

# Research on the Transformation from Financial Accounting to Management Accounting in the Age of Artificial Intelligence

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**Abstract:** In recent years, with the rapid development of artificial intelligence and big data information technology, the accounting function of traditional financial accounting is being gradually replaced by artificial intelligence. In the foreseeable future, the demand for financial accounting in enterprises will gradually decrease, which will force accounting personnel to transform to management accounting. However, it is not difficult to find some problems in the process of transformation. Management accounting positions require individual comprehensive quality that is far higher than that of traditional financial accounting. Accounting personnel still lack certain transformation conditions if they want to successfully transform. At first, this paper gives an overview of the related theories involved, and explains the connection and difference between them. Secondly, it expounds the current situation to be faced in the current social environment, and further points out the problems existing in the transformation of financial accounting to management accounting. Finally, in view of the above challenges, in-depth analysis of financial accounting to management accounting transformation measures, so as to provide some feasible reference for the subsequent related enterprises.

**Keywords:** Artificial Intelligence; Financial Accounting; Management Accounting

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## 1. Research Background

With the advent of the big data era, the Chinese market is gradually changing from a traditional market to a data-based market. Artificial intelligence, as a product of this era, has certain properties that some traditional financial accounting does not have, such as high accuracy in processing information, timeliness and low cost of use. However, because many practitioners are still stagnant and do not update their financial knowledge, their cognition of society is still accustomed to the previous developmental changes, and it is difficult to adapt to such drastic changes in the new era. At the same time, the financial accountant's own comprehensive quality is not up to standard to create value for the enterprise. Up to now, most of the enterprises are still not very clear about the concept of intelligent accounting, and their internal management system cannot adapt to the current social development, and the related financial post system also has great limitations. Based on this, these enterprises have been adhering to the financial accounting work with the current development of the general environment does not fit, and can not bring an effective solution to the problems that have arisen in the enterprise to adapt to the current situation.

## 2. Overview of related theories

### 2.1 Artificial Intelligence

#### 2.1.1 The Concept of Artificial Intelligence

Artificial intelligence is a part of computer science, and it is also a challenging science. Artificial intelligence is essentially a human being giving intelligence to a machine to solve some specific problems, and it can simulate some information processes related

to human consciousness. However, AI cannot achieve human-like intelligence, but it can think like a human being and may surpass the intelligence of human minds in the future.

## **2.1.2 The two main branches of modern business accounting**

### **2.1.2.1 Management accounting**

Management accounting is a science that combines accounting science and management science. It is a science based on management science and mainly based on accounting information, which provides decision support for the internal management of enterprises through planning, controlling and organizing, etc. Its purpose is to improve the overall competitive advantage of enterprises so that it can bring more and better economic benefits to enterprises.

### **2.1.2.2 Financial Accounting**

Financial accounting refers to a kind of economic management work that reflects and supervises the economic activities of a unit with money as the main unit of measurement. Its basic functions mainly include supervision and accounting.

### **2.1.2.3 The connection and difference between financial accounting and management accounting**

The information sources of enterprises are the same: both financial accounting and management accounting accounting information comes from the daily business activities of enterprises. Financial accounting can reflect true and accurate information to the enterprise by accounting and monitoring the daily occurring business, while management accounting needs to do further optimization based on this information. Therefore, management accounting is to a large extent limited by financial accounting. At the same time, the ultimate purpose of the work is the same: financial accounting and management accounting belong to the same accounting profession, the purpose of which is to improve business management and improve the economic utility.

The article explains the difference between financial accounting and management accounting from the following five aspects. One of the time is different: financial accounting is to record and account for the past and the events that occurred, and eventually made to reflect the past business results of the enterprise; while management accounting is based on the financial accounting has the information on top of the optimization process, for the enterprise in the future development of the road to provide a more reasonable optimization program.

Second, the service subjects are different: financial accounting is mainly for the external disclosure of enterprises, such as: shareholders, government, investors; while management accounting is mainly for the internal decision-making level of enterprises to serve.

Third, the main functions are different: the main function of financial accounting is to supervise and account, and check whether its financial information is true and reliable at the same time; while the main function of management accounting is to reduce the operating costs of enterprises as much as possible, and at the same time, from the financial aspect, to give decision makers effective forecast information in the future.

Finally, the comprehensive quality of their own requirements are different: financial accounting requires financial personnel to account for and supervise business operations, requiring them to be familiar with the transactions and to be able to prepare reports, while the work attitude requires caution; while management accounting requires further processing of financial information obtained to provide more specific financial information for the enterprise.

### **3. Issues facing the transformation of financial accounting to management**

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##### **3.1 Current issues facing the transition from financial accounting to management**

###### **accounting**

Although the benefits of big data for enterprises in the era of artificial intelligence are clear at a glance, there are still many problems to face in the transition from financial accounting to management accounting, such as: accounting transition may face the threat of structural unemployment, management accounting requires high comprehensive quality ability of individuals, and the accounting system is not yet perfect. The next chapter will analyze the possible problems in the context of artificial intelligence era in detail.

##### **3.2 Old-fashioned perception of corporate management and finance staff**

On the one hand, when the old and new ideas collide in the era of artificial intelligence, a large number of enterprises' decision makers are still in a wait-and-see attitude and still cannot give high importance to the transformation from financial accounting to management accounting. Even though some enterprises have set up relevant departments within the enterprises, many of them are relatively vague about the division of authority of management accounting in the practical application because of the relatively late application of management accounting in China. On the other hand, influenced by the past financial management mode, financial accountants are generally regarded as only need to record daily business, account entry, preparation of accounting reports and other high repetition rate work, so it leads them to lack active learning active atmosphere, work environment is relatively comfortable, thus many financial accountants imagine that management accounting transformation is very difficult. Especially when the accounting industry is facing the current era of artificial intelligence, artificial intelligence, although the accounting industry has brought greater opportunities and challenges, but because the accounting staff's own comprehensive quality is not enough to support their transition to management accounting, which directly caused the traditional financial accounting began to gradually not applicable to the development process of modern enterprise, management accounting personnel serious shortage, to a certain extent, hindered the artificial intelligence To a certain extent, it hinders the transition process of traditional accounting to management accounting in the era of artificial intelligence.

##### **3.3 Low level of enterprise financial informationization**

In the era of big data, the disadvantages of financial accounting compared to artificial intelligence are readily apparent. Financial accounting is characterized by high repetition and low efficiency in the overall financial data information processing of an enterprise. In the daily operation and management of an enterprise, financial personnel only account for and compile relevant data and information. However, in the real implementation, the financial accountant is not so skilled in processing and handling financial related data and information, which leads to the decision-making level not to understand the problems of each data and information in a timely manner, which leads to the enterprise in further optimizing the solution and not to achieve a best solution, thus the overall efficiency of the enterprise will be reduced. At the same time, if the enterprise data information is not timely, it may directly lead to the management to make wrong decisions about the current market, which will bring huge losses to the enterprise.

##### **3.4 Lack of composite talents in enterprises**

Since AI can effectively replace the work of finance personnel and has the characteristics of high efficiency and low cost, considering that the use of AI will further expand in the future, companies will cut a large number of financial accounting positions to save costs for the purpose of reducing operating cost expenses. When a large number of financial accounting positions begin to shrink,

this causes a reduction in the total number of personnel in the accounting industry, forcing companies to lack accounting talent. At the same time, the skills, experience and knowledge base requirements of management accounting personnel are much higher than those of traditional financial accounting personnel, and the accumulation of these skills will require long-term and continuous systematic training by enterprises. In addition, if enterprises directly recruit talents with strong personal comprehensive ability externally, then they must pay high costs to retain them, however, the reliance of such talents on enterprises is generally not high, and when these talents are faced with high compensation it is difficult to ensure that they remain loyal to enterprises.

### **3.5 Management accounting assessment system is not yet perfect**

Along with the artificial intelligence began to generally replace the daily work of financial accounting, the role of management accounting becomes more and more important for enterprises, but there are still some problems for enterprises to evaluate management accounting. On the one hand, at present, the responsibilities of most finance departments are still based on accounting and supervision, and the reason why management accounting cannot be given a proper measure like financial accounting is mainly because the assessment indexes of financial accounting work are relatively mature, the rights and responsibilities are clearer, and the management's indicators of financial accounting effectiveness are easy to design. However, management accounting needs to analyze the past financial status, operating results and cash flow of the enterprise, and on the basis of this analysis, to predict what kind of development trend the enterprise will face in the future, and its effectiveness can only be verified in the future development, so it is not easy to be reflected in the current point of time. This makes it difficult to measure the effectiveness of management accounting, so the design of the function is relatively more restricted.

## **4. Suggested measures to transform financial accounting to management**

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#### **4.1 Change the traditional concept and implement a new management accounting mindset**

From the management side, enterprises should clearly position the accounting personnel and pay attention to the development of training management accounting talents. At the same time, enterprises need to change the past more single financial management model, through the active introduction of foreign advanced management concepts to improve the financial model of enterprises, to do joint their own practical problems, planning a new financial accounting model, the development of scientific and feasible strategic objectives, breaking the constraints brought about by the old model.

From the aspect of accounting personnel, enterprises should require relevant accounting personnel to learn more basic knowledge and solid financial knowledge, and can provide relevant training regularly to improve the skills of employees and cultivate high-quality talents for the company, so that employees themselves also have a sense of access to the relevant professional mastery more advanced, so that their own concepts can keep pace with the times, so that they can better contribute to the company's advice.

#### **4.2 Update information management system and build big data platform**

First of all, to seize the opportunity in the big data market, we must optimize the internal and external environment of management accounting information construction, standing in the supply chain and industry development height consideration, can make the enterprise and artificial intelligence connected, the enterprise's internal need for information construction and information management, which requires us to reformulate the development plan and rethink the issue of strategic objectives, at the same time, the external environment of the enterprise is changing rapidly, we We should actively meet the changes and adapt to them. At the same time, we should improve the quality and business ability of the staff, so as to enhance the corporate culture and improve the cohesion and centripetal force of the staff. Second, increase the software development of artificial intelligence series, improve the participation

of artificial intelligence in the enterprise, so as to be able to better cope with the competition in the same industry. Management accounting should make timely responses according to the internal and external environment of the enterprise, actively and proactively use artificial intelligence software to provide certain reference value for the senior management of the enterprise, so as to maximize the benefits of the enterprise.

### **4.3 Cultivate complex accounting talents**

In the era of the increasing popularity of artificial intelligence, the manual bookkeeping of financial accounting is gradually withdrawing from the historical stage, and the demand for general accounting jobs is bound to decrease in the future, but the entry and accounting methods of artificial intelligence still require a small number of financial personnel to operate, so enterprises should give the most basic living space to accounting personnel, and enterprises should adopt order-based delivery methods for talents with universities, by requiring their cooperation with universities to send teachers to join the operation and management of enterprises. By asking universities to send lecturers to join the operation and management of enterprises, they can participate in the daily operation of enterprises, understand the development direction of social practice, link theory and practice, and thus grasp the focus of teaching direction, which is conducive to improving the education level of university teachers to ensure the quality of teaching. It provides a certain guarantee for talent input.

### **4.4 Improve the financial management system and integrate financial accounting and management accounting with each other**

Accounting transformation is not to deny all the functions of financial accounting, enterprises still need to retain part of the financial staff, from their own situation, in order to control business activities, supervision of business activities, the need to integrate financial accounting and management accounting. At the same time, if enterprises want to develop management accounting, they need to ensure the reasonable operation of financial accounting, and if they want to use management accounting in all aspects and at all levels of the enterprise, they need to achieve the integration of industry and finance, so that the data provided by management accounting can provide support for the strategic decisions of the enterprise management.

### **4.5 Summary**

This paper takes artificial intelligence as the premise of the times, combined with the enterprise's own situation, to find out some problems that may exist in the transformation of the enterprise, mainly in the management and financial personnel thinking old-fashioned, management of accounting transformation is still in a wait-and-see state,; financial personnel lack the necessary conditions for transformation; enterprise financial information technology level is low, etc.. If these problems are not solved in time, it may lead to the enterprise in the future road is difficult to stand firm, lose their competitive advantage difficult to have a place of their own.

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