Exploring the transformation and development of enterprise internal audit in the era of big data

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ABSTRACT

With the advent of the big data era, computer information technology has been widely used in auditing, and traditional auditing concepts and auditing technology means have been greatly impacted and influenced. As one of the supervisory and management departments of the internal audit institution, it is necessary to continuously promote the digital transformation and innovation of internal audit with big data as the core, in order to achieve high-quality and high-efficiency internal auditing, and to ensure the good achievement of the expected goals of internal auditing. This paper discusses the significance of internal audit transformation and innovation, analyses the problems that exist in the implementation of enterprise internal audit in the era of big data, and explores the optimization path of enterprise internal audit in the era of big data at a deeper level to better ensure that the enterprise internal audit can be compatible with the development trend of the current big data era.

Key words: Big Data; Internal Audit; Transformation and Innovation

1 INTRODUCTION

With the advancement of accounting informatisation process, the internal audit of enterprises is gradually developing in the direction of intelligence, standardisation and process. How to do a good job of China's audit work of information technology innovation and reform work, skilled grasp and use of big data technology, through the audit work and the use of big data technology to unify and combine, to achieve the goal of enhancing the degree of information technology of the audit work, but also at this stage of China's auditing staff is highly concerned about the problem [1]. Therefore, it is extremely important to explore the internal audit work of enterprises in the era of big data.

2 ANALYSIS OF ISSUES IN DIGITAL TRANSFORMATION OF INTERNAL AUDIT IN A BIG DATA ENVIRONMENT

2.1 Inadequate internal audit system

With the process of enterprise informationisation and the gradual deepening of the concept of risk-oriented management, the traditional single type of business has been difficult to meet the development needs of modern enterprises [2]. Therefore, enterprises need to improve efficiency and effectiveness by repositioning the organisational structure, optimising resource allocation and performance assessment, etc. In addition, enterprises need to clarify the importance and necessity of the internal audit department in the big data environment, so as to formulate an internal audit system suitable for the development of the company [3].

2.2 Lack of digital technology support for internal audit

In the practice of internal auditing, enterprises lack the support of digital technology, making it difficult to find valuable references from massive data [4]. Enterprises fail to optimise the audit model and lack scientific analysis and proper storage of audit data. Enterprises lack effective supervision of internal auditing, and it is difficult to monitor the actual implementation of internal auditing by various departments in real time, and the method of processing data is relatively simple, so it is impossible to accurately predict potential risks.

2.3 Audit concepts are relatively outdated

Scientific and effective audit concept is an important prerequisite for the construction of a reasonable audit process, the implementation of effective audit mode. And our country in the audit work since the development stage, are long in the low information technology level stage, and scientific and effective, with the times of the audit concept is to ensure that the relevant audit unit is fair and effective reasonable basis [5].

Part of the enterprise follows the traditional lagging audit concept, not adapt to the audit mode with digital characteristics. Enterprises failed to explore the value of audit culture, the lack of positive guidance on the values of internal auditors, and failed to guide them to innovate their auditing way of thinking. Internal auditors lack good digital thinking, and lack the flexible application of big data technology in the practice of internal audit. Internal auditors lack real-time attention to and comprehensive examination of dynamic changes in the auditing environment, fail to change their auditing concepts in a timely manner, and find it difficult to scientifically analyse and effectively avoid all kinds of auditing risks [6]. Lack of problem orientation of internal auditors makes it difficult for them to grasp the focus of internal audit work; lack of value orientation makes it difficult for them to promote internal audit to give full play to its value role and provide assistance for the achievement of corporate goals; lack of risk orientation makes it difficult for them to accurately grasp and effectively control the audit risks.

2.4 Lack of Complex Internal Audit Talent

The establishment of an internal information system is the first step in the computerisation of internal auditing, and whether the information system can play the expected role depends largely on the auditors of the operating system. At present, the audit system can adapt to the development of modern enterprise internal audit information technology professionals are few, and the enterprise's internal auditor may not be an audit professional, for the audit of professional knowledge is not in-depth, can not see through the surface to see the essence of the content of most of the business can not be made to deal with professional, so that the quality of the internal audit of the hidden dangers [7]. Therefore, despite the big data in the current stage of economic and social development is as strong as a bamboo, and once the lack of composite audit talent, which means that the road of innovation and reform of audit information technology will be unprecedented challenges.

2.5 Lack of internal audit independence

The content, scope and schedule of the work of internal auditors in the big data environment have changed significantly, making it impossible for them to carry out their operations independently. The audit activities of internal audit bodies need to be well independent in order to ensure that the audit scope is broad, the audit behaviour is unrestricted, the audit opinions or decisions are implemented, and the audit recommendations are appropriately adopted [8]. As internal audits in enterprises often do not have separate branches, they are dispersed in different functional departments, do not have the ability to act

independently, and are easily swayed by interests, which leads to unfair manipulation of the results of internal audits and the inability to provide unbiased audit reports. As a result, the main leaders of the departments are not clear, the division of power is not clear, and the independence of the internal audit body cannot be guaranteed to carry out the relevant audits independently, which leads to the inability of risk-oriented internal auditing to play its due role for the management of the company [9].

3 OPTIMISATION PATH FOR DIGITAL TRANSFORMATION OF INTERNAL AUDIT IN A BIG DATA ENVIRONMENT

3.1 Strengthening the institutional system to improve data auditing standards

Audit innovation in the context of big data, the first task is to continue to strengthen the system construction, the use of system construction to find out the shortcomings of the audit work, and constantly improve and perfect. Secondly, we must hold regular audit data research and analysis work, in-depth analysis and explore the audit mode and processing analysis mode used in the audit project of big data, deepen the theoretical research on the audit work, in order to achieve the purpose of improving the level of audit innovation.

In addition, it is necessary to strengthen the concept and method of risk-oriented management, so as to enhance the attention of internal auditors to risk awareness, information security awareness and control capacity building, so as to make them realise that the internal control system is directly related to whether an organisation can operate normally and assume the corresponding responsibilities [10]. Finally, strengthen the construction of the audit team and improve the quality of auditors. In the big data environment, the internal audit work is a professional knowledge, but also need to be skilled in the use of modern information technology means to deal with and put forward comments and suggestions. And strengthening team building requires enterprises to pay attention to talent training and selection mechanisms, the establishment of incentives and constraints system, etc., to enhance internal control capabilities.

3.2 Digital technology support for internal audit

Enterprises need to strengthen investment in computer software application and maintenance, increase hardware configuration construction, strengthen the database management platform construction, establish a sound risk warning mechanism and internal control system to prevent potential risk factors to the company's losses. Enterprises should build a high-performance analysis platform for audit data, to carry out digital internal audit to consolidate the data analysis foundation. The use of big data and cloud computing and other technologies, the implementation of high-efficiency analysis of massive data, the implementation of scientific analysis of various types of data and effective application, upholding a multi-perspective on the data to carry out a comprehensive analysis [11]. The audit model is continuously optimised to enhance the efficiency and simplicity of the audit model, and after the data are analysed using the audit model, the results of the data analysis are properly stored in the database, making it easy for internal auditors to access the data as needed.

3.3 Construct the concept of big data auditing and lead the new development of internal auditing.

In the face of the constant change of new things and the rapid development of new technologies, internal audit must change the traditional conceptual model to big data thinking

to lead the transformation and upgrading of the unit's internal audit. First, establish a risk-oriented internal audit thinking. From a single line of business risk to a comprehensive identification of associated risks, the development of relevant plans to implement the programme, the implementation of the audit process, the audit environment, behaviour and risk status of the comprehensive consideration, to master the full range of risk dynamics. Second, establish the concept of predicting risk points. The use of online analysis tools to form a full range of risk early warning, rapid discovery of doubtful points in the internal audit process, accurate positioning of risk points, predicting the development trend of business and risk, and then effectively do the risk identification of foresight and control, to promote the orderly operation of the audit and follow-up work.

3.4 Optimise the training of audit professionals and enhance the professional competence of internal auditors

Internet and big data auditing puts forward higher requirements for the work, that is, to build up a composite audit talent team. In order to further achieve the innovation of audit information technology, it should continue to meet the requirements of complex audit projects in the context of big data, to create a professional team of composite audit talent, with the help of professional auditing knowledge and skills and the skilled use of cloud computing technology, and continue to innovate the information technology of the audit work [12]. Big data internal audit requirements must establish a systematic audit thinking, systematic audit thinking is based on systematic professional knowledge, not only to be proficient in the relevant policy system, but also proficient in business, familiar with the basic business processes. Today, with the continuous development and progress of information technology and audit models, improving the quality of auditors is a top priority.

3.5 Strengthen the construction of the regulatory system and regulate the behaviour of big data auditing

In the big data environment, China's internal audit supervision still needs to be improved, and it is necessary to strengthen the construction of the enterprise's internal control and risk management system. Firstly, a coordination mechanism for internal audit work can be established with the "three committees" as the main body, in which the "three committees" refer to the shareholders' general meeting, board of directors and supervisory board set up within the enterprise. Secondly, it is necessary to improve the relevant legal standards for the collection, management and utilisation of big data. In terms of data collection, storage, organisation, establishment of databases, utilisation and monitoring, further refinements should be made in terms of both laws and standards. At the same time, the confidentiality requirements of big data should be strengthened to eliminate the concerns of the audited units and limit the behaviour of auditors. Finally, an internal audit quality monitoring and assessment system should be gradually established. With the development of big data and the broadening of the scope of auditing, the existing audit quality management methods and quality assessment system need to be constantly updated. Regulate data access and the authority of auditors in the process of big data auditing in order to prevent potential audit risks that may arise.

4 CLOSING REMARKS

In summary, the digital transformation of internal audit in the big data environment can enhance the adaptability to the audit environment and help to innovate internal audit. The problems of digital transformation of internal audit in the big data environment lie in the

imperfection of the internal audit system, the lack of digital technical support for internal audit, the relative lagging behind of the audit concept, the lack of composite internal audit talents, and the lack of independence of internal audit. In this regard, in the big data environment, enterprises should promote the digital transformation of internal audit by strengthening the construction of the system, improving the data auditing standards, providing digital technical support for internal audit, constructing the concept of big data auditing, leading the new development of internal audit, optimising the training of auditing professionals, improving the professional competence of internal auditors, strengthening the construction of the regulatory system, and standardising the conduct of big data auditing and other measures to promote internal audit to achieve digital transformation.

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