# New Ideas of Teaching Reform of Management Accounting in Colleges and Universities Under Artificial Intelligence

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*Abstract:* The wide application of artificial intelligence technology has had a profound impact on all walks of life. Education is no exception, especially the teaching of management accounting. As an important basis for enterprise decision-making, management accounting's teaching content, methods and means need to keep pace with The Times to adapt to the development of artificial intelligence era. Based on this, the thesis mainly discusses and analyzes the teaching reform of management accounting in universities from the perspective of artificial intelligence. *Keywords:* Artificial intelligence; Management accounting; Teaching reform

# Introduction

With the rapid development of artificial intelligence technology, all walks of life are facing profound changes. As an important support system for enterprise decision-making, management accounting also faces the opportunities and challenges brought by artificial intelligence. Therefore, it is of great practical significance to discuss the teaching reform of management accounting in colleges and universities in the era of artificial intelligence.

# 1. The impact of artificial intelligence on the field of management accounting

#### 1.1 Basic concepts and development of artificial intelligence

Artificial intelligence, referred to as AI, refers to a system with certain intelligent functions created by human wisdom. These systems are capable of simulating, extending, and expanding human intelligence to help people solve complex problems <sup>[1]</sup>. In the context of the rapid development of modern science and technology, cutting-edge technologies such as big data, cloud computing, Internet of Things, and machine learning provide a solid foundation for the wide application of artificial intelligence. The field of management accounting is one of the important scenarios for the application of artificial intelligence. The application of artificial intelligence can quickly and accurately process a large amount of accounting data, saving the time and energy of manual operation, and deeply mining and analyzing useful information in accounting data, providing a favorable basis for management to make decisions.

#### 1.2 The impact of artificial intelligence on management accounting careers

The development of artificial intelligence is changing various industries at an unprecedented rate, and the work content and methods of management accountants are also being profoundly affected. The application of artificial intelligence in the field of management accountants has greatly improved work efficiency and made accounting work more accurate and efficient. But at the same time, it also puts forward higher requirements for the skills of management accountants, and with the assistance of artificial intelligence, the work efficiency of management accountants has been significantly improved. Ai can process large amounts of data quickly, provide real-time financial analysis, and help management accountants better understand the financial condition of a business.

# 2. The necessity of management accounting teaching transformation in colleges and universities

#### 2.1 Promoting management accounting teaching conforms to the trend of international economic development

In the new era, global economic development is deeply integrated, scientific and technological innovation is changing rapidly, Internet +, big data, cloud computing, financial sharing platforms have emerged one after another, and artificial intelligence is in the ascendancy. These continuous technological evolution and the birth of innovative resources are leading us into a storm of technological revolution. With science and technology as the driving force and economy as the cornerstone of comprehensive national strength competition, human resources have become a fundamental, core and strategic factor to determine national competitiveness. With the promotion of China's opening up policy and the implementation of the "going global" strategy, Chinese enterprises need to bravely cross national boundaries, and China's accounting industry is gradually integrated into the international arena, competing fiercely with foreign enterprises. At present, the ratio of management accounting and financial accounting personnel in the United States is 9:1, while that in China is 1:9, showing the huge gap in management accounting talents in China. It is estimated to be over 3 million <sup>[2]</sup>. Therefore, higher education institutions should respond positively, adhere to the principle that education serves social and economic development, elevate the reform of management accounting respond positively, adhere to the principle that education serves to training composite management accounting professionals who meet the needs of social development in the new era.

#### 2.2 Ensure that management accounting teaching matches the needs of enterprise development

In the era of the 21st century, the intelligent development of information technology is in full swing, the competition in the global market is becoming increasingly fierce, and China's economy has entered a new stage of development. Facing the dual pressure of market and technology, the management strategy and mode of enterprises are also encountering unprecedented challenges. In order to stabilize the position in the competition and achieve sustainable development, enterprises need to adapt to the actual situation, innovate the development concept, and accelerate the transformation of the development model. The key is to use the potential of artificial intelligence technology to systematically integrate, integrate and analyze financial data and information relying on information software. At the same time, under the influence of the global digital economy and artificial intelligence, enterprises have an increasing demand for management accounting talents who have knowledge of international accounting rules, are proficient in multiple languages, are good at capital operation, risk management, budget control, strategic planning, and master artificial intelligence technology. These talents can deeply participate in and promote the decision-making process of enterprises, improve the level of management accounting, and enhance the ability of enterprises to create value. Therefore, cultivating such management accounting talents has become the key goal of accounting education in many far-sighted domestic colleges and universities.

# **3.** Teaching reform of management accounting in colleges and universities under the background of artificial intelligence

#### 3.1 Renew teaching philosophy and objectives

Under the impact of artificial intelligence, the working mode and business process of the accounting industry are undergoing profound changes. Colleges and universities should set up innovative practice courses to stimulate students' innovative thinking, cultivate their positive attitude and adaptability in the face of changes, so that they can constantly innovate in the future work and adapt to the new working mode. At the same time, management accounting not only requires students to master theoretical knowledge, but also emphasizes its application in practical work. Colleges and universities can make students learn and master the tools and methods of management accounting in practice through case analysis and simulated practical training, so as to improve their ability to solve practical problems. In the era of artificial intelligence, the speed of knowledge upgrading is accelerating, colleges and universities should cultivate students' habits and abilities of independent learning and continuous learning, so that they can constantly self-renew in their careers and maintain competitiveness.

#### 3.2 Optimize the curriculum system and content

The teaching reform of management accounting in colleges and universities should optimize the curriculum system and content according to the development trend of artificial intelligence. First of all, add artificial intelligence technology courses related to management accounting, such as "Management accounting and artificial intelligence", "Big data and accounting analysis", etc., so that students can understand and master the application of artificial intelligence in the field of management accounting. These courses can help students understand the basic concepts, principles and applications of artificial intelligence, and master the basic methods and skills of combining management accounting with artificial intelligence. At the same time, through studying these courses, students can understand the latest developments and application cases of artificial intelligence in the field of management accounting, laying the foundation for future work and development.

Secondly, strengthen the core courses of management accounting, such as "cost accounting" and "management accounting theory and practice", so as to improve the professional quality of students. These core courses are the cornerstone of management accounting majors. Through in-depth study of these courses, students can master the basic theories, methods and practical skills of management accounting. For example, cost accounting courses can help students understand the basic methods of cost calculation, cost control and cost management methods and skills; Management accounting theory and practice courses can help students master the basic principles and methods of management accounting and understand the practical application of management accounting in business decision-making.

#### 3.3 Innovative teaching methods and means

Under the background of the development of artificial intelligence technology, the teaching of management accounting in colleges and universities is faced with unprecedented opportunities and challenges. In order to meet the needs of the development of this era, management accounting teaching in colleges and universities should break the traditional education mode and adopt diversified teaching methods and means to improve the teaching effect and cultivate the comprehensive quality of students. First of all, teachers can use the combination of online and offline teaching model to integrate artificial intelligence technology into teaching. Through the online platform, teachers can carry out remote teaching, so that students can access high-quality educational resources no matter what kind of environment they are in. At the same time, online teaching can also achieve real-time interaction, resource sharing and other functions to improve teaching efficiency. Offline teaching can focus on practical operation, so that students can master the knowledge and skills of management accounting in actual operation. Secondly, artificial intelligence technology can be used to carry out virtual simulation experiments. Through the virtual simulation experiment, students can learn and practice in the simulated real environment, and improve the ability to solve practical problems. This teaching method can not only stimulate students' interest in learning, but also cultivate students' innovative thinking and teamwork ability.

# 4. Conclusion

The progress of modern science and technology has given birth to artificial intelligence technology and opened a new era of intelligent finance. This change has a double impact on the task of higher education institutions in the training of management accounting talents, which provides both opportunities and challenges. As the key talent pool for economic development, colleges and universities should adapt to the changes of The Times, have the courage to face the challenges of the new era, and actively promote the reform, innovation and progress of the training of management accounting talents. The traditional accounting education model will be transformed into the management accounting education model adapted to the artificial intelligence environment, aiming at cultivating more management accounting professionals with high quality and composite ability for the society.

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