

# Risks and Countermeasures of Accounting Informatization in the Era of Big Data

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**Abstract:** The advent of big data era has accelerated the development of accounting informatization, improved the efficiency and quality of accounting work, and made better use of accounting information resources. While accounting informatization brings more advantages in accounting information management to enterprises, it also brings greater risks to enterprise operation. Therefore, it is necessary to study risk factors and preventive measures of accounting informatization in the era of big data, so as to better promote the progress and development of accounting informatization. Based on the author's learning and practical experience, this work first analyzed the characteristics and influence of accounting informatization in the era of big data, then summarized the risks in accounting informatization, and finally proposed countermeasures under the background of big data.

## 1. Introduction

With the rapid development of IT and communication technologies such as the Internet, the Internet of Things, social networks, and cloud computing, the amount of data in the world has exploded exponentially, and the society has entered into the era of big data. The emergence of big data has not only brought people a more convenient life, but also changed the operation and management models of many enterprises [1]. For accounting informatization that is undergoing rapid development, the advent of the big data has played a revolutionary role. The rise of big data has brought cloud computing into the 2.0 era, and cloud accounting based on cloud computing has also ushered in unprecedented precious opportunities and severe challenges. Therefore, this work first studied the development trend of accounting informatization in the era of big data and the risk prevention in the development process, and then exerted the guiding significance to practice and society based on theoretical research, thus further promoting the development of enterprise accounting informatization [2].

## 2. Characteristics and Influence of the Accounting Informatization in the Big Data Era

### 2.1 Characteristics of the accounting information development

With the advent of the big data era, accounting informatization, the product of the information society development, is the main direction for the future development of enterprise accounting. Accounting informatization usually combines computer, communication, network and other information technologies with accounting work, which is of great significance to financial processing and business auditing in accounting work. At present, the accounting informatization in China often has the characteristics of universality, gradualness, integration and dynamics. Universality is a common characteristic in accounting informatization, integration is mainly to effectively collect and

organize accounting information in different work areas, and dynamics is to continuously change and enrich accounting information.

## **2.2 Influence of big data on accounting informatization**

First, big data provides a resource-sharing platform for accounting informatization. In the development stage of accounting informatization, the emergence of computerized accounting information makes accounting informatization a big step forward and provides reference for business operators [3]. However, in the process of using computerized accounting information, it is easy to appear information island phenomenon, so that the internal information sharing and communication of the enterprise cannot be better achieved. However, the advent of big data era can not only effectively solve the above problems, but also realize the effective integration of information resources, providing a resource sharing platform for enterprise users.

Second, big data improves the efficiency of accounting informatization. With the advent of the big data era, enterprise accounting informatization can take advantage of network technology to effectively communicate with users. At this point, users can often complete the service they need through network connections, which can effectively improve the efficiency and quality of financial management.

Third, big data effectively reduces the cost of accounting informatization. In the process of conventional enterprise development, achieving accounting informatization often involves a series of problems, and the cost required is relatively high, mainly reflected in the following aspects: first of all, equipment related to accounting informatization needs a large sum of money, such as network and computer rooms; in addition, a large amount of funds are required to support the operation of accounting informatization; finally, related software and expenses incurred during the maintenance and upgrade of the hardware system.

## **3. Risks of Accounting Informatization in the Big Data Era**

### **3.1 Incomplete construction of accounting information sharing platform**

If accounting informatization wants to develop smoothly, it is necessary to build a perfect sharing platform, and only in this way can the purpose of resource sharing be realized. In the era of accounting informatization, the economic development in China is still in a backward position compared with that in developed countries. What is more, the development of informatization is relatively low, which is extremely detrimental to the development of accounting informatization, such as the incomplete accounting information cloud computing platform, the lagging development of accounting informatization, insufficient product promotion, negligent management, and immature application technology. All these factors will influence the development of accounting informatization to a certain extent.

### **3.2 Hidden safety hazard in accounting information security**

Accounting informatization is different from conventional accounting since it relies on accounting software. However, the accounting informatization in China has developed relatively late, and the software itself has security risks. In addition, in the era of big data, enterprise accounting contains more information, which can easily be attacked by criminals [4-5]. Plus, due to the slow development of domestic accounting informatization software technology and the outdated management of information security protection, criminals may steal a large amount of accounting information resources for profit, which produces great crisis in the enterprise accounting information security.

### **3.3 Incomplete accounting information laws and regulations**

For the accounting informatization in China, the objective fact is that it started late and relevant laws and regulations are not complete. Although the government has formulated a series of technical specifications, it is still incomplete. In addition, the security supervision of network information also has a serious lag. If an enterprise's commercial information is stolen or tampered with, it will cause

serious damage to the enterprise. The key is that under the existing legal framework, the enterprise cannot safeguard its own rights and interests.

### **3.4 Accounting operators lack technical skills**

In the era of big data, the correctness of accounting information operations depends on the operating ability of accounting personnel. Compared with developed countries', China's accounting information development is slow, accounting personnel lack quality and capability, and there are great differences in the operation and application ability of accounting information. Some accountants are conservative and ideologically incapable. Since they are technically inexperienced, they are impossible to skillfully integrate information technology with accounting knowledge, which reduces work efficiency and increases the possibility of making errors. These have become factors restricting the development of accounting informatization

## **4. Risk Control Strategies for Accounting Informatization in the Big Data Era**

### **4.1 Promoting independent research and development and construction of information platforms**

As an important carrier of the development of accounting informatization, the information sharing platform is crucial. In order to strengthen risk prevention, enterprises need to implement independent research and development and construction of information platforms, so as to strengthen the effective use of external resources in accordance with the actual situation of the enterprise. In order to conduct independent research on information platforms, the government should also take the lead in realizing financial and technical guidance, establish special funds for cloud computing technology development and support, and motivate the initiative of suppliers' independent research and development platforms, so as to enable suppliers and enterprises to jointly develop platforms and solve the problem of enterprise capital and technology shortage. In addition, enterprises need to complete the recycle system construction of logistics, capital flow and information flow, and promote the integration of enterprise information around the enterprise's financial and accounting work to strengthen the construction of shared platform.

### **4.2 Strengthening network security management**

In the era of big data, it is necessary to recognize the importance of strengthening network security management for the development of accounting informatization. For one thing, enterprises need to strengthen the construction of network security protection systems. Based on the business development of enterprises, enterprises need to set the operation permissions of different personnel and supervise the permissions in actual operation, so to provide maximum security for the accounting information system [6]. For the accounting data encryption program, it is necessary to conduct research in conjunction with the use situation and develop virtual machine combined with the results. Through the basic isolation, enterprises can ensure the security of data network transmission and reduce the risk of file transmission encryption. For another, it is necessary to enhance employees' awareness of network security, promote the participation of all employees in network security management, and make encryption processing to prevent the leakage of valuable information and data.

### **4.3 Strengthening the theoretical knowledge research of accounting informatization**

In order to cope with the risks caused by the lagging of accounting informatization theory, it is necessary to strengthen the study of accounting informatization theory knowledge, and conduct in-depth research on information technology and financial knowledge in the era of big data. In addition, it is also necessary to explore the way of integrating knowledge of accounting and computer science based on the information processing and analysis problems in practice. Therefore, advanced accounting informatization theory can be put forward to provide guidance for the implementation of practical work. For corporate finance and accounting personnel, they should also strengthen the study

of computer technology, and strengthen the integration of technology with professional work. Transforming conventional accounting management concepts and introducing advanced foreign accounting information management models can implement accounting information software suitable for the actual needs of the company's actual accounting work and improve the effectiveness of the accounting information technology.

#### **4.4 Establishing and improving system standards and safety regulations**

In response to the risks of accounting informatization, the government should also introduce safety regulations from the legislative level, establish a comprehensive standardization system for the informatization of accounting systems, promote the orderly development of accounting informatization in all walks of life, and effectively curb various safety risk factors by strengthening network security management [7]. For enterprises, it is necessary to improve the internal accounting information management system, formulate corresponding risk prevention mechanisms, and timely discover risk factors of accounting informatization through risk assessment, so as to take practical measures to prevent risks [8]. With regard to the key financial and accounting information of the enterprise, it is also necessary to pay close attention to the information trend, strengthen the management of key information and risk protection by clearly dividing responsibilities, and prevent the occurrence of information leakage problems.

### **5. Conclusion**

Through research, it can be found that in the era of big data, the production environment has changed, and enterprises should obtain new development opportunities by realizing the development of accounting informatization. But at the same time, enterprises should also recognize the risks, such as theory lagging, network information security and other factors that will cause risks. For these risks, only by taking targeted measures in combination with the actual situation of the enterprise can effective prevention of risks be achieved, providing guarantees for the construction and development of accounting informatization.

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