

# Upgrade and Transformation of Vocational Accounting Major under the Background of Artificial Intelligence

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**Abstract:** In the past ten years, with the rapid development of economy, science and technology change with each passing day, promoting the rapid development of Internet, artificial intelligence and other related technologies, thus changing the development direction of accounting. In this paper, personnel training mode of higher vocational accounting under the background of artificial intelligence is profoundly discussed and analyzed, and the training objectives of higher vocational accounting personnel are put forward. The relevant teaching system is further improved, and the teaching scheme and methods are optimized, so as to train professional personnel in higher vocational accounting.

## 1. Introduction

With the rapid development of emerging information technologies such as cloud computing, big data, and artificial intelligence, as the core driving force of the new round of technological revolution, artificial intelligence technology is gradually applied to all walks of life, further promoting the accounting field from digitization and networking to Intelligent transformation. In May 2017, financial robots represented by Deloitte's "Xiaoqinren" were launched. For the first time, artificial intelligence (AI) technology was introduced into accounting, taxation, auditing and other tasks, replacing financial personnel to complete manual processing that required a lot of manpower. Data entry, summary statistics, and auditing and accounting work have triggered fierce discussions among financial professionals on whether AI will replace part of the financial work. On July 20, 2017, the State Council put forward the concept of intelligent education in the "New Generation Artificial Intelligence Development Plan", requiring the use of artificial intelligence technology to accelerate the reform of talent training models and teaching methods, build a new education system, and promote artificial intelligence in teaching Application in the whole process. Comparing the 2017 and 2018 government reports, we can find that in the 2019 government work report, the description of artificial intelligence has changed from "accelerating" in 2017, and "strengthening" in 2018 to "deepening". This shows that my country's artificial intelligence industry has entered a period of in-depth development from the initial development stage. If artificial intelligence is applied to the accounting profession, it can effectively reduce the frequent repetitive accounting operations in the accounting profession and some standardized operations that have been fixed. These contents are what teachers and students in higher vocational colleges need to spend a lot of energy and time to learn and master. When this ability is easily replaced by artificial intelligence, what should we do for these talents who come from colleges? How does the development of higher vocational colleges respond to the impact of artificial intelligence on the accounting field, ensure the harmonious development between the two, and carry out the innovation of professional talent training mode is one of the main objectives and tasks that are urgently needed at the moment. The overall improvement of the quality of talents in colleges and universities has important practical significance.

## **2. Literature Review**

### **2.1 Domestic Research**

The application of artificial intelligence in the field of education has only attracted extensive attention from scholars since last year. Ma and Bo et al. (2017) made an understanding and reading of the report “Planning for the Future and Embracing the Era of Artificial Intelligence” released by the United States, put forward the development ideas for the application of artificial intelligence education in China, and suggested that schools set relevant courses on artificial intelligence. Wang and Su (2017) discusses the artificial intelligence technology brings a new mode of accounting theory and accounting practice, and artificial intelligence is put forward to promote transformation of accounting personnel, accounting personnel need to deepen the cutting-edge ideas, combining the artificial intelligence technology and accounting, efforts to transition to the combination of artificial intelligence and accounting accounting talents. Yu, Feng and Zhu (2017) combined with the research results of foreign cases of machine learning-based education application this year, and put forward relevant Suggestions on the educational application and innovation of machine learning from the perspectives of cross-border, technology and teaching. The innovation of education and teaching led by artificial intelligence and intelligent education has become the inevitable trend of the development of education informatization. Ye who is Deloitte’s tax management consulting partner (2017) thinks that robot business process generally divided into three stages: the first is to simulate the man's work, to its task, then add some calculation ability, carry on some simple judgment, the last is more in-depth learning ability, logical thinking ability and analysis ability. “With the rapid development of the digital economy, digital transformation has become a hot topic in the corporate world,” said Zhao, vice President of Kingdee China and general manager of EAS Business unit (2017). In his book Financial Transformation Begins with Shared Services, Zhang (2015) wrote that the transformation of financial accounting work is the content to distinguish daily accounting work from management accounting work. Encourage accountants to create value for enterprises and shift their focus to work with high added value, such as decision support, budget forecasting, financial planning, tax planning, control and evaluation, etc. In short, the transformation of accounting work should start from the reform of financial accounting work.

### **2.2 International Research**

KPMG (2017) announced that it planned to apply Watson cognitive function of IBM to its audit service process to enable it to analyze more data, so as to have a deeper understanding of clients' financial and business operation status. Us tax firm Block Tax (2017) also announced a partnership with IBM Watson in order to reshape tax planning. Daniel (2012) suggested that the progress of modern information technology are of great help to the development of accounting information system, not only can simplify some financial work cumbersome process, can completely replace the accounting personnel in some work, so the intelligent accounting information system application and popularization in Romania and around the world, enterprise should according to this development trend, for financial personnel training, career planning, etc. To develop new training program, to adapt to the change. BBC company (2017) published a Michael Osborne, according to researchers at the university of Cambridge, and Carl Frey research report for the next 365 specific career replaced by artificial intelligence was discussed, the prospect of thought “telemarketers” replaced by robots probability of 99%, accounting, typist, insurance salesman, banking career, government staff, the operator, the front desk, customer service, replaced by robots probability above 90%. There is no doubt that financial robots have obvious advantages over human beings in processing data and information.

## **3. Disadvantages of the Existing Talent Training Model**

### **3.1 Low Personnel Training Objectives and Specifications**

In 2017, the NPC and CPPCC canceled the accounting professional qualification certificate, and

the entry-level accounting ability became the professional title of junior accountant, and the knowledge level also added financial management to it. The cultivation goal of students can no longer be for a single small and medium-sized enterprise services, but should be more tends to the bookkeeping center and financial sharing center. In terms of quality, knowledge and ability, the requirement of knowledge ability shows that it lags behind this era. In some large state-owned enterprises, the financial sharing center model has been launched, and the era of intelligent finance and tax has come, but there is obviously no corresponding requirement for these abilities in talent training.

### **3.2 Obsolete Curriculum System**

The previous courses were more in the accounting type of financial accounting course system, which mainly focused on how to do accounting and tax declaration. With the advent of artificial intelligence, invoices can be automatically printed, scanned for bookkeeping and tax returns. Therefore, accounting talents in the new era should master more knowledge of decision-making, management and budget on the basis of basic knowledge, and learn more courses in financial management, management accounting, financial analysis, etc., so as to adapt to this era. This is also a test for teachers. Many advanced technologies are not available in the school, so it is necessary to expand the teaching staff and introduce part-time social teachers to ensure the quality of talent training.

### **3.3 Single Teaching Methods and Evaluation System**

Nowadays, most classes are still teacher-centered, and students have few opportunities to give play to their subjective initiative. With the emergence of artificial intelligence, more consideration should be given to the dominant position of students, change passive learning to active learning, and make extensive use of MOOC to learn more comprehensive knowledge. The student sources are diverse, and more teaching methods are needed to adapt to the cultivation of various talents. Currently, mixed classes such as single enrollment, “3+2” and college entrance examination enrollment promote the communication among students, but the drawbacks of one-size-fits-all are not taken into account. At present, most schools still give priority to the examination results of specialized courses, and all kinds of examinations are also paper-based examination papers, which are more about the examination of academic performance. Without considering people's sense of achievement and happiness, artificial intelligence is used to realize the comprehensive examination of students, not only the examination of academic performance.

## **4. Specific Plans for Strengthening Vocational Accounting Professionals under Artificial Intelligence**

### **4.1 Update the Vocational Post Ability and Revise the Training Objectives of Accounting Majors in Higher Vocational Colleges through Research.**

The training of traditional accounting professionals is positioned as technical talents, which enables higher vocational students to have strong accounting information processing and data processing capabilities. However, in the era of artificial intelligence, traditional accounting positions have been greatly compressed, which in turn requires accountants to have more professional management ability. Accounting can not only provide data and information, but more importantly, can provide reference and decision support for enterprise management. Higher vocational colleges, therefore, it is necessary to comply with the requirements of the development of the economic environment change and intelligent era, from the role of management accounting, and accounting for management decision-making, renew the idea of higher vocational accounting teaching, cultivation of talents strategy adjustment, clear the talents training goal of higher vocational accounting and the talents training goal of higher vocational accounting may be defined as: a deep, solid accounting theory knowledge and good professional quality, can skilled application of intelligent software processing complex, high level of accounting information, management

talent (C - H - M).

#### **4.2 Dynamically Adjust the Content of Vocational Accounting Courses and Improve the Vocational Accounting Course System.**

Higher vocational accounting personnel training in the era of artificial intelligence should have the courage to break the limitation of traditional curriculum setting, dynamically adjust and optimize curriculum content, and establish a perfect interdisciplinary integrated curriculum system. Optimize the structure of students' knowledge of accounting, delete old and outdated curriculum, compression type accounting course and decrease the difficulty, add advanced EXCEL, artificial intelligence, accounting, financial sharing, data analysis and other courses, increasing management accounting, financial management, etc. The proportion of class, thus to analysis, communication, decision-making and control system of management accounting. (Figure 2) Aims to cultivate a group of compound, high-level and managerial (C-H-M) accounting talents who can not only have basic financial data analysis and processing ability, but also can appropriately use artificial intelligence technology to help enterprises make decisions.

#### **4.3 Pay Attention to the Application of Modern Information Technology and Innovate the Teaching Mode of Accounting Major in Higher Vocational Colleges.**

The traditional accounting major in higher vocational colleges is mainly taught by teachers, and students' enthusiasm for participation is insufficient, which is difficult to stimulate students' interest, and also restricts the cultivation of students' personalized development and innovative thinking ability. The wide application of computers and the Internet in the era of artificial intelligence is not only conducive to the sharing of accounting course content and accounting information resources, but also can provide rich learning resources for students and promote the innovation of teaching mode. To comply with the requirements of The Times, artificial intelligence, therefore, giving full play to the advantages of Internet, micro class, longed for class, adhere to the students as the center, pay attention to flip the classroom teaching mode, through online and offline a series of organizational learning activities, carry out interactive teaching, and, in turn, stimulate students' participation, raises student's innovation ability, decision-making ability and analysis ability, let the students after graduation can better meet the needs of the accounting work.

#### **4.4 Build a “Double-Qualified” Teacher Team and Build a Comprehensive Training Base for Higher Vocational Accounting.**

On the one hand, we should build a “double-qualified” teacher team. Teachers should enhance the consciousness of independent learning and constantly improve and update the knowledge structure system. I practiced in enterprises on weekends and holidays, got familiar with accounting, finance, management and other processes of enterprises, and accumulated teaching cases and real materials of higher vocational accounting. The college should regularly organize accounting teachers to participate in training in intelligent software, Internet application skills and other aspects. Outstanding accounting professionals from enterprises can also be required to come to the school to teach, undertake scientific research tasks, and participate in the construction of higher vocational accounting major in the era of artificial intelligence.

On the other hand, it is necessary to build a comprehensive training base for higher vocational accounting. In the era of artificial intelligence, the original training base is difficult to meet the needs of talent training. Therefore, higher vocational colleges should pay attention to the upgrading and transformation of the training base and the updating of equipment to meet the needs of accounting practice teaching in the era of artificial intelligence. Deepen school-enterprise cooperation, expand practical training for accounting majors, and improve students' application level of intelligent software and application skills of accounting professional knowledge.

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