Accounting Information Revolution Based on Cloud Computing Technology

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Abstract. China's information technology has been rapid development, cloud computing technology has been widely used in many fields. The informatization level of accounting major is one of the important factors influencing the development of enterprises. There are some problems in the traditional way of accounting work, such as low efficiency, data error and so on. Based on this, this paper puts forward the research of accounting information transformation based on cloud computing technology. This paper first analyzes the existing problems in the development of accounting informatization, and further expounds the advantages of cloud computing technology in the construction of accounting informatization, and then puts forward the transformation scheme of accounting informatization based on cloud computing technology. The results show that the scheme proposed in this paper is helpful to enhance the development strength of the company, and is widely praised by the accountants.

Keywords: Cloud Computing Technology, Accounting Major, Information Revolution, Development Strength

1. Introduction
With the development of economy and information technology, enterprises of all walks of life have put forward different requirements for the daily management of the company. China has entered the information age [1]. The coming of the information age is both an opportunity and a challenge for many fields. Accountants are an important part of an enterprise. If the level of accounting information is too low, it will restrict the further development of enterprises, and even be eliminated [2]. The improvement of accounting professional information level needs relevant departments and personnel to promote the reform, so as to ensure that accounting information can adapt to this open and diverse era. Therefore, it is of great significance to study the reform of accounting information.

In the traditional accounting industry, financial management still adopts the traditional form of manual reconciliation, with low efficiency and easy problems in financial data [3]. So there is an urgent need for a technology to change this situation. Cloud computing is based on the network, supplemented by more services and interaction modes, and provides dynamic, scalable and often virtualized resources with the help of the Internet. The service forms of cloud computing are diverse, including cloud IOT, cloud storage and cloud security [4]. The information platform of the Internet of
things is provided by cloud technology. The interaction of entity information is the content of cloud IOT, and the work of obtaining information and developing entity business can be completed on this platform. Cloud storage is to upload data to the cloud platform and analyze data information quickly. Cloud security is very important. Users operate on the Internet. Once a customer is infected with a virus, if the security measures are not in place, it is likely to endanger the security of the platform [5]. Here we will introduce the characteristics of cloud computing. The first feature is high degree of fusion, which can coordinate software and hardware to allocate data resources. The second characteristic is its high flexibility. Users can request and purchase service resources according to the actual situation. Compared with the traditional information management, cloud computing is limited, with good mobility and real-time performance. In addition, space-time constraints are even more obvious [6]. Because of the characteristics of cloud computing technology, such as security, high efficiency, easy to expand, etc., it is considered to use cloud computing technology in accounting professional information transformation.

In view of the lack of accounting professional information level and the needs of enterprises, this paper puts forward the research of accounting professional information reform based on cloud computing technology, in order to help improve the efficiency of accounting staff, and further improve the core competitiveness of enterprises.

2. Problems in the Development of Accounting Informatization

The rapid advancement of information technology has a very direct impact on the development environment of accounting major. In many cases, no matter the enterprise or the school and other units, in order to further enhance the accounting and financial management ability of the university through information technology, the relevant managers should, on the basis of advanced management technology, put the informatization construction of accounting major in the first place. Throughout the current development of accounting major, the accounting construction system in Colleges and universities in our country has achieved phased results in the process of transformation from the traditional mode to accounting information. Management ability and application practice have been improved. However, there is still a lot of room for progress in the overall information construction [7]. The accounting talents trained in Colleges and universities will eventually go to various types of enterprises. The performance of accounting talents in various enterprises reflects the talent training level of accounting major.

From some small and medium-sized enterprises, we can see that accounting informatization has the following shortcomings: (1) the level of accounting informatization is low. Many small and medium-sized companies do not have the concept of accounting professional information, do not realize the importance of this concept, and small and medium-sized companies are seriously inadequate in terms of capital investment [8]. In the aspect of account management, enterprises that stay at the level of manual bookkeeping still have the situation of account confusion, and the authenticity of their data needs to be studied. (2) The accounting business process is not perfect [9]. Accounting work is related to most business activities of the enterprise, which should have been closely communicated. However, in reality, the activities of financial accounting related personnel are mostly limited within the Department, without timely and effective communication with procurement department, management department, marketing department and so on. As a result, the business is disjointed, and all departments are unable to obtain effective accounting information in the first time. (3) Accounting information system plays a limited role. Some enterprises have established accounting information systems, but the systems among various departments are different and difficult to be compatible [10]. This results in low utilization of resources. In addition, the operation and maintenance costs of the system remain high, which is a double economic burden for small and medium-sized enterprises. The problems existing in the above accounting informatization seriously restrict the long-term and healthy development of enterprises.
3. Analysis of the Advantages of Cloud Computing Technology in the Informatization Construction of Accounting Major

The application of cloud computing technology in the construction of accounting informatization can greatly improve the working efficiency of accounting practitioners and the comprehensive strength of enterprises. The advantages of cloud computing technology in the informatization construction of accounting major are as follows:

First of all, the cost of accounting information construction should be controlled in a reasonable range. By paying the cloud service provider, the enterprise can obtain the corresponding hardware and software service content, and the upgrade and maintenance of some software in cloud computing technology are free, which reduces the investment of the enterprise in software development, system upgrade and maintenance.

Second, it is conducive to the exchange of data and information within and outside the company. Cloud computing technology can deal with business for enterprises all day, and can mine useful information in time, so as to prevent information isolation or even resource waste. Using cloud computing technology to send accounting information to the cloud server, and then the server quickly transmits the results of analysis data information to users. In addition, users can also share data information with multiple devices through the network, which is conducive to the collaborative cooperation of multiple departments of the enterprise and improves work efficiency. For example, for the application of government departments for project research, the accounting department should make a timely breakdown of its relevant account expenses. For the past accounting system, it is difficult for enterprises to communicate with external units in time. Under the cloud computing mode, they can complete online accounting, auditing and other related work.

Third, it is more convenient to transfer accounting information and more professional management standards. With the application of cloud computing technology, relevant personnel can solve financial problems anytime and anywhere without the limitation of time and space. In addition, in the cloud computing environment, companies can obtain the required services through network media, and the maintenance and upgrade of the system is also simplified. Because the work is carried out on the same cloud computing platform, the whole process is unified, and the accounting work is carried out under the unified standard, which is very efficient. For example, financial accountants can further analyze the company's income situation through the completed work, and provide reference for the company's subsequent decision-making. The company can also expand with the help of cloud computing technology according to the change of demand.

4. The Transformation Path and Effect of Accounting Informatization Based on Cloud Computing Technology

4.1 The Transformation Path of Accounting Informatization Based on Cloud Computing Technology

4.1.1. Improve the Security of Cloud Computing Technology in Accounting Information. The company's financial information needs high security. If the relevant information is damaged, it is bound to have an impact on the company's operation. In the process of accounting information construction, it is necessary to effectively monitor the security of accounting information of cloud computing technology. For example, check the cloud computing system regularly and fix the bugs found in time. The financial accounting personnel shall find out whether the financial data is abnormal in time. For security protection, network firewall can be added. Considering that there is no 100% security, accountants log in to the cloud computing platform through their account passwords, so that different accounts will leave use records in the cloud platform. Once there is a problem, it can be traced back to the source. Administrators at different levels can set different permissions to avoid information disclosure.

4.1.2. Improve the Cloud Computing Technology Level of Cloud Service Operators. The content of
financial accounting is very rich, which is closely combined with the development of the company. Here, we can let accounting professionals communicate with technical personnel of cloud computing service providers, and constantly adjust the content of cloud computing services, such as investment management, financial analysis and prediction, etc. There are also many areas of cloud computing services. Through this customized service, cloud computing platform can be more practical. Under the active communication between cloud computing technicians and accountants, it can not only promote the construction of accounting information cloud computing platform, but also broaden the vision of talents of both sides.

The application of cloud computing technology to the construction of enterprise accounting information requires not only the proficient accounting professional knowledge, but also the strong computer operation ability. At present, the enterprise lacks this kind of compound talents, so it improves the comprehensive ability of enterprise accountants. For example, enterprises can regularly organize professional knowledge training for accountants in financial management, information management and data security. At the same time, to strengthen the computer technology operation ability of accountants, accountants themselves should constantly improve their business level, master accounting knowledge and information technology, and then promote the development of enterprise accounting information construction.

4.1.3. Improve the Performance of Cloud Computing Internet. The efficient application of cloud computing technology is inseparable from excellent Internet performance. The quality of Internet performance is directly related to the quality of cloud computing technology services. With the popularization of cloud computing technology in the future, enterprises put forward higher requirements for network service quality, improve the performance of cloud computing Internet, and ensure the efficiency, integrity and security of network data transmission.

4.2 The Effect of Accounting Information Transformation Based on Cloud Computing Technology
In order to explore the effectiveness of the methods in this paper, a medium-sized and a small-sized enterprise respectively implemented the path scheme of accounting professional information transformation based on cloud computing technology. After the implementation of the plan, the company's income and the favorable comments of the financial and accounting personnel of the two companies with different sizes are counted. The results are shown in Figure 1 and table 1.

Figure 1. Comparison of income of different scale companies before and after the implementation of the plan (unit: 10000 yuan)
Table 1. Favorable comments of financial personnel of different scale companies before and after the implementation of the plan

|                | Before implementation | After the implementation |
|----------------|-----------------------|--------------------------|
| Mid-sized company | 31.2%                 | 74.8%                    |
| Small-sized company | 33.7%                 | 69.1%                    |

From Figure 1, it can be seen that after the implementation of the accounting professional information transformation scheme based on cloud computing technology, the income of companies of both sizes has increased in varying degrees, indicating that this method is conducive to the healthy operation of the company. It can be seen from table 1 that the financial staff have a positive attitude towards the introduction of the accounting professional information transformation scheme based on cloud computing technology. The number of Accountants in medium-sized enterprises has increased from 31.2% to 74.8%, and the number of Accountants in small-sized enterprises has increased from 33.7% to 69.1%, with the most obvious increase in medium-sized enterprises. Further analysis shows that due to the large business volume of medium-sized enterprises and the complicated work of accounting personnel, the workload has been greatly reduced after the introduction of cloud computing technology, so it has been widely praised.

Conclusion

Informatization is the inevitable trend of economic and social development. Correspondingly, our production and life style will also change a lot. In the information age, the information theory and management model applied in financial management play a very important role. Applying cloud computing technology to accounting specialty will help the long-term and healthy development of economy and society and further improve the comprehensive strength of enterprises.

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