

# Thoughts on the Transformation of Enterprise Financial Management in the Era of Big Data

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**Abstract:** With the development of big data, cloud computing and other high-tech, human development has entered the era of big data. For enterprises, in the face of the current situation of financial management in the era of big data, we should actively respond and realize the transformation of enterprise financial management as soon as possible. Using big data thinking, through "intelligent accounting", to achieve the transformation to management accounting, to provide decision support for enterprises as the service goal, so as to achieve better and faster development of enterprises in the era of big data.

**Keywords:** Big data; Financial management; Transformation

## 1. Introduction

In recent years, with the rapid development of high-tech such as big data, cloud computing and artificial intelligence, "Internet +" and financial robots have appeared one after another, and human society has entered the era of the digital economy. In the era of big data, traditional financial management methods can no longer meet the needs of enterprise development. Therefore, in the face of the current situation of financial management, we should timely meet the big data technology revolution and realize the transformation of enterprise financial management as soon as possible.

## 2. The Current Situation of Enterprise Financial Management in the Era of Big Data

Under the background of big data era, the financial work of enterprises has changed from traditional bookkeeping, accounting and reimbursement to the stage of accounting computerization, to use big data technology to deal with financial information, so as to provide the users of financial information with the information needed for decision-making. Under the background of big data, financial personnel and financial work of enterprises are facing certain challenges.

### 2.1. Still restricted by traditional financial concepts

In the traditional financial work, the financial personnel of the enterprise think that from the acquisition of the original voucher to the issuance of the financial report, that is, the majority of the financial work has been basically completed, and the decision-makers such as the management also make decisions through the accounting information provided by the financial report and other

carriers. In the era of big data, the traditional concept of obtaining financial data and financial information has not been completely changed. When providing financial information, financial personnel fail to fully consider other factors such as external environment, suppliers, customers, etc. When decision-makers make relevant decisions, they rely more on the information related to the financial statements, and pay less attention to other relevant project information such as industry information.

### 2.2. Lack of financial data analysts

The major of financial personnel is accounting or related business management. The financial knowledge reserve of such personnel is comprehensive, but their computing technology and application knowledge are relatively scarce. Under the background of big data era, it is necessary to use computer technology and Internet related knowledge to realize cloud accounting with big data. There is still a shortage of compound talents who are familiar with both financial knowledge and computer technology.

### 2.3. The integration of big data and financial information will take some time

For enterprises, their financial information is their core secret, most of them are not willing to share the company's financial data in the network, and the network supervision of related financial data may not guarantee the security of their data. In addition, the accounting information system of some enterprises is not fully integrated with the data of other relevant business systems. The data in the accounting information system of enterprises reflect the fund movement expressed in currency. The business data in such links as purchase, production and

sales may be inconsistent with the data processing standards of the accounting information system, which makes the enterprises unable to use the network data from the overall level. Based on this, the integration of big data and financial information will take some time.

### **3. The Influence on the Financial Management of Enterprises in the Era of Big Data**

Big data technology will have positive and negative effects on the financial management of enterprises. On the one hand, it will make the financial work more scientific, timely and accurate from the positive aspect; on the other hand, it will bring some pressure and risks to the financial management.

#### **3.1. Positive influence on financial management of enterprises in the era of big data**

Firstly, financial information report and financial decision-making are more scientific. The important characteristics of big data are "big, many, value, fast and reliable", which is also known as "5V". Different from the traditional financial processing mode, the processing and analysis of big data can study the relevance of data information and explore the internal laws. The results of data processing are not only fast and efficient, but also of high information quality and credibility, which greatly enhances the scientific decision-making of enterprises. Secondly, the value of financial information is high. In the era of big data, financial personnel can find, mine, quantify, analyze and apply the "massive point" data. Compared with traditional accounting, they can conduct extensive data collection, timely process the scattered information, and integrate the disordered and cumbersome data into valuable data, so as to highlight the value of financial information. Thirdly, financial management is more clear and effective. Due to the intelligence of financial work, financial management personnel are liberated from the traditional and complex basic financial work, which makes financial management personnel develop more to the management accounting, and devote more time and energy to the prediction and decision-making matters that need to be judged and analyzed.

#### **3.2. Negative influence on financial management of enterprises in the era of big data**

First, the transformation of financial personnel is under great pressure. The major of enterprise financial personnel is accounting or its related business management major. The financial knowledge reserve of such personnel is relatively comprehensive, but their computing technology and application knowledge are relatively scarce. In the big data environment, the financial transformation requires that the role of financial personnel be changed from the traditional "accounting type", "keeping money type", "implementing type" to "management type", "fi-

ancing type" and "decision support type", so the financial staff feel a lot of pressure. Secondly, there are security risks in information data. In the era of big data, the sources of financial information data are wide and complex, and the processing and processing of information will face some technical and operational difficulties; on the other hand, the intelligent degree of big data analysis is high, with the further development of big data analysis technology, its intelligent degree will be higher and higher, but it will always be a computing tool operated and controlled by people, once the human loopholes or technology The risk of data security is also worrying. Third, it also increases the burden of financial expenditure and training. Big data, cloud computing, etc. all need enterprises to build information networks, and increase corresponding intelligence introduction or training, which obviously has certain pressure on enterprises with relatively tight capital.

### **4. Thoughts on the Transformation of Enterprise Financial Management in the Era of Big Data**

#### **4.1. Management thinking: from account books to big data cloud computing**

Human development has entered the era of "big data" and "cloud computing", which means that people's production and life have changed greatly. Big data thinking mainly includes three types of thinking: one is subjectivity, the other is relevance, and the third is fault tolerance. Financial management workers need to have a certain understanding of the above aspects of thinking. For organizations in the future, the key to management is how to discover, mine, quantify, analyze and apply the "massive point" data, so as to form countermeasures and forecasts. For an enterprise, financial management is the core of the whole enterprise, and all the values of the enterprise should be reflected through financial indicators, which should achieve two points: one is timeliness, the other is accuracy. To achieve these two points, it is difficult to achieve them through traditional account books and general computer information, only through big data analysis. Because big data has the important characteristics of "velocity" and "veracity", not only the data processing speed is fast, but also the data accuracy and reliability are high, that is, the data quality is high. Therefore, big data and cloud thinking are the inevitable choice of enterprise financial management thinking under the background of big data. Financial workers make full use of the thinking mode in the era of big data and use massive data to create the practical value they should have.

#### **4.2. Management means: from artificial to intelligent**

The traditional accounting processing, from the original voucher to the bookkeeping voucher and then to issue the

statement, is mainly manual. Many accounting work is still completed by traditional accounting means, which will bring about the lag of financial information, and also can't meet the needs of the timeliness of enterprise decision-making information. With the arrival of the era of big data, financial management has also stepped into the era of intelligence. The advent of Deloitte's "financial robot" in 2016 marks the liberation of the productivity of financial personnel from the trivial and error prone labor of traditional manual bookkeeping and accounting. Moreover, the emergence of big data, cloud computing, electronic invoice, mobile payment, image recognition, blockchain, mobile Internet, data security technology, etc., also marks the comprehensive arrival of the era of "accounting intelligence" Come on. The future accounting work is "cloud accounting" or "intelligent accounting", which refers to the virtual accounting information system based on cloud computing technology under the background of big data. Through the accounting information system, various information resources of the enterprise are integrated, so as to provide necessary and reliable information data for the survival and development of the enterprise. At the same time, accounting and accounting management are completed. "Intelligent accounting" is based on big data technology. Its data information is not as one-sided and isolated as today's financial information, but has relevance (such as downstream enterprises) and accuracy while ensuring the subjectivity.

#### **4.3. Management focus: from financial accounting to management accounting**

Financial accounting and management accounting are two important branches of financial management. They have both differences and connections. Under the premise of "law", financial accounting is how to record the economic activities of enterprises, reflect the operating results, pay attention to the legality, authenticity, accuracy, etc., including budget, accounting, supervision, etc.; management accounting is in the science of "theory", integrate modern management into accounting practice, make correct and reasonable decisions for the development of enterprises, in order to achieve the strategic objectives of enterprises. Due to the emergence of big data, the "data processing" of financial accounting has become intelligent and fast. The past "human brain" has been completely or partially replaced by "intelligent brain", and more financial work will become "simple" from "complex". At this time, the "human brain" of financial management will devote more time and energy to the "non process and unforeseen" work that needs to be judged and analyzed from the financial information pro-

vided by the "intelligent brain", and providing services for enterprise decision-making will become an important transformation of financial management in the era of big data. Therefore, in 2014, the Ministry of Finance issued and implemented the guidance on comprehensively promoting the construction of management accounting system, which shows that the Ministry of finance has shifted its focus from financial accounting to management accounting.

#### **4.4. Management objective: from accounting control to forecast decision**

The traditional financial work mainly has three functions: accounting, budgeting and supervision, which is the record and reflection of the "internal" economic activities. For today's enterprises, whether it is small to daily pricing or large to project investment, "foresight" is an important means to win, and is a prediction and decision-making based on "external", which is the financial management in the big data environment New targets. To achieve this goal, the role of financial managers should be changed from traditional "accounting type" to "decision support type", and big data thinking should be used more for information analysis, performance evaluation, financial prediction, etc., so as to improve the market sensitivity of enterprises and the accuracy and scientificity of enterprise decision data.

In a word, the coming of the era of big data is of great significance to the transformation and innovation of enterprise management, especially financial management. On the one hand, it has built a new platform for the development of the enterprise and increased new opportunities for financial management; on the other hand, it has brought many challenges to the financial management of the enterprise. The financial management of an enterprise needs to show its development characteristics in the era of big data. By using big data thinking and through "intelligent accounting", it can realize the transformation to management accounting, and provide decision support for the enterprise as the service goal, so as to achieve better and faster development of the enterprise in the era of big data.

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