



# Research on the Integration of Big Data Financial Information and Management Accounting

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**Abstract.** At this stage, with the advent of the era of big data, accounting work has undergone earth-shaking changes under the influence of information technology. Financial accounting and management accounting were originally two independent departments under the same system. In the context of the era of big data, the work integration of the two has gradually developed into an inevitable trend. Based on this, this article analyzes the necessity of the integration of financial accounting and management accounting in the era of big data. From the standpoints of the staff and the company, it provides some reference opinions on the integration of the two, hoping to be able to provide a long-term strategy for the company development plays a catalytic role.

**Keywords:** Big Data · Financial Accounting · Management Accounting · Information Platform · Integration · Working Model

## 1 Introduction

The integration between financial accounting and management accounting is based on the current highly developed information technology. At this stage, with the maturity of big data technology, the financial management of major enterprises has also obtained considerable room for development. Therefore, the development mode of financial management has also begun to develop towards informatization. In the resource-sharing information system, management accounting provides reference for the development strategy of the enterprise based on the financial information provided by financial accounting, while financial accounting provides management accounting with financial information collected in the big data system. The development provides a real basis, and the integration between the two will promote its work efficiency to be further improved.

## 2 The Necessity for the Integration of Management Accounting and Financial Accounting

### 2.1 Traditional Productivity Has No Longer Met the New Economic Situation

In the traditional financial management work model, the period of financial accounting to check corporate financial information is relatively long, usually based on the annual

unit. Therefore, in the current era of high-speed update of information and data, the value of this financial accounting work has been greatly reduced [1]. At the same time, the previous financial accounting work was mainly for the parties (such as creditors, investors) that had economic interactions with the company. By integrating the financial operation data of the enterprise in a certain period, combined with the work development form of the enterprise for a period of time in the future, the financial statements with a high degree of authenticity are finally formed after analysis to reflect the actual operation of the enterprise. However, under the new market economy situation, this kind of financial management work restricted by fixed formats and fixed standards can no longer meet the development needs of enterprises, nor can achieve continuous and effective delivery of financial information to enterprises. Therefore, the current stage of financial accounting should be adjusted in time, observe the changes in the market economy under the general environment at any time, and strengthen the integration with management accounting. It helps them to filter out effective information from the constantly updated market data information, so as to ensure that the company can respond at any time under the ever-changing market environment.

## **2.2 The Importance of Management Accounting Gradually Demonstrates**

Management accounting is mainly used to organize the financial information of the enterprise to help the management of the enterprise understand the current operating status, and provide decision-making basis for the adjustment of its macro-layout and investment plan. Therefore, there is a fundamental difference between management accounting and financial accounting, and the nature of its work is more inclined to the community of finance and business, and meet the long-term development needs of enterprises. At the same time, it can adjust the company's various work arrangements, investment budgets, and cost control according to the work results of management accounting [2]. Therefore, management accounting is oriented to the long-term strategic planning of the enterprise, and its work objectives are not limited to the economic information of the enterprise. At the same time, it also includes business activities that are directly related to the economic benefits of the enterprise. In addition, management accounting also has a more flexible development form of financial accounting in the work situation, which is not restricted by fixed standards. Instead, it is possible to formulate an operating plan that meets the needs of enterprise development based on the actual operating status of the enterprise.

Therefore, when the management accounting analyzes the operating data of the enterprise, it should be based on the market economy information collected in the big data technology combined with financial accounting. In this way, it can formulate an economic distribution plan that maximizes benefits for enterprises and help enterprises obtain greater returns in investment and operation. And through in-depth analysis of the company's financial data, it can discover potential risk projects in the process of business operations, and obtain a stable development environment for the company. For this reason, the important work of the current stage when the management and financial accounting are integrated is also the basic guarantee for enterprises to ensure that they are invincible in the market competition [3].

### **2.3 Businesses Need Greater Market Competition**

In the traditional accounting work, due to the lack of technological level, people's use of financial information is not thorough, and there are still many huge economic values that have not been discovered. In the context of big data, although information resources cannot be reflected in the form of physical statements, they are also an important part of corporate assets, and together with economic assets and fixed assets, they serve as important capital for the future development of enterprises. At the same time, some seemingly fragmented and unsystematic data information often contains huge and huge economic value. Once it can be developed, it will play an inestimable role in the comprehensive development of the enterprise.

Therefore, in order to thoroughly explore the potential value of data information, most companies have chosen to build internal databases and promoted the work model of resource sharing to every department in order to achieve efficient integration of information resources and enable companies. It shows more powerful work efficiency in the collection and utilization of data information. Under the resource-sharing work model, management accounting can rely on the data provided by financial accounting to make more accurate judgments in the process of carrying out relevant enterprise marketing, cost forecasting, and investment return rate analysis, so as to make the enterprise gains. It is more obvious that the risk of business activities has been minimized [4].

### **2.4 Establish and Improve an Integrated Fund Management Platform**

Fund management can be said to be a work that determines the lifeblood of enterprise development. Therefore, under the new work situation, companies should fully combine the advantages of big data technology to implement highly centralized and integrated management of their own financial information to ensure the rationality of various fund allocations. For example, an enterprise can set up multi-functional parallel network ports with the ERP system as the center to realize the seamless connection of internal organizations and ensure rapid and stable information exchange and communication in the actual work process. At the same time, in order to ensure the leakage and sharing of information in the process of information circulation, enterprises also need to integrate data processing, and adopt standardized electronic information processing procedures to store similar financial data. This working mode not only ensures that the company maintains dynamic supervision of capital flows, but also effectively reduces the uncertain risk factors caused by manual operations, making the company's capital mobilization more secure and reliable.

## **3 Suggestions on Integrating Financial Accounting and Management Accounting**

With the gradual improvement of the information society, the use of information technology has had a deeper and deeper impact on the current financial management of enterprises. Therefore, at this stage, the reform of accounting work within the enterprise has become unstoppable. Only by effectively integrating the work content of management and financial accounting can the accounting work be forced to accelerate the process

of transformation. Toward the development of management and service, it can play a greater role in the operation and management of the enterprise.

### **3.1 Enterprises Should Actively Change Their Thinking and Promote the Reform of the Working Mode**

To promote the integration of management accounting and financial accounting, and to change the traditional working mode, companies should start by changing their own thinking, and correctly interpret the important significance of the big data era to the development of the company. First of all, companies need to recognize the tremendous value that financial information creates for their development. Therefore, companies should update data processing equipment in a timely manner to ensure that data collection can be completed effectively. At the same time, the work behavior of the staff is regulated, so that when facing the huge data information, it is as refined as possible. It can ensure that financial accounting can integrate these financial information in a timely manner, discover valuable parts and pass it to management accounting, so as to provide a true reference for management accounting.

Secondly, in the face of the work style of fighting each other between various departments within the enterprise, the enterprise should actively make adjustments. It can construct a resource-common information platform to enable effective collaboration between various management departments, thereby promoting communication between management accounting and financial accounting, so as to create a brand-new accounting management model. In addition, companies should also formulate reasonable incentive policies to promote relevant departments to invest in rectification work with greater enthusiasm. Unconditionally cooperate with enterprises to realize the rectification of accounting work, it can accelerate the integration of management accounting and financial accounting. For example, companies can strengthen employees' sense of belonging to the company by delegating shares to employees, and make employees realize that the company's rectification behavior is to promote greater economic benefits. In this way, it is helpful for employees to think about problems from the perspective of enterprise development, and cooperate with the enterprise to complete the alternate tasks of the new and old working modes.

### **3.2 Accounting Staff Need to Update Their Work Concepts**

In the information age, it has become a foregone conclusion that information technology will replace part of human work. And the processing efficiency of financial information by advanced technology such as cloud computing is beyond doubt. Therefore, the accounting staff should change the traditional work concept and transfer part of the financial accounting work to the intelligent financial system. The focus of his work is on business management, so that he can develop a richer function and utility in the context of big data.

In this form, in addition to being responsible for the structured processing of the company's financial information and forming a data model with a high degree of reference, financial accounting should also focus on strengthening its own data development functions and assisting with advanced information technology. Next, some scattered data are

extracted from big data in time to provide a timely and effective reference basis for the development of management accounting work, so as to cooperate with it to construct a modern accounting information report. At the same time, management accounting needs to adjust and control the production plan and cost targets of the enterprise in time based on the financial information provided by the financial accounting. The information fed back during the adjustment process of the enterprise is sent back to the hands of financial accounting in a timely manner, so that it can concentrate on observing the changes in the business data of the enterprise during this process under the general market environment. In order to judge whether the adjustment of management accounting is reasonable, the development state of the enterprise enters a virtuous circle and ensures the effectiveness of accounting integration work [5].

### **3.3 Strengthen Talent Training**

At this stage, financial managers who only possess professional accounting skills can no longer adapt to the new work style. Therefore, enterprises should strengthen training and stimulate the learning consciousness of accountants, so that they can enrich their own professional skills and become compound talents in the new era.

Management accounting should strengthen its own management level, focus on the most advanced international corporate management model, and draw management experience from it, so as to promote its own ability to analyze and judge data. At the same time, management accounting should also study more relevant empirical cases, so as to effectively analyze the company's investment forecast, sales evaluation, cost control, and production plan.

In addition to handling the data collection and summary work, financial accounting should also combine its own professional advantages to learn some of the latest economic policies issued by country. It can learn to analyze the market economy situation, and be able to collect effective information on the market according to the needs of management accounting. The working mode of financial management and accounting integration can play a higher practical value.

In addition, both management accounting and financial accounting should strengthen their own information technology level. Only in this way can it flexibly operate the advanced financial management system and collect market economy information in a timely and effective manner. In addition, financial managers need to strengthen their macro-awareness when carrying out financial work, so that they can promptly put forward effective suggestions on the business activities of the company in the rapidly changing international economic market, and help the company complete the long-term strategic goal planning.

## **4 The Integration of Big Data Financial Information and Management Accounting**

### **4.1 Improve the Construction of Accounting Information Platform**

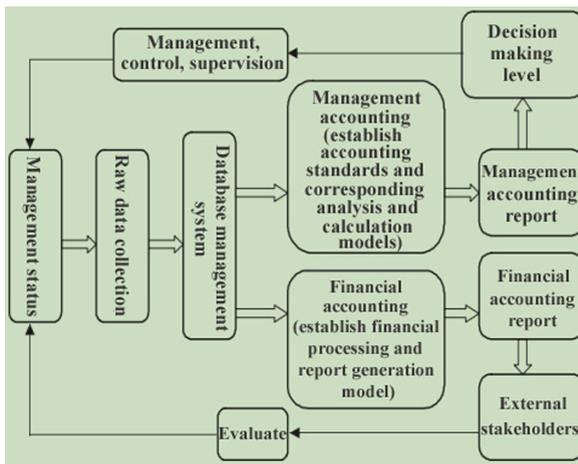
At this stage, the financial database systems of many companies cannot meet the needs of big data technology. Therefore, in order to promote the integration of management

accounting and financial accounting, the construction of the enterprise's own financial data information platform should first be improved. In the process of construction, it is first necessary to integrate the historical financial data of the enterprise in detail and integrate it into the big data repository to ensure that the working data of the server is sufficiently accurate. In addition, the current more advanced data analysis software should be selected as technical support to strengthen the analysis capabilities of big data information and further provide a decision-making basis for the development strategy of the enterprise.

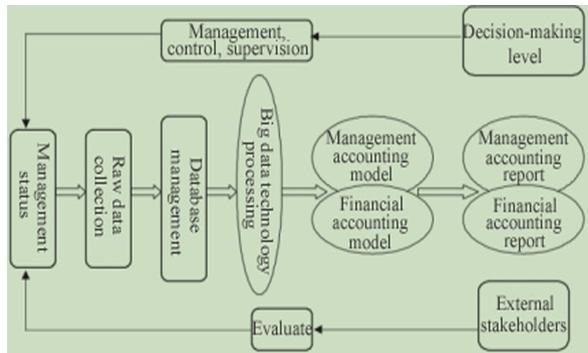
### 4.2 Building Big Data Technology Integration Management Accounting and Financial Accounting Model

At the current stage, although the financial work of the enterprise has been able to skillfully use information technology tools to assist labor and has also established a complete financial database system. However, there is still a more obvious problem, which is that the work connection between financial accounting and management accounting is not close enough. Although both of them use the financial database system of the enterprise to obtain work data, the work results of financial accounting in this process are for individuals or enterprises that are economically interacting with the outside of the enterprise. However, in the process, financial accounting results or individuals or enterprises interact with outside. The senior managers of the enterprise can make decisions in their daily business processes. The specific work is shown in Fig. 1.

Under the construction of the big data service platform, through the overall planning of market economy information, a more diversified work model can be developed in accordance with the actual needs of the enterprise in the development process. For example, according to the operating conditions of the enterprise, it can formulate an



**Fig. 1.** Financial accounting and management accounting work structure model (Quoted from “Theory and Model Construction of the Integration of Financial Accounting and Management Accounting”). Note: The data can be reproduced for use.



**Fig. 2.** Integrating big data technology into the relationship model of management accounting and financial accounting (Quoted from “Theory and Model Construction of the Integration of Financial Accounting and Management Accounting”). Note: The data can be reproduced for use.

operating plan that is more in line with the development needs of the enterprise, so as to improve the production efficiency of the enterprise and effectively reduce the operating cost. Another example is to propose adjustment measures to the company’s internal management plan based on the company’s business contacts in the most recent period of time. In this way, it effectively promotes the integration of financial accounting and management accounting, and generates integrated management accounting reports and financial accounting reports, as shown in Fig. 2.

## 5 Conclusion

To sum up, in constructing an accounting work system that integrates management accounting and financial accounting, enterprises should focus on changing employees’ work thinking. At the same time, it should speed up the pace of development of the company’s information construction, prompting employees to strive to improve their professional skills in order to adapt to the new working environment. In this process, the employees’ thoughts should be transformed to accelerate the integration and development.

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