

# The Application of Management Accounting in Practice in the Era of "Big Data, AI, Mobile Internet, and Cloud Computing"

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## Abstract

With the rapid development of big data, AI, cloud computing and other information technologies, a new era of accounting information - "Big Data, AI, Mobile Internet, and Cloud Computing" era is coming. As an important tool to serve the internal management of enterprises, promote the refinement of management and the integration of industry and finance, management accounting stands at the forefront of the new era. This paper discusses the current situation of the development of management accounting in the era of "Big Data, AI, Mobile Internet, and Cloud Computing", the problems existing in the application of management accounting in practice in the era of "Big Data, AI, Mobile Internet, and Cloud Computing", and puts forward corresponding countermeasures against these problems.

## Keywords

The era of "Big Data, AI, Mobile Internet, and Cloud Computing"; management accounting; big data; Countermeasures.

## 1. Introduction

In 2017, is also the first years, of intelligent management accounting KeJie with "alpha dog" man-machine chess battle in memory, at the same time, many well-known accounting firms are proposed to introduce accounting robots to assist accounting work related solutions, all of these cause the extensive concern of people from all walks of life, of course including the financial community. More and more enterprises benefit from intelligent technology. Take financial work as an example. Many accounting work can be done by financial robots, and even decision-making can be done by intelligent robots. Through the establishment of the financial sharing center, it promotes the fine management of enterprises, achieves the goal of the integration of industry and finance, and realizes the implementation of management accounting.

## 2. The Opportunity of Management Accounting in the Era of "Big Data, AI, Mobile Internet, and Cloud Computing"

### 2.1. Promote the Integration of Business and Finance and Create Business Value

Each department of an enterprise can share all kinds of information together, realize the interconnection between different departments, simplify the process of information exchange between departments, reduce the steps of the whole work, simplify every link in the work chain, so as to get rid of the phenomenon that the redundant business process and application are disconnected due to various reasons among departments, and improve the whole enterprise Economic efficiency. Only by combining the era of "Big Data, AI, Mobile Internet, and Cloud Computing" and information data sharing, can companies at the upper end of the supply chain

and companies below the supply chain be able to firmly grasp the tuyere, keep up with the trend of market development and bring economic benefits to enterprises.

## **2.2. Analysis and Modeling to Provide Intelligent Support for Decision-Making**

Data modeling and calculation is the most important function of management accounting. In the analysis system of management accounting, data can be divided into many dimensions. The strong modeling ability of business intelligence can help management accounting realize the commercialization and informatization of multidimensional data analysis, analyze the data of every step in the daily business activities of the enterprise, and conduct real-time sharing of these data within the enterprise. Enjoy, help enterprises to carry out the construction of internal information, so that enterprise managers can more clearly understand the daily operation of enterprises. Taking the activity-based costing in activity-based costing management as an example, enterprises can use business intelligence to build a model of cost accounting, with the help of the analysis of big data, to provide more detailed cost data information for enterprises, so that the cost of enterprises can be more accurately and precisely allocated and amortized according to activity-based activities, so that the senior management of enterprises can better price their products. We should make decisions on how to combine and sell products in order to bring the most benefits to the enterprise and determine which products can bring the most economic benefits to the enterprise, so as to improve the core competitiveness of the enterprise.

## **2.3. Reduce the Cost of Accounting Information and Promote the Refinement of Enterprise Management**

All commodities of an enterprise need to meet the cost-benefit principle, without exception, while management accounting information, as a distinctive commodity of an enterprise, also inevitably needs to meet this principle. The traditional accounting information system construction process is complex and tedious, usually including project preparation, establishment of various groups, employment of technical experts and various staff in the enterprise. Through the basic information of the enterprise, understand the needs of the enterprise and the existing problems, carry out the system development in terms of technology. After the development is completed, the business personnel and technical experts carry out repeated debugging together. After the system version is determined, the unit leader needs to carry out acceptance evaluation and a series of processes. After the acceptance, audit and evaluation are qualified, the accounting information system can be put online for formal operation. The enterprise Only accountants can use it formally. Just like mobile phones, color TVs and other home appliances need after-sales service, the accounting information system that runs formally will have various problems due to improper use of personnel, equipment failure and other situations. This is just like that people need to have regular physical examination, which requires professional personnel to carry out various necessary maintenance and upgrading from time to time.

By using intelligent financial staff software, the financial staff of an enterprise can avoid many simple, repetitive and tedious processes that a lot of financial work has to go through, and can save more human, material and financial resources, so that the financial staff can focus more time and energy on the strategic planning of the enterprise, and tap the need to provide more strategic decisions. To promote the fine management of enterprises. For example, an enterprise can strictly review and control all the reimbursement bills, project funds and specific reimbursement matters of its employees through the management control system.

## **2.4. Provide Technical Support for the Function of Management Accounting**

One of the most important functions of management accounting is performance management. Whether the enterprise can develop for a long time is closely related to whether the enterprise carries out efficient performance appraisal for its employees. In the era of "Big Data, AI, Mobile

Internet, and Cloud Computing", the management of enterprises can realize the quantification and integration of data information through the punch card software, ERP, timely communication software and logistics query software, which provide quantitative data information for the performance management of enterprises, provide data support for the performance evaluation of enterprises, and promote the management accounting to play a better role through technical support.

### **3. Problems in the Application of Management Accounting in the Era of "Big Data, AI, Mobile Internet, and Cloud Computing"**

#### **3.1. Hidden Danger of Management Accounting Information**

In such an intelligent era as "Big Data, AI, Mobile Internet, and Cloud Computing", it is necessary for enterprises to collect a large number of data for big data analysis. Because big data analysis needs to ensure the comprehensiveness and accuracy of the analysis, the collected information will be more and more complex. The collected information may involve the company's business secrets, such as project quotation and customer information. In such an era, the information of management accounting will have security risks, no one can guarantee the confidentiality of information artificially. In the background of big data analysis, the application of cloud computing background program is more complex. The more complex the background program is, the more vulnerable it is to network loopholes in the Internet era. Computer experts and hackers are everywhere. More loopholes give them the opportunity to invade, and also bring risks to the management of accounting information. These intruders can damage one of the programs to lead to meta computing. In the process of data transmission, once these data are illegally tampered or stolen, the calculation results will be biased, which will cause irreparable losses to the enterprise. Therefore, we must take corresponding measures to remedy the possible risks of these vulnerabilities and ensure the security of core data.

#### **3.2. Lack of High-quality Management Personnel**

With the rapid development of information network and the acceleration of internationalization, the development of accounting intelligence makes the financial personnel of the company change from the former simple financial accounting to the managers who provide data for the managers at all levels of the enterprise to plan and control the daily economic activities of the enterprise and help the leaders of the enterprise to make various decisions. However, from the current situation of China's management accounting development, accounting is widespread, but there are few talents who can truly integrate Internet technology and financial knowledge, and there is a shortage of high-quality management accounting talents.

#### **3.3. Lack of Awareness of the Application of New Technology in Management Accounting**

Cloud computing, the Internet of things, big data and other technologies have emerged one after another. Although there are technologies, there are few that can truly and accurately understand and master the application of this technology in management accounting. Huge amounts of big data have been mined out and analyzed, but single enterprises do not know how to use these data, can not mine the value behind these data, and do not pay enough attention to these data. Data can't really be applied to the strategic planning and management of enterprises. Many small enterprises are willing to take out funds for equipment maintenance even after they can't tap the real value of these data, not to mention the training of enterprise accounting personnel in the application of intelligent management accounting skills.

## **4. Countermeasures to Improve the Application of Management Accounting in the Era of "Big Data, AI, Mobile Internet, and Cloud Computing"**

### **4.1. Strengthen the Security Protection of Confidential Information**

The risk of data information disclosure is a major problem faced by enterprises. All enterprises cannot ignore this risk. In order to better avoid the risk of data information disclosure, enterprises must work hard in this area, such as setting up network firewall, classifying data information, setting up network password and information collection and inquiry, data isolation and language Database encryption and other means to strengthen the security protection of confidential information. It can also be combined with the existing advanced security protection technology, such as fingerprint recognition, iris recognition, face recognition and so on, to encrypt the information data.

### **4.2. Strengthen the Information Consciousness and Train the Management Accounting Talents with Big Data Thinking**

In the guiding opinions, it is mentioned that we should give full play to the guiding role of the financial department, use the power of the society to build the machine gun management accounting system, and implement the relatively new knowledge and technology methods such as big data and cloud computing to the masses through various ways and methods, so that people in all walks of life pay attention to the application of information technology, and increase big data mining The cultivation of accounting personnel with the view of strategic development is based on the exploration of technology and overall performance. Encourage enterprises and institutions to cooperate with colleges and universities as well as colleges and universities that train accounting personnel, pay attention to the training of management accounting personnel with big data thinking, and encourage colleges and universities to set up ERP courses and related accounting skills competitions, so that future enterprise accounting personnel can truly master the basic skills of management accounting in the era of "Big Data, AI, Mobile Internet, and Cloud Computing", better adapt to today's information technology The needs of enterprises in the era.

At the same time, we must actively carry out the consulting service of management accounting, establish the development forum of management accounting in the era of "Big Data, AI, Mobile Internet, and Cloud Computing", carry out the construction of case base, timely summarize the successful experience of management accounting practice and reflect on the wrong experience, increase the proportion of management accounting knowledge in the continuous education and professional and technical qualification examination required by accounting personnel, so as to strengthen Training of high-end management accounting talents.

### **4.3. Improve the Application Consciousness of New Technology in Enterprise Management Accounting**

In the era of "Big Data, AI, Mobile Internet, and Cloud Computing", the compound talents who master it technology and are proficient in financial management have become the main body of enterprise accounting. The mastery and application of big data mining technology by management accountants is closely related to enterprise strategic planning and development. Can management accountants use the new intelligent technology to mine the real value behind big data and apply it to enterprise development The exhibition has a great influence on the strategic development of the enterprise. Therefore, the enterprise should attach importance to the application knowledge of management accounting to new technology, pay attention to the system maintenance of management accounting, allocate some funds to carry out regular and necessary maintenance and repair of the equipment, and send the management accounting

personnel of the enterprise to the corresponding training institutions for the training of management accounting intelligent application or invite relevant experts to Enterprises carry out special training.

## 5. Conclusion

The era of "Big Data, AI, Mobile Internet, and Cloud Computing" is an era of both opportunities and challenges for management accounting. While promoting the internal information sharing of upstream and downstream enterprises to promote the rapid development of enterprises, it also brings various risks. The high integration of new information technology and traditional accounting requires enterprises to seize the opportunity to keep pace with the development of the times, keep pace with the times, and constantly strengthen the construction of enterprise accounting information. With the help of cloud computing, business intelligence, artificial intelligence, mobile Internet and other technologies, management accounting can more effectively serve the internal management of enterprises, enhance the core competitiveness of enterprises, and improve The production and operation efficiency of an enterprise creates more production and operation value for the enterprise and promotes the sustainable development of the enterprise. At the same time of paying attention to the development of technology, the enterprise should not neglect the training of high-quality talents, pay attention to the training of new technology application of internal management accountants, pay attention to the training of compound talents who can combine IT technology and financial management, adhere to the combination of theory and practice, so that the enterprise can achieve long-term development in the era of "Big Data, AI, Mobile Internet, and Cloud Computing".

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