise cost accounting management and audit

software and hardware as the basis. Enterprises do not need to carry out a large number of small-scale "digitization" at the same time. They can buy various computing devices and need to implement them early. The reason for this is that the price of these devices will be greatly reduced over time.

4 Integration of Enterprise Cost Accounting Management and Audit

The rapid development of big data information technology will have a significant strategic impact on the development of information construction process of national audit institutions in the future. The development of big data audit technology has brought great changes to the company's audit business objectives, audit business content, analysis methods, audit business thinking and management mode. Large amount of data, different types. The amount of data collected by big data is so large that it seems insignificant. People usually don't compile this data for research. However, economic or non economic data always have more or less internal correlation, which may be real or superficial. Big data analysis is often bound to produce amazing prediction results. In the traditional sense of China, the data in big data is encoded by simple numbers. At present, network big data needs to be formed after collection, analysis and processing. It is not only a series of numbers or data, but also covers a wider range of industry content [5]. The era of big data has brought three changes to our way of thinking in auditing. First, ensure the compliance of audit analysis data rather than audit accuracy. Traditional financial audit methods focus on collecting financial data. Its main core business is to publish structured statistical reports and identity voucher statistical information. Big data information technology has a high degree of information digitization and complexity. Secondly, data types mainly cover conductor structured, non conductor structured and semiconductor

structured data, and are used to save the most valuable data information and understand its meaning more widely. We must achieve a unified nationwide audit rather than direct sampling audit, and implement a full-scale audit on the performance of financial responsibilities of public financial funds, state-owned assets, state-owned human resources and key managers. Finally, big data mainly reflects the causal correlation of a thing, not the relationship between causality. Big data does not mean changing the basic causal relationship between existing audit business transactions, but always focus on the scientific development and comprehensive utilization of audit relationships. It reduces the dependence on causality data analysis and makes it more focuse'd on relationship based data analysis. Big data information technology also provides early attention to abnormal economic and social dynamics, improves the sensitivity to abnormal data and realizes early warning through interdisciplinary large-scale economic and social behavior data analysis. The audit now makes a preliminary statistical analysis on the risk management of China's macroeconomic and overall social development by using audit big data and relevant analysis techniques. Through a variety of comprehensive individual structured data analysis based on different enterprise individual fields, continue to add the data analysis results of semi legal structure and illegal semi comprehensive structure across multiple individual fields into the overall comprehensive structure analysis data application processing framework, Gradually and effectively improve the overall comprehensive structure analysis data application and processing capacity of financial declaration audit of big data enterprises in China.

4.1 Main Problems of Management Accounting in the Era of Big Data

First, the management function of management accounting has changed in the era of big data. The function of traditional management accounting is only to focus on analyzing the causal relationship between data through a limited amount of data. When a large amount of data appears, the characteristics of various and lengthy data make the requirements for data analysis ability continuously improve, and management accounting is required to turn more and more to the allocation of value resources. It is not only the information in financial documents, but also massive business information. How to collect and analyze information, place useful information in reasonable resources, realize valuable financial data through efficient financial management process, and allocate resources in the field of growth is one of the manifestations of financial personnel changing their functions.

Second, new requirements are put forward for the professional ability of management accounting in the era of big data. Under the traditional accounting environment, the function of accounting focuses on simple accounting and report analysis, which provides data basis for managers, operators and decision makers. With the advent of the era of big data and the continuous development of market economy, simple data analysis can no longer meet the needs of accounting information users. Accountants need to use the database to comprehensively analyze the financial data of the enterprise and the data of other departments, mine the available information from different angles and depths, and understand the current situation of the enterprise through the hidden information of these data, Timely evaluate the business results of the enterprise objectively and truthfully, so as to facilitate the management to make timely and professional decisions. In the era of big data, management accounting is no longer a simple data indicator analyst. It is more

required to be able to skillfully use various data models, have a certain data sensitivity, and have the professional ability to integrate and use all resources.

The third is to improve the security of accounting informatization and prevent others from maliciously and illegally accessing and stealing data. Enterprises need to establish a safe information network, monitor all kinds of electronic data in real time, strengthen internal supervision, establish a sense of confidentiality, regularly implement job rotation, and systematically build enterprise internal control. In terms of hardware, we should carefully select service providers, order professional equipment with high security and stability, and ensure that the service providers have risk response plans. At the same time, the most basic key issue is to increase the investment funds for cloud computing platforms. Group enterprises must have their own servers to connect various subsidiaries and upstream and downstream related enterprises to form their own information network. Because today is the era of big data, the largest resource is data information. Once it is invaded by hackers or infected by viruses, confidential business information is likely to be leaked, which will bring irreparable losses to enterprises.

4.2 Countermeasures of Management Accounting in the Era of Big Data

First, for the problem of data leakage, we should take measures and plans to deal with the crisis at any time, strengthen the construction of firewall, resist virus infringement, ensure the security of information, improve the awareness of network security, pay attention to the preservation and collection of network crime information, and legally safeguard our own rights and interests.

Second, if enterprises want to expand data capacity, quickly analyze massive data and improve their data processing capacity, they must widely apply cloud computing and cloud reserve. Cloud computing and cloud reserve are based on the Internet to provide dynamic, extended and virtual resources. At present, cloud computing and cloud reserve have penetrated into all aspects of big data. Distributed processing, distributed database and virtualized data have become the support of big data, which saves the data to the greatest extent, makes management accounting break through the limitations of time and space, greatly improves the storage space and analysis efficiency, and fully reflects the value of data.

Third, establish the concept of big data assets. Actively respond to the demand for massive data, fully reflect the quality of accounting information, recognize that data is an asset and the data has its own value, so as to expand the items listed in off balance sheet financial statements and financial reports, improve the depth of financial analysis value, strengthen the deep excavation ability of management accounting in data analysis depth, and widely apply big data information achievements in all aspects of enterprise management and decision-making.

5 Conclusion

Based on the existing data, this paper puts forward the integration of enterprise cost accounting and audit based on big data information technology. Combined with China's current economic environment and the current situation of enterprise cost accounting

practice, this paper analyzes the necessity and feasibility of formulating the integration of enterprise cost accounting management and audit, then analyzes the theoretical system of enterprise cost accounting standards and enterprise cost accounting standards, and constructs the cost calculation standards. It provides an effective reference for the integration of enterprise cost accounting management and audit in the future.

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