

Opportunities and Challenges of Enterprise Management Accounting in Big Data Era

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Abstract: In the era of big data, many industries are undergoing reforms. As for enterprise management accounting, the popularization of big data technology is both an opportunity and a challenge. Opportunities are embodied in the application of big data technology in enterprise management accounting, which helps to improve the enterprise's pre-planning ability, enhance the decision-making ability of management, improve the efficiency of enterprise operation, and assist enterprises in assessment and evaluation. Challenges are embodied in the fact that the integration of big data technology and accounting management is still in its infancy, and information security is a problem to be solved, the information processing foundation is relatively weak, and some enterprise personnel lack correct understanding. In view of this, this paper puts forward some suggestions, such as building large data accounting information system and confidentiality mechanism, establishing data sharing mechanism, and improving employees' awareness, in order to provide useful reference for the improvement of enterprise management accounting level.

1. Background of the Study

1.1 Literature review

With the rapid development of Internet and information industry, large data technology has attracted great attention in recent years. The high-speed circulation of social information enables enterprises to obtain relevant data and information quickly by means of information technology. Big data applications cover many areas, including data integration, cloud computing, data analysis and processing. How to combine big data technology with its own business field has become a hot spot in various industries. Among them, many scholars have studied the opportunities and challenges of management accounting in the era of big data. Yang Ning believes that by collecting and collating data and producing valuable processing reports, management accounting can enable enterprise managers to effectively plan and control economic activities and promote further economic benefits of enterprises. The combination of big data and management accounting can fully improve the level of enterprise management accounting. On this basis, Yang Ning further discussed the current shortcomings and difficulties of management accounting, and put forward corresponding strategies (Yang, 2017). Geng Yunjiang, Zhao Xiaoxiao pointed out that under the background of big data era, business such as enterprise data collection and analysis has undergone tremendous changes. As an auxiliary attack of enterprise management, management shutdown has been deeply affected. Two scholars elaborated on the important role of management accounting in enterprises in the era of big data, and from the perspective of enterprises, discussed how to promote the development of management accounting (Geng and Zhao, 2015). Zhang Jing believes that enterprises need to improve the application awareness of big data in management accounting, actively use big data technology, evening enterprise data storage system, train professional personnel, and improve the security mechanism (Zhang, 2017). Xu Chun believes that the current use of big data has penetrated into various industries. In the management accounting work, the use of big data can greatly improve the efficiency of management accounting work and inject vitality into the development of enterprises. At the same time, the use of big data also puts forward higher requirements for enterprise management accounting. In studying the opportunities and challenges faced by management accounting in the era of big data, Xu Chun specifically analyzed the enterprise

response measures (Xu, 2018). Hu Qin said that the use of big data technology in accounting management can not only improve work efficiency, but also provide a guarantee for enterprise development. He also proposed that cloud computing accounting information system should be built in the future, professional big data talents should be trained, and the application of big data technology should be strengthened (Hu, 2019). Zhao Qian believes that in the era of big data, business management accounting opportunities and challenges coexist, and puts forward some specific measures to speed up the integration of big data and accounting management, in order to give full play to the auxiliary effect of accounting management on enterprises (Zhao, 2018).

1.2 Purpose of the study

By combing the existing literature, we can find that the integration of big data technology and enterprise accounting management is still in its infancy. As an important part of enterprise management, the essence of management accounting is also a kind of quantitative management. The arrival of big data era brings new challenges and opportunities for the development of management accounting. In this context, it is of great practical significance to study how management accounting can better apply big data information and extract valuable information for enterprise management and key decision-making. Based on the macro background of big data, this paper explores the opportunities and challenges faced by current management accounting, and explores the future development of management accounting, with a view to helping management accounting construct a new operating mode and give full play to its role in enterprise management.

2. Opportunities for Enterprise Management Accounting in the Age of Big Data

The core purpose of enterprise management accounting is to assist enterprise management and provide necessary information for its management and decision-making. Its specific functions mainly include the following aspects: firstly, planning enterprise economic activities; secondly, supervising and regulating enterprise economic activities in accordance with the plan formulated to achieve control in advance; thirdly, assisting enterprise managers in making business decisions; fourthly, assessing and evaluating business performance, according to the responsibility indicators, assessing and realizing it step by step. Post-control of enterprise operation. The application and popularization of technology in the era of big data provide a new opportunity for enterprise management accounting to give full play to the above functions.

2.1 Enhancing Enterprise's Pre-planning Ability

The application of big data technology in enterprise management accounting can effectively collect and collate massive, dynamic and complex data, and effectively predict the key indicators such as business status and financial status of enterprises in the next stage (Wu, 2018). Taking sales forecasting as an example, through the technology of big data analysis, the original sample model will be transformed into data model, so as to predict customer purchase trend and market influencing factors in advance, help enterprises to grasp market competition opponents'trend in time, grasp market opportunities, improve management planning ability, and then make systematic and forward-looking sales forecast.

2.2 Enhancing Enterprise Decision-making Ability

Under the background of big data era, the integration of management accounting and cloud computing technology will help to collect online and offline data more comprehensively and systematically, collect related data of supply chain upstream and downstream, customers, industries, and so on. According to real-time business market feedback, we can get corresponding reference opinions, and provide them to enterprise management to assist enterprises. Industry management makes scientific and rational decisions (Chen, 2019). The change of management accounting may cause the change of enterprise decision-making mode. With the application of big data technology, management accounting is more rapid, accurate and detailed in acquiring customer Internet data. It will sort out and purify the interview traces and comments which are difficult to count before, and

assist the managers to clear up the current problems faced by enterprises and enhance their decision-making power.

2.3 Improving the Efficiency of Enterprise Management

The rapid development of the Internet has brought huge amounts of data. How to efficiently capture these data and extract valuable information from it is a problem that enterprise management accounting must face. Using big data technology, companies can more scientifically analyze the cost, sales, after-sales service and other data involved in the product. Its dynamic and high-quality data acquisition capabilities can assist enterprises to conduct large-scale and large-scale market investigations, and then assist Managers develop appropriate production, sales and management techniques. On the one hand, it is conducive to reducing operating costs, avoiding similar competition in the enterprise in advance. On the other hand, corporate flexibility and market response adjustment capability have also been greatly improved. Through the supervision and analysis of the implementation process at various stages, the efficiency of business management is improved.

2.4 Assist Enterprises in Assessment and Evaluation

An important duty of accounting management is to help enterprises conduct assessments, and whether the assessment can truly reflect the actual situation depends largely on whether the data acquisition is comprehensive and accurate. Applying big data technology in accounting management can quickly acquire massive data and improve data analysis capabilities, thereby enhancing the authenticity and scientificity of management accounting. By integrating and analyzing big data, the performance of all departments and employees can be accurately reflected. Enterprises with a reasonable evaluation mechanism can be able to conduct a fair and holistic inspection of the original work performance of the enterprise, mobilize the enthusiasm of the department, and prevent the brain drain.

3. Challenges faced by enterprise management accounting in the era of big data

3.1 Information security issues to be resolved

The application of big data information technology not only brings great convenience to enterprises, but also brings the risk of accounting information leakage (Ning, 2018). To a certain extent, big data technology is a double-edged sword for management accounting. Although it helps to improve the efficiency of enterprises, if the problem of information security is not solved, it will also bring great losses to enterprises. At this stage, the rapid dissemination of Internet information, once the unfavorable information of enterprises is exposed, it is easy to be targeted by competitors, affecting the sustainable development of enterprises. Therefore, in order to truly apply big data technology in enterprise management accounting, we must first solve the problem of information security.

3.2 Information analysis technology is relatively weak

Despite the rapid development of large data technology in recent years, in general, large data technology is still a new technology, and its development is insufficient (Niu, 2018). At this stage, management accounting can quickly obtain information from the Internet by means of big data information collection technology. However, the development of analysis technology after information collection is still insufficient, especially in enterprise management accounting, the ability of information analysis is relatively weak, and the overall efficiency of information utilization is low, which makes information lose its reference value. In addition, the current enterprise data analysis is based on data structure, for unstructured. Semi-structured data, whose data need to be further transformed to play the value of data, data conversion process is relatively slow, further reducing the ability of data conversion.

3.3 Lack of Correct Understanding

The development and gradual popularization of big data technology have brought opportunities for enterprise management accounting. However, unfortunately, some small and medium-sized enterprises do not realize the importance of data to the development of enterprises. Big data accounting management mainly stays between large enterprises. This situation not only slows down the development of enterprises, but also hinders the integration of big data technology and accounting management. The integration of big data technology and industry is related to all enterprises in the industry. Only large enterprises research will not only reduce the amount of data, but also increase the corresponding cost of human resources and equipment environment. Lack of small and medium-sized enterprises to participate in large data business management accounting, can not really accurately judge the industry information. Enterprise managers lack correct understanding of big data technology, which can not improve the efficiency of enterprise operation and affect sustainable development.

4. Countermeasures for Strengthening Enterprise Management Accounting Level in the Age of Big Data

4.1 Building a big data accounting information system and confidentiality mechanism

Information security is a key issue of modern enterprises. Information security issues cannot be solved, and big data technology cannot be universally popularized in enterprise management accounting. Therefore, relevant government departments and industry associations should establish a system. A sound accounting information security system. This system should assess key indicators such as corporate credibility and service level. In the process of screening service users, service providers must have high qualifications and confidentiality. The use of hierarchical permissions prohibits illegal access and intervention, and low-privilege users cannot access high-rights content. Big data service providers also need to focus on corporate information security and protect confidential business information. On this basis, each enterprise needs to set up a data accounting information system to make use of the powerful data acquisition capabilities of big data to provide effective advice for enterprise decision-making and operation.

4.2 Improve the use of big data awareness among relevant personnel

As a new technology, the application of big data has broad prospects, which brings new opportunities for the development and innovation of enterprise management accounting. In order to give full play to the value of using big data technology, corporate accountants need to have the awareness of using big data, face challenges, and find a way out for them. On the one hand, accounting workers need to actively learn from the successful experiences of other companies in applying big data, integrate analysis, and explore models that are consistent with their own operations. Relevant training can also be carried out within the company to assist accountants in improving their understanding of big data. On the other hand, corporate management needs to recognize the value of big data technology in management accounting and play a leading role in making employees aware of the company's determination to introduce big data. In addition, corporate managers can regularly organize big data exchange activities to increase the recognition of big data by internal staff.

4.3 Establish a data sharing mechanism to improve the utilization of information resources

In the initial stage of the integration of big data and enterprise management accounting, the cooperation of enterprises at all levels is required. To a certain extent, a key indicator to measure the level of enterprise accounting information is the degree of non-confidential data sharing. The higher the degree of data sharing, the higher the utilization of information resources. In the long run, sharing information helps to avoid homogenization of enterprises and achieve differentiated and market segmentation operations. Moreover, the stronger the information sharing ability, the faster the response speed of the enterprise and the corresponding improvement of the service level.

Therefore, enterprises at all levels should strengthen their writing, build a unified internal sharing platform, and use the Internet to realize the sharing of accounting information data resources among enterprises in the industry. On this basis, set up a special supervision department, do a good job of resource sharing supervision, and improve the utilization of information resources while improving the level of enterprise information security.

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