A Brief Analysis on the Application and Influence of Computer Big Data in Management Accounting

Jian Zhang¹, Luyuan Niu¹, Zhi Li²

¹Yunnan Technology and Business University, Yunnan, China, 650000
²Evergrande Group, China

*E-mail: 261157061@qq.com

Abstract. In the years after 2015, big data and industry 4.0 words often appear in news and websites. These two words have become concepts that everyone knows. The popularity of their topics is rising rapidly. Under the influence of computer technology, manage-accounting is also expanding to the direction of information[¹]. In order to provide a variety of reference for the decision-making of enterprise management, enterprises should use the information in various information systems to carry out data mining. In this case, the enterprise can get the important manage-accounting information. In this research direction, the application and influence of computer big data in manage-accounting is far-reaching and important.

Keywords: Big Data, Manage-accounting

1. Introduction

In today's era background, the growth rate of the network information we are in daily contact with has far exceeded the growth rate of the world economy. In proper principle, the growth rate of computer data processing capacity has exceeded the world economic growth rate by three times. The acceleration of data processing speed also promotes the emergence of the main application of manage-accounting. In order to bring rich resources to enterprises, effective use of data and improve the level of management is the inevitable phenomenon of the transformation of manage-accounting.

In recent years, people have gradually found the main advantages of big data system under computer technology. It can turn information into a shared carrier. This carrier can integrate various forms of resources in society. These resource forms can better meet the main needs of consumers. manage-accounting is an immature field of accounting in China[²]. Its development in China has been restricted in many aspects. These limitations include incomplete data and unreliable data. In this case, scholars have been studying the means of future development in the field of manage-accounting. It is
found that the reference of big-data can effectively promote the application of manage-accounting in the production process. These applications will also have a profound impact on it.

2. The main characteristics of computer big-data technology

The vocabulary of big data is an important information concept we often hear. At present, it is a new computer technology. It can apply cloud computing to data mining. It can even turn the integration of data into a fully shared mode of data. In this mode, the application of big-data makes people get more accurate, reliable and extensive data.

2.1. Various forms of data and the combination of accounting and financial data

In the characteristics of the era of computer big-data, there are all sorts of message that can be collected and stored. With the support of traditional informational technology, the information collected by the network is more objective and reliable. However, the information that can not be well recorded is also difficult to be collected by the system[3]. In the area of manage-accounting, the adoption of big-data technology makes it easier to obtain non-financial information. The acquisition of financial data information becomes very simple.

2.2. The sources of data have become more extensive

According to the above tips, we can understand that the data mining function of cloud computing is very powerful. Computer big data can change cloud computing data into digital form and store it in computer equipment. According to a lot of practice, we can find that the use of cloud processing technology can greatly reduce the difficulty and cost of information collection. In the course of collecting old data, due to the incompatibility of technology, the message survey of sampling technology has a relatively large error form. Today, the use of computer big data can well solve this problem (see Figure 1).

![Figure 1](image_url)

**Figure 1.** The combination of big data and management accounting

2.3. The scope of data sharing has been expanded

Due to the improvement of comprehensiveness and flexibility of information acquisition, the scope of
data sharing has been expanded. In the same situation, the actual application of data calculation also needs a large range of data sharing as the main basic technology. Through the establishment of a wide range of information system, much data can be collected and stored. This situation is also the main advantage of expanding the scope of data sharing.

3. The main characteristics of the development of manage-accounting

Manage-accounting and financial accounting are the two main components of the accounting part of an enterprise. Financial accounting pays more attention to the calculation, recording and data processing of accounting work. Manage Accounting combines accounting and management effectively. It can make use of accounting information to make management decisions. Therefore, manage-accounting pays more attention to management. Compared with financial accounting, the development of manage-accounting is immature. The problems encountered in the process of its development are also very complex.

3.1. The development of manage-accounting pays more attention to theory than practice

In fact, the beginning of manage-accounting in China is very late. The time and depth of the research we have invested in it is short. According to the investigation of a large number of documents, the research of manage-accounting in our country mainly focuses on the theoretical stage. Because the actual financial environment of enterprises is different and complex, it is difficult to find an appropriate experimental stage for theoretical knowledge in the practical application of manage-accounting. Therefore, many theoretical hypotheses can not be confirmed.

3.2. The system in the field of manage-accounting is incomplete

In the main process of the development of manage-accounting in China, we have been learning from the corresponding system standards of foreign manage-accounting. However, we still haven't got innovative and substantial breakthroughs. We also have not a complete and unified standard system to establish the corresponding manage-accounting system. This also explains why the progress of manage-accounting industry in China is slow.

3.3. The implementation is very difficult and lack of attention

Due to the influence of computer information technology and management theory, manage-accounting has not been paid attention to in enterprises. In order to implement the main functions of manage-accounting in enterprises, enterprises generally need to collect a lot of information. This information includes financial information and non-financial information. However, the collection of information is complex and difficult. In this case, the implementation of manage-accounting will become more difficult. On the other hand, some small and medium-sized enterprises in China do not pay attention to the practical problems of manage-accounting theory.

4. Application of computer big data in manage-accounting

4.1. Application in sales activities

There are many kinds of information about sales activities that are entered into the computer system.
They include customer information, commodity information and calculation information. At the same time of information input, the big data analysis platform will also screen and analyze relevant data. Big data technology can make use of the work function of manage-accounting to present various analysis reports. These analysis reports can help managers make management decisions. The impact of these decisions mainly includes four aspects. They are the guiding role of the market, the precise marketing of users, the credit policy of customers and the evaluation policy of sales performance (see Table 1).

**Table 1. Investigation on the application and influence of computer big data in manage-accounting**

| Application             | Influence                                           |
|-------------------------|-----------------------------------------------------|
| Application of sales activities | The important influence of management decision     |
| Inventory management    | Predictive analysis of accurate model based data reliability |
| Cost control            | The effect of data sharing becomes more obvious     |

4.2. The application of enterprise inventory management

As mentioned above, big data technology can realize the sharing and integration of purchasing business and financial information. By collecting the relevant information of purchasing suppliers, combined with the requirements of enterprise management, manage-accounting technology can build the corresponding supplier cost evaluation model\[4\]. Enterprises can analyze the quality and cost of purchasing activities according to the model. Managers can directly judge whether the purchasing activities can be carried out smoothly. In fact, the reference value of the evaluation model is infinite.

4.3. Application of cost control

The job of accounting is financial control. As a part of financial control, cost control is also a very important enterprise internal financial structure. The manage-accounting technology based on big data technology can calculate the output of the actual cost of a project by collecting the problems of capital turnover and material procurement of enterprises. According to the pre-determined cost control principle, managers can carry out appropriate cost control according to the output of cost calculated by computer.

5. The influence of computer big data in manage-accounting

5.1. It will increase the basis of accounting information in decision-making of manage-accounting

In practice, the important reason why manage-accounting is difficult to be applied is that it is very difficult to obtain comprehensive information. The emergence of computer big data solves this problem very well. The comprehensive and complete financial data and non-financial data provided by big data technology can provide convenience for consumers and managers\[5\].

5.2. It provides an accurate model basis for the application of manage-accounting in forecast analysis
Forecasting is an important part of the function of manage-accounting. It can forecast the sales and cost according to certain statistical methods through the old data. However, there are many defects in traditional forecasting methods. Although it can greatly save the cost, it will reduce the accuracy and reliability of the prediction results. In the forecasting function of manage-accounting supported by big data technology, the accuracy of prediction results is very high.

5.3. The sharing of big data makes the budget more effective

Comprehensive budget refers to all aspects of the enterprise's future sales and production activities reflected in the process of enterprise's goal based on prediction and decision-making. Comprehensive budget can help enterprises to organize and coordinate specific production and operation activities in the production cycle. Comprehensive budget includes cost budget and capital turnover budget\(^6\). There is no doubt that these two forms of budget are the main part of the function of manage-accounting. At the same time, the introduction of computer big data technology has accelerated the speed of comprehensive budget. They also help companies save a lot of time.

6. Conclusion

At present, all walks of life are mining various resources of big data technology to a great extent. With the deepening of people's research, the application scope of computer big data technology in the field of manage-accounting is also gradually expanded. Effective use of computer big data technology, enterprises can quickly improve the management level of manage-accounting and enterprise market competitiveness.

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