# Risks and Countermeasures of Accounting Informatization under the Background of Big Data

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**Abstract:** Big data can offer a resource sharing platform for enterprise accounting informatization and help to improve the efficiency and reduce the cost simultaneously, thus promoting the development of enterprise accounting information. However, big data also brings certain risk factors to accounting informatization with respect to security of information, stability of platform technology, perfection of system standard in network system. Based on the author's learning and practical experience, this work first analyzed the influence of big data on accounting informatization, then discussed the risks in enterprises accounting informatization in big data era, and finally put forward some possible strategies to address these risks.

## 1. Introduction

Since the beginning of the new century, the network information technology has been developing continuously and the accounting information becomes the main developing trend. However, the traditional accounting work mode has been feeble to meet the needs of the enterprise and the demand of economic development [1-2]. Hence, the big data based accounting information, using computerized accounting to deal with all kinds of accounting affairs, has been widely concerned. The accounting information is the inevitable result of the effective integration of the traditional accounting work with the modern information technology. With the aid of the big data, the high automation of the accounting information processing is realized, and the accounting information can be fed back to the enterprise in time [3]. At the same time, the accounting risk can be effectively prevented, and the modern management level of the enterprise can be improved as well.

## 2. The Influence of Big Data on Accounting Informatization

### 2.1 Big data provides a resource sharing platform for accounting informatization

The emergence of big data, especially the deep integration with cloud computing, makes cloud services appear in front of enterprise managers. Cloud services can effectively integrate information resources and provide users with a resource sharing platform. In the era of Cloud 2.0, cloud services can make use of the technical features of cloud computing to build an enterprise integrated management information system [4]. Firstly, the highly integrated operation mode of software and hardware of cloud computing can help enterprises to achieve efficient management, convenient maintenance and low-cost operation, so that the internal finance, sales, procurement, decision-making and other departments can work together based on the same cloud platform, thus ensuring seamless connection for each department. Secondly, the rapid deployment and scalability of cloud computing ensure that the scale of accounting information system with cloud computing as the core can be adjusted dynamically to meet the needs of the integrated application of accounting information for enterprise scale growth in the future. Thirdly, cloud computing is also convenient for enterprises, suppliers, customers, banks, taxation, customs, accounting firms and many other stakeholders to maintain data links in cloud computing mode.

### 2.2 Big data reduces the cost of accounting informatization

The development of accounting informatization is different from the traditional paper accounting

stage. Accounting information solutions first need a large number of infrastructure construction, such as computer room, office, power supply, air conditioning, network and other basic equipment. However, after the integration of big data and cloud computing, cloud service provides a convenient shortcut for accounting informatization of small and medium-sized enterprises. Also, enterprise users can solve the problem of paying according to the amount of resources used or the length of time After the use of cloud accounting, enterprise users can solve the payment problem according to how much or how long they use resources [5]. Enterprises do not have to invest a huge fee for computer room, data center, server, network, software and other infrastructure. With the change of investment mode, the enterprise does not need to consider the depreciation of facility cost. Furthermore, the enterprise does not occupy too much operating expenses, but can obtain the latest hardware platform, steady software system and the best solution of financial management in time, which greatly reduces the direct investment cost of accounting informatization for small and medium-sized enterprises.

## 2.3 Big data improves the efficiency of accounting informatization

Under the background of big data, the accounting information system which provides cloud accounting service realizes the interworking with customers through the Internet. As long as users can connect to the network, they can customize and obtain the required services, which greatly improves the efficiency of financial management, both from the internal and external aspects of the enterprise. From the internal point of view of the enterprise, the powerful computing power of cloud accounting can form various indexes and reports in real time, and managers can quickly understand the operating conditions and identify the operating risks. The cloud accounting inside the enterprise takes the internal accounting process as the center through the information flow cooperates with the enterprise each department orderly cooperation to form the high efficiency enterprise information integration process. Especially for enterprises with cross-regional or transnational business, accountants in different regions can operate online and work together at the same time, which greatly improves the application efficiency of accounting informatization. From the outside of the enterprise, cloud accounting processes the financial and accounting business between the enterprise and the external departments in real time through the Internet, which accelerates the transaction speed and improves the work efficiency [6].

## 3. The Risks in Enterprise Accounting Informatization in Big Data Era

### 3.1 The platform for resource sharing is not yet perfect

As yet, the information that enterprises need to deal with is not only complex, but also various, so the requirements for the platform itself will be more stringent. The scale of accounting information resource sharing platform will affect the development of accounting informatization. If the platform is scientific and perfect, then it will fully meet the resource needs of different enterprises. Both large and small enterprises pay great attention to the practicability of the platform. They all need to make the flow of information fast and efficient, and strive to master accurate and useful information at the first time, which is very important for any enterprise. The development of the platform is timely, and the financial or personnel information of the enterprise is changing every day. If the platform operates slowly, it will also hinder the development of the enterprise.

### 3.2 Security of information within the resource platform needs to be enhanced

In this era of information development, the circulation of information is very fast. Although the popularization of enterprise accounting informatization has brought a lot of convenience to enterprises, it has also created opportunities for some illegal elements. The security protection, operation, storage and collection of data are closely related to each other, but now the upgrading and updating efficiency of security protection means used in many enterprises can not keep up with the needs of the development of the times, and can not match the amount of nonlinear growth of enterprises. In addition, many enterprises still choose the traditional information processing method for financial security [7]. The contradiction we face today is: The traditional mode of mode is slow,

which can limit the development of the enterprise, but it is safe enough; the emerging mode is high in efficiency, which can help the enterprise to develop, but there is a certain security risk.

### 3.3 The relevant laws and regulations are not yet sound enough

No matter in which kinds of industries, it is necessary to establish corresponding stipulation standards. The big data is not an extra-legal place as the network supervision system of our country is gradually strengthening, and the relevant legal provisions of network security are also gradually coming out; however, there will still be shortcomings, (e.g., the slow legal provisions), which provides lawbreakers with the opportunity to take advantage of legal gaps and infringe on the legitimate rights and interests of enterprises. Considering the law is not perfect and imperfect, when this kind of situation occurs, the umbrella of law can not be protected in time, which dispel the enthusiasm of accounting personnel to use cloud computing. The safety of enterprise finance is related to the fate of the whole enterprise, and a reasonable management system can effectively protect the development of the enterprise.

## 4. Possible countermeasures to Mitigate the Risk of Accounting Informatization

### 4.1 Accelerating the construction of accounting information sharing platform

In the accounting informatization sharing platform, the development of accounting informatization can be better realized. Although there are some risks in the shared platform, the risk can be effectively avoided by perfecting the construction of the shared platform. Therefore, it is necessary for relevant national departments and enterprises to attach great importance to it and increase the construction of accounting informatization sharing platform in order to better promote the development of accounting informatization in the big data era.

### 4.2 Establishing the security protection system of accounting informatization

Under the era of big data, the security hidden dangers in cloud computing will reduce the accuracy of accounting information processing to a certain extent, so it is necessary to establish a set of security protection system of accounting informatization, specifically focusing the following two points. First, strengthening identity authentication. In the era of big data, it is best to set up different permissions and formulate systematic operation protection mechanism according to the requirements to ensure the security of accounting information in cloud computing. Second, improving the encryption program of data. In fact, suppliers can increase the research and development of virtual machine software to better simulate the hardware system with completion function, and ensure the storage and transmission of accounting information in big data environment.

### 4.3 Perfecting the norms and standards of accounting informatization

In the process of planning accounting informatization in the era of big data, measures should be taken to supplement and perfect the norms and standards of accounting informatization, and to control the risks existing in accounting informatization by means of law, so as to ensure the healthy development of accounting informatization [8]. At the same time, the relevant government departments need to speed up the process of information security legislation and improve the norms and standards of accounting informatization while formulating the laws and norms related to cloud accounting. In addition, it is also necessary to construct external regulators to supervise the cloud computing service licenses of major suppliers, and to order them to correct and reform them regularly, so as to provide a good basis for the development of accounting information in big data era.

### 4.4 Strengthening the construction of the internal control system

In the era of large data, the improvement of the internal control system in the process of the development of the accounting informatization has become the key to the effective prevention of the risk of the accounting information, which can not only guarantee the smooth progress of the development of the accounting information, but also improve the quality of the security management

[9]. In the process of internal control system construction, we need to start from the following aspects: First, formulating and improving the internal control system according to the actual working situation of the enterprise. Second, carrying on the scientific and reasonable operation to each new technology, so as to ensure the smooth progress of each link of accounting informatization. Third, strengthening the management of internal staff, give relevant constraints to the daily work behavior of each person, establishing the corresponding restriction mechanism, and optimizing the post personnel management system, in order to better achieve the constraints on the behavior of internal personnel and ensure the effectiveness of their work.

## 5. Summary

The operation mode of traditional enterprise accounting can no longer meet the needs of the development of science and technology. Moreover, the development concept of the present era cannot allow the slow development of the traditional model. Therefore, under the premise of ensuring the security of enterprise accounting information, how to better avoid the risks existing in enterprise accounting informatization in the era of big data is the primary consideration of this work. Accordingly, this work put forward some possible solutions as follows: accelerating the construction of accounting information sharing platform, establishing the security protection system of accounting informatization, perfecting the norms and standards of accounting informatization, and strengthening the construction of the internal control system.

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