Big Data and Internet: Reshaping Management Accounting

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Abstract: Building on a summary of the formation and evolution of management accounting, this paper initially examines the features of accounting data within the context of the "Internet" era, highlighting the necessity for big data technology in management accounting. Subsequently, it delineates the specific impacts of big data on management accounting, assessing the associated opportunities and challenges. The paper concludes by offering scientifically grounded recommendations for establishing and refining the theoretical framework and the application-oriented talent system of management accounting in this new environment.

1. Introduction

In the current "Internet+" context, with the continuous development of technologies such as artificial intelligence, mobile Internet, cloud computing,big data has been defined as an important strategic resource by various industries in society.The advent of the "Internet +" and the era of big data has brought about a major transformation in finance, that is, from the emphasis on financial accounting to management accounting, towards the development of industry-finance integration.

Therefore, in recent years, China has paid special attention to the content of management accounting, and has successively issued relevant policies and documents to promote the construction and application of management accounting system.The development of big data technology under the "Internet+" vision has provided unprecedented opportunities and challenges for management accounting.Enterprises should actively seize this opportunity, update management concepts and rules and regulations, actively respond to the risks and challenges brought by the "Internet+" and big data era, promote the use of different functions of enterprise management accounting, and achieve leapfrogging and sustainability development of.

2. Features and advantages of big data under "Internet+"

2.1. Characteristics of Big Data

The concept of big data is not particularly unified. The general concept is a data set with a large volume and a large number of data categories. This type of data set cannot be captured, managed, and processed with traditional database tools.It has four recognized characteristics: large size, diversity, high value density, and fast speed.

2.2. The Advantages of Big Data

The traditional data analysis method is based on the past data to mine the rules of the data and the value of the data, which makes the prediction and decision basis less accurate and scientific.

In the "Internet+" context, users no longer simply use traditional relational models and query models for data requirements, but return to the original characteristics of the data, breaking up a large amount of data from different sources and different structures, only process, analyze and manage data under certain rules.

In the context of "Internet+", the new big data technology will continuously track and analyze the data obtained from inside and outside the enterprise, summarize the internal laws of the data, conduct risk assessment, formulate plans, and optimize resources to serve the business. The department maintains its ability to innovate to provide a source of data.

3. Management Accounting Needs Big Data Technology from the Perspective of "Internet+"

3.1. Characteristics of Accounting Data in the Perspective of "Internet+"

In the context of "Internet+" and big data, the sources of accounting data are more extensive. In addition to traditional structured data, which can be directly obtained from databases, such as numbers and pictures, but with the rapid development of information technology and smart devices, The popularity of the update is more unstructured, such as web page data, audio data, or other cloud platform data, which will inevitably place higher requirements on future data processing. The accounting data collected in this way can better provide the company's stakeholders with useful accounting information for decision-making.

Data visualization is a new development trend in the era of "Internet+" and big data. Traditional data analysis methods are mainly focused on the analysis of historical data, and traditional graphical analysis is difficult to adapt to changes in the current market and the development of the times. The "Internet+" era needs to pay attention to the changes and development trends of data. The emergence of such visualization tools and methods has made accounting data directly to the interests of enterprises in a way that is intuitive, clear and understandable with pictures, graphics, and animation. Relevant parties not only make effective use of this tool, but more importantly, they can gain a more real-time and accurate insight into the market and reflect the visual value of accounting data. Accounting information users, that is the stakeholders of the enterprise, must use data mining techniques and other means to capture, analyze and process data from a large amount of data in order to make the potential value of accounting data fully play.

3.2. The Impact of Big Data on Management Accounting from the Perspective of "Internet+"

Big data promotes technological innovation in management accounting from the perspective of "Internet+". Traditional management accounting data cannot be shared, but big data (cloud platform, cloud accounting) under "Internet+" makes enterprise resource allocation more optimized and provides a platform for resource sharing and data sharing. Realizing data sharing, cleaning, filtering, etc., helps to plan corporate strategy and cost control, and provides useful data information for decision-making of enterprise stakeholders.

It's also driving the transformation of management accounting. It enables enterprises to conduct cross-regional and transnational business activities without the constraints of space and time, and enables enterprises to carry out global procurement activities, sales activities, and bidding activities. In the current global economic environment full of fierce competition, accounting transformation will inevitably be brought about. In the context of "Internet+", shared financial management and management accounting may become a future development trend. The transformation of domestic financial management and accounting is imperative, and this transformation is more international.

Improved management accounting functions. Big data has caused great changes in the content of management accounting, and electronic data is gradually replacing paper data, so that data can be quickly saved, transferred and shared. This also makes the control function of management accounting shift from the traditional focus on after-the-fact control to the focus on pre-control and in-control. The emergence of big data technology under "Internet+" has made the level of informatization of management accounting higher and higher.

Enterprises have mastered and utilized big data technology, and leveraged the advantages of big data technology to further enhance the refined forecasting, decision making, planning, Control and other functions, so as to better promote the realization of the company's own development strategy. Enterprises should apply big data technology in the context of "Internet+" to management accounting, which is of great significance to both management accounting theory and practice, and it also brings updated motivation for enterprises to achieve value creation goals.

4. The Challenge pf Big Data for Management Accounting

4.1. Lack of Management Accounting Theory System Integrating Big Data

At present, the research on accounting in China still focuses on the content of financial accounting, and the theoretical system of management accounting seems to be lagging behind. Therefore, a theoretical system of management accounting with Chinese characteristics combined with the characteristics of Chinese enterprises has not been formed. Big data is an important tool for accelerating the development of management accounting, but the current lagging development of management accounting in China cannot carry many conveniences brought by big data. Therefore, the construction of a management accounting theory system that incorporates big data and reflects Chinese characteristics is a top priority.

4.2. Lack of Accounting Talents Who Have Mastered Big Data Knowledge and Refined Management

Although the number of accountants is large, senior accounting talents are insufficient, and the traditional financial accounting knowledge system is the main skill, and there is a real shortage of management accounting talents. At the same time, companies need more complex talents who can master big data knowledge and understand computer technology, design, communication, statistics and other related knowledge. As the company's future business management is facing a huge challenge of transitioning to scientific and refined management, it is imperative to promote the professionalization of management accounting in China and cultivate professional management accountants.

4.3. Lack of A System to Secure Management Accounting Information

The openness of the Internet in the "Internet +" era has brought opportunities and hidden dangers for enterprises. With the rapid development of information technology, the process of management accounting making full use of big data technology will inevitably bring data security issues. For example, the security of management accounting information storage. In the era of big data, accounting information from a wide range of sources is stored in electronic media in a centralized manner. This centralized storage method may cause hacker attacks and ultimately increase the risk of corporate trade secrets being leaked. Management accounting information may be attacked by hackers during the transmission process. Because management accounting makes big data of various unstructured data in the process of forecasting and decision-making, the software and systems cannot be infected during the process of capturing viruses. This inevitably brings huge hidden dangers to the security of management accounting information. Therefore, once the important data of an enterprise is leaked, it may cause a devastating blow to the enterprise. Therefore, the establishment of a complete management accounting information system is also a top priority for enterprises.

5. Suggestions on Improving Management Accounting under the Big Dataof "Internet+"

5.1. Constructing a Theoretical System of Management Accounting with Chinese Characteristics Fusion of Big Data

The construction of a theoretical system of management accounting with Chinese characteristics integrated with big data should be based on the basic theory of management accounting, combined with the actual situation of Chinese enterprises and the "Internet+" background, and integrate big

data technology, management accounting theory and management accounting practice. Management accounting theory system with Chinese characteristics. Specifically, the system is always around the core goal of management accounting, which is to create value for stakeholders. It is built on the three major foundations of management, data and technology, including strategic performance management, budget management, cost management, operation and investment and financing. Decision management, risk management, and environmental management six major elements, including strategic map, balanced scorecard, activity cost method, cost-benefit analysis, comprehensive budget management, data mining and other tools and technical methods, covering performance report, cost report and other management A complete and scientific theoretical system of accounting report content.

5.2. Cultivate Refined Management Accounting Talents with Big Data Knowledge and Application Capabilities

On the one hand, by embedding management accounting policies, contents, systems and big data technology, big data application knowledge, etc. into the content of continuing education and training for accounting personnel, training the existing accounting talent team, thereby rapidly improving the existing accounting personnel Management accounting skills and big data technology capabilities.

On the other hand, by integrating knowledge of big data application, data mining technology, and visual analysis technology into the teaching of accounting majors in colleges and universities, the accounting staff who will enter the enterprise in the future will understand and master the relevant knowledge of big data in colleges and universities at the same time. Colleges and universities should also increase the proportion of management accounting knowledge content, strengthen the theoretical knowledge of management accounting, and cultivate sophisticated management accounting talents that meet the needs of modern society.

5.3. Establish and Improve Management Accounting Information Security

To ensure the safety of management accounting information, it is necessary to strengthen and improve the internal control system of management accounting data information based on the existing internal control. The accounting personnel of an enterprise should distinguish between personnel in accordance with the requirements of the system in the process of processing data information. After the operator submits the data, the supervisor must conduct a secondary audit to ensure the reliability and timeliness of data transmission. At the same time, improve the data information backup system to ensure that multiple backups are performed on the company's own server. No data is lost.

In terms of technology, we should make full use of the existing network technology and big data technology to ensure the security of management accounting information. First, use the existing data encryption technology and multiple combined encryption methods to ensure the security of the data; second, use the Internet technology to do a good job in the management and accounting information network security defense system, use certain risk assessment methods, and select and install various advanced Anti-virus software that regularly cleans up viruses in the system to ensure the security of

the information system; Finally, enterprises with conditions should also independently develop anti-hacking technology, and on the basis of fully grasping the rules and characteristics of hacking attacks, develop a suitable for the enterprise itself The anti-hacking technology used enhances the ability of the enterprise management accounting information system to resist hackers, ensures that the management accounting data information is more secure, and lays a solid technical foundation for the enterprise to create value.

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