

Research on the Accounting Talents Training in Higher Vocational Education in China under the Background of Artificial Intelligence

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Abstract

The application of artificial intelligence in the accounting industry not only brings opportunities and challenges in the accounting profession, but also puts higher requirements for the higher vocational accounting talents. Nowadays, there are some problems in the training of higher vocational accounting talents, such as the disconnection between the training objectives and social needs, the failure of the curriculum to meet the needs of artificial intelligence and the excessive pursuit of test results. Therefore, it is necessary for higher vocational colleges to adjust their talents training objectives and curriculum setting, in order to adapt to the changing times.

Keywords

Artificial intelligence, Higher vocational education, Accounting talents.

1. Impact of Artificial Intelligence on Accounting Industry

As the science and information technology advances rapidly, the information technology era highlighting "Internet +", artificial intelligence, big data has quietly approached. In March 2016, the official introduction of artificial intelligence into the financial work of Deloitte ushered in a new era of financial accounting industry. In 2017, the creation of Deloitte's financial service robots enabled the accurate replacement of repetitive, standardized and process-based accounting and bookkeeping in the financial process, which enhanced the efficiency of the financial work. Following Deloitte's financial service robots, PWC, Ernst & Young, and KPMG successively launched the financial service robots in the same year. Financial service robots, as a type of the computer programming software, i.e. RPA, can handle highly repetitive and logically fixed work tasks as humans do through instructions based on certain rules.

With the aid of financial service robots, those highly repetitive, standardized and time-consuming accounting affairs can be coped with 24 hours a day. In comparison with manual accounting, the financial service robot has some prominent advantages including high work efficiency and no leave or complaints. However, there is still much room for improvements in the accuracy of the financial service robot. When the financial service robot keeps accounts of common businesses based on the formulated procedures after data entry, automatic bookkeeping errors might be induced owing to insufficient standardization of the original accounting vouchers. For the non-programmed uncommon businesses, they are beyond the analysis and judgment of the robot, thus leading to accounting errors. Therefore, the financial service robot will mainly replace a variety of basic and repetitive routine accounting work, such as bookkeeping, accounting, and account submitting. Despite of the reducing demand for traditional accounting talents, the accounting duties which require specialized judgments have to be done by professional accountants.

2. Present Situation and Existing Problems of Training Mode in the Higher Vocational Accounting Major

2.1 Talent Training Objective and Social Needs are Disconnected

At present, most of the training objectives of the accounting major in higher vocational colleges are mainly trained students with basic accounting skills to serve small and medium-sized enterprises. In the wake of almost saturation of traditional accounting personnel, the conventional accounting positions will be substituted by financial service robots. Therefore, the job prospect of accounting

major graduates in higher vocational is not promising. The qualifications of enterprises for accountants have gradually changed from grasping the basic financial accounting competence to compound talents that are capable of analyzing and processing accounting data, evaluating financial risks and making financial decisions.

2.2 The Curriculum Setting of Accounting Major Cannot Meet the Needs of Artificial Intelligence

For a large majority of higher vocational colleges, the major curriculum of accounting are comprised by compulsory courses such as Basic Accounting, Financial Accounting, Cost Accounting, Tax Accounting, Management Accounting, Auditing and Financial Management. Colleges placed great emphasis on the teaching and practice of financial accounting, barely involved the training of financial data analysis, risk management and budget decision making. Moreover, the practical teaching of management accounting is insufficient, due to the complex courses, limited class hours and the inherent weaknesses of examination-oriented education. The practice training of accounting talents is not properly connected with artificial intelligence technology and courses related to Statistics, Data Mining, Computer Information System and Enterprise Simulation Operation are missing. Gradually, students' ability detached with the needs of enterprises and artificial intelligence.

2.3 Students Pay Excessive Attention to the Results of the Certificate Examination

In 2017, the biggest event in the accounting industry in China occurred, namely the cancellation of the traditional accounting qualification certificate. College students are allowed to apply for the junior accounting certificate in their freshman year. Students merely pursue the passing rate of examination in their academic years and become increasingly utilitarian. As a result, the accounting education system deteriorates and a great number of accounting students are growing into examination machines. Students can not complete the accounting practical activities and unable to fulfill the needs of enterprises and public institutions.

3. Construction of the Higher Vocational Accounting Talent Training Mode in the Era of Artificial Intelligence

3.1 Optimize the Talent Training Program and Cultivate Compound Talents

In the context of the artificial intelligence era, the training objective of accounting talents in higher vocational colleges should incorporate the artificial intelligence-related courses into the talent training program and extend to highlight professional judgment and data analysis instead of merely focusing on the financial accounting, in order to conform to the changing development of the times and the economic environment. The training objective of accounting talents in higher vocational colleges can be positioned as compound talents who are equipped with profound specialized accounting theoretical knowledge reserve and good professional ethics, familiar with processing of accounting information based on the operation of smart software, and management accounting consciousness, independent learning aptitude and comprehensive analytical competence in the era of artificial intelligence.

3.2 Improve the Accounting Curriculum System and Achieve the Course-Certificate Integration

In the wake of the increasing application of artificial intelligence in the accounting area, it has become particularly important to grasp the theories and knowledge related to artificial intelligence technology. Accounting talents are confronted with a growing number of problems such as the maintenance and update of computer systems, the protection of accounting financial data and risk control. Colleges should reconstruct the curriculum system, facilitate the connection between vocational qualification certificates and work skills, and exemplify the comprehensive quality education centering on the professional quality, in order to enhance the quality of accounting talents training. A series of courses involving the information technology and management skills needed by enterprises should be added such as Cloud Accounting, Application of Big Data in Accounting, Management Accounting Practice, Enterprise Risk Management. Thus the demand for accounting talents can be better fulfilled in the era of artificial intelligence.

3.3 Build Comprehensive Training Bases and Strengthen the Construction of Double-qualified Teachers

Higher vocational colleges should attach great importance to the construction of professional comprehensive training bases, introduce financial service robots and regard the upgrading of hardware and software equipment by setting up the school-run enterprises or school-enterprise cooperation. Through the cloud platform, the Robot Process Automation(RPA) is adopted to help enterprises print and sort invoices, fill in vouchers, issue reports and declare taxes. In this way, students are exposed to the most advanced technology, thus they can master the development trend of the social accounting profession in the future and make full preparations for their job hunting.

Excellent teachers serves as the basic premise of talents cultivation. Higher vocational colleges should strengthen the construction of double-qualified teachers. The accounting teachers of higher vocational colleges should be regularly organized to participate in trainings in intelligent software and Internet application proficiency for the purpose of upgrading their skills in terms of intelligent software development, design and application.

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References

- [1] W.Y. Xiong: Change of Accounting Industry and Reform Strategy of Accounting Teaching in Higher Vocational Education in Artificial Intelligence Era, Journal of Huanggang Polytechnic, vol. 21 (2019), 68-71.
- [2] X.Zhang: Redesign of Higher Vocational Accounting Course System in the Era of Artificial Intelligence, Journal of Tianjin Vocational Institutes, vol 22 (2020), 49-52.
- [3] N.Liu: Innovative Research on Training of Accounting Talents in Higher Vocational Colleges in the Era of AI, Journal of Hebei Software Institute, vol 20 (2018), 50-54.
- [4] N. Zhao: Research on the New Capability Structure of Accounting Talents in Higher Vocational Colleges under the Background of Artificial Intelligence, Journal of Changchun Finance College, No.6 (2019), 91-96.
- [5] X.N.Lin, N.Lin: Research on Accounting Talents Training in Higher Vocational Colleges in China under the Background of Artificial Intelligence, Higher Vocational Education(Journal of Tianjin Vocational Institute), vol 29 (2020), 43-47.
- [6] J.L.Iv, Research on Career Reprogramming and Development of Financial in the Context of Artificial Intelligence. (MS., Capital University of Economics and Business, China,2018), p19.
- [7] J.Qiu: Research and development of artificial intelligence in China, National Science Review. No.4 (2016), 538-541.
- [8] X.Z.Zhang: Accounting Objective and Reporting System Construction of Managerial Accounting in China, Finance and Accounting Monthly, No.11(2015), 3-8.
- [9] Y.W.Bo: Research Report on Teaching Reform of Accounting Major in Higher Vocational Colleges under Background of Artificial Intelligence Accounting, Shandong Textile Economy, No.2 (2020), 35-39.
- [10] L.J.Ouyang: The Coping Strategies of Accounting Majors in Higher Vocational Colleges under the Background of Financial Robots, Journal of Hubei Three Gorges Polytechnic, vol 18 (2019), 26-27.