Optimization of Accounting Information System Based on Big Data

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Keywords: Big Data; Accounting Information System; Measures

Abstract: Big data and cloud computing are not new words to the public in today's era. They are the product of emerging technologies and are also closely related to the overall economic situation. The application of big data is widespread in all walks of life, especially in the financial accounting industry. In order to follow the trend of the times, many enterprises have begun to combine large data with accounting information system, which can also create better business interests. This paper introduces the concept and characteristics of accounting informatization, analyses the advantages and disadvantages of the current accounting information system, and gives some suggestions on the optimization of accounting information system based on big data, hoping to bring some inspiration for the optimization of information system construction.

1. Introduction

With the progress of science and technology, the economy is also developing rapidly, and the information data accompanied by it is also increasing. Traditional accounting information system can not fully meet the needs of company information capacity, speed and integration efficiency. Therefore, the optimization of accounting information system based on big data is of great significance. Big data is the necessary reform of the development of the times and the improvement measures that should be taken to adapt to the times [1]. If we want to improve its development speed and income level, we should make good use of big data as a good tool to lay a solid foundation for further better and higher profits and long-term benefits of the company. However, the companies are onto something. Such an accounting information system seems premature. Because of the lack of accounting information, he Internet technology openness cannot have been responsible for the dangerous issues and the risk of Environmental security over the past implying years. That is the combination of big data and accounting information system's own fault. And the only measure we can do is to find a better idea to decrease the risk and make a better use of its advantage and the point of advance.

2. Basic Contents of Accounting Information

2.1. The Concept and Development Trend of Accounting Information

Accounting informatization, generally speaking, is an efficient accounting management method that stores, utilizes and re-integrates accounting information into the computer network to facilitate the development of accounting-related work. Accounting informatization and other business management activities serve the interests of the company [2].

In our country, the development of accounting informatization roughly goes through three stages: the experimental stage of accounting software, the commercial accounting software stage, and the management accounting software stage. Scholars generally believe that since 1996, the accounting information system has entered the third stage. According to another definition, accounting informationization has experienced six trends since its development. First, the application and development of XBRL (Extensible Business Reporting Language). Trend 2: Financial sharing service has entered the 3.0 era. Trend 3: Paperless accounting archives are developing in depth. Trend 4: The application of artificial intelligence in accounting. Trend 5: Location and development of cloud accounting. Trend 6: Big Data Audit and Cloud Audit. At present, the development trend of accounting informationization of enterprises in China is in an asynchronous stage from Trend Three

to Trend Six, and the significance of these four stages seems immediate and far-reaching [3].

In the latter three trends, two concepts can be used to facilitate understanding. One is intelligent commercialization, the other is mobile business development. Instead of introducing conceptual meanings, it is better to introduce them and the meanings of the three trends.

2.2. Advantages of Accounting Information

Generally speaking, the advantages of accounting informationization are reflected in its positive role in promoting the comprehensive competitiveness of enterprises. Firstly, compared with traditional manual accounting, accounting informationization has the advantages of centralized information allocation and easy competition and comparison. In traditional accounting, there is a classic phenomenon of isolated island, which roughly means that corporate information is too isolated from each other, resulting in poor communication of business competition analysis content. Accounting informationization can facilitate the overview of enterprise resources and comparative analysis with the same industry, greatly reducing the harm of information passivity, thus providing a data-based condition for the strategic deployment of enterprises [4]. In addition, accounting informatization can enrich and implement the financial tools of enterprises, ensure the timeliness and accuracy of data, and greatly facilitate the improvement of work efficiency and operational capacity of enterprises. In addition, the popularization of accounting information greatly improves the management ability of business managers, because the symmetry of information is guaranteed, and business managers are more effective.

It is convenient to manage staff information and business information, because staff information and business information are closely related to accounting information. In other words, accounting information and the whole business process are interrelated. Therefore, the more perfect the accounting information is, the more convenient it is to grasp the whole business situation and stage, which is really helpful to the improvement of managers' management ability [5].

3. Realistic Problems of Accounting Information System under Big Data

3.1. Concept and Research Significance

Big data is a new tool emerging in the business development of enterprises. It refers to the data collection which exceeds the traditional meaning of database software. It has very advanced characteristics in information collection, storage and management. With the progress of technology, the professional functions of big data are constantly improving. According to the statistics of China Accounting Vision magazine, the expected value of big data application in the accounting field will be as high as 78% in the next two years. From these statistics, it can be seen that the measures of combining big data with financial information are of great significance. The details are shown in the figure 1.
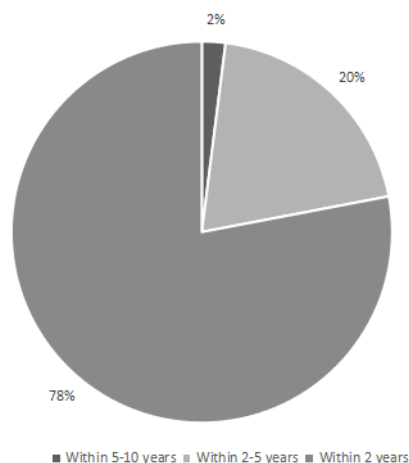

Fig.1. Expected value of application degree of big data

The purpose of applying data tools and putting them in the field of accounting informatization is

mainly to help enterprises to process better financial data and make financial departments have a quantitative concept of their own level of development. Through the comparison of vertical time, we can see the development trend of accounting information. Through the comparison of horizontal and open financial information with other companies in the same industry, we can see the development trend of accounting information. The market share of the company's earnings[6]. Under the background of Internet era and big data, the realistic research of accounting information system under big data is to make better use of this advantageous development opportunity, and also to be able to analyze the problems from a more professional and rational perspective and to meet the existing challenges.

3.2. The Impact of Big Data on Accounting Information

The application of the combination of accounting informatization and big data is at the initial stage, and the practical basis of the combination of accounting informatization and big data is relatively weak. This also shows that there are many practical problems in accounting informatization under big data. It can be divided into three aspects. Firstly, there exists the exclusion of the fact of financial openness brought about by accounting informatization in enterprises. Under the background of big data, the openness of financial information has been further enhanced, which includes not only the sharing of financial data, but also the publication of other financial information. In enterprises, the traditional trend of financial information is conservative. Many managers regard accounting information as important conservative information. Therefore, they are cautious about the combination of accounting information system and big data. They hope that the less information they publish, the less insignificant it is. This makes the development of big data accounting information system slower. Secondly, the amount of information that can be digitalized by the accounting information system itself is too little and the content is too single. Generally speaking, financial information needs the support of enterprise information and additional notes on the internal situation and the actual business situation of the enterprise. However, there are great limitations in the specific operation. Therefore, there are some problems under this problem, such as data deviation and application risk. Third, the risks brought by the external environment. The external environment mentioned here basically refers to the Internet environment. Its risk is determined by its openness. The more developed the Internet technology, the greater the financial risk to enterprises in case of hacker attacks on information systems. Therefore, it is also reasonable to mention that insiders hold exclusive effect on the disclosure of financial information.

4. Optimizing Countermeasure of Accounting Information System under Big Data

Firstly, it is necessary to strengthen employees'understanding of big data and financial informatization. As mentioned above, the third problem arising from the combination of big data accounting is the risk of financial information, and internal employees are excluded from big data because of the risk [7] .But objectively speaking, the action of combining big data with financial information has advantages and disadvantages. It can not be totally excluded or blindly followed. Therefore, enterprises can invite experts to make some professional knowledge popularization and special introduction to alleviate the negative emotions of large data within enterprises. On this basis, combined with the actual situation and future development prospects of enterprises, let employees realize the superiority and importance of big data.

Secondly, we should make enterprise informatization more popular and integrated [8]. The development of accounting information based on big data is inseparable from other information supplement of enterprises. In order to complete the unified construction of information technology, non-financial information also has its place in the big data system. It can not only provide additional information support, but also improve the efficiency of the utilization of financial information resources. With the support of non-financial information, data bias and large data application risk will be further reduced and reduced, which also reduces the speed of decision-making and improves the efficiency of negotiation.

Thirdly, we should strengthen the information security protection of enterprises. In the external

environment, we should better protect the enterprise's Internet information security environment. Under the use of big data, enterprise accounting information system naturally has Internet security information system. In order to improve its security, enterprises can outsource it to the Internet security outsourcing team with higher professional level and technical ability. In addition, we can invite technical experts to set up an Internet security department to further protect the Internet environment of enterprises [9].In the internal environment, in the safety management system, enterprises can establish a security access system for financial departments and other important departments. Non-authorized personnel can not obtain relevant information, and strictly do the confidential work of important information. In terms of information content transmission, enterprises can establish two information systems, one is local area network and the other is Internet, which can achieve partial information isolation between internal and external, and further meet the company's important information security security requirements.

5. Conclusion

With the continuous development of economy and the rapid development of information technology, the role of big data has become increasingly prominent under the development of information technology. At present, human society has entered the era of big data. In the era of big data, enterprises need to conform to the trend of historical development and realize the importance of big data in the development of enterprises. On the one hand, the rapid development of enterprise accounting information in the era of big data promotes the transformation of enterprise accounting mode; on the other hand, in the era of big data, enterprises can achieve efficient development by applying information data, reduce production costs and promote the optimal allocation of enterprise resources [10].

Starting from the concepts of big data and accounting informatization, this paper makes a thorough discussion on the problems in the process of big data in the current accounting information system, and gives some corresponding suggestions. If managers can stand in the perspective of enterprises and financial departments, while recognizing the concept of financial accounting information, strengthen cross-domain interaction, improve the development of enterprise integrated information, and strengthen the security protection of financial information and big data application, then the process of accounting information system based on big data will be more ideal acceleration.

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