

Practice and Exploration of Managerial Accounting Talent Cultivation under the Background of Big Data and Artificial Intelligence

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ABSTRACT. *Big data, artificial intelligence, cloud computing and other information technologies are integrated and interconnected, pushing enterprise informatization into a new stage. This will bring tremendous changes for all walks of life, provide strategic decision-making support for the financial industry center of gravity transformation into an inevitable trend, result heavy accounting into analysis, and lead decision-making management accounting transformation into an inevitable requirement of economic and social development. This paper firstly introduces the training objectives of management accounting talents in colleges and universities under the current background, then analyzes the problems existing in the current training process of management accounting talents in colleges and universities, and finally puts forward corresponding solutions.*

KEYWORDS: *Managerial Accounting; Training Objectives; Artificial Intelligence (AI)*

1. Introduction

The year 2016 is known as the first year of Managerial Accounting. The ministry of finance has issued <The Basic Guidelines of Managerial Accounting > and <The 13th Five-year Plan for Accounting Reform and Development Successively>, and Managerial Accounting has entered a rapid development stage. 2017 was a turbulent year for the financial industry. On the one hand, the certificate of Accounting professional was cancelled, and the barrier of Accounting major disappeared. On the other hand, Artificial intelligence represented by robots gradually enters people's field of vision and occupies the positions of financial personnel. The four major international companies, represented by Deloitte, PWC, Ernst & Young and KPMG, have successively provided financial robots and financial robot solutions, bringing an abrupt end to the Accounting era and making the transition from Accounting to Managerial Accounting unstoppable. With the arrival of the era of big data comparison, the implementation of Accounting integrity files and Accounting "blacklist" system, the integration of three certificates, five certificates and multiple certificates, makes Accounting development increasingly difficult.

2. Objectives of Management Accounting Personnel Training in Colleges and Universities

The environment is changing quietly. The new economic era presents new challenges to Accounting. Colleges and universities, as an important force in the cultivation of Accounting talents, actively explore the cultivation system matching the requirements of Accounting transformation, adapt to the urgent needs of Managerial Accounting talents, increase the cultivation of Managerial Accounting talents, and provide high-quality applied Managerial Accounting talents for the sustainable development of China's economy and society.

On October 8, 2018, the ministry of education issued <The opinions on accelerating the construction of high-level undergraduate education to comprehensively improve talent cultivation ability> (hereinafter referred to as "40 guidelines for higher education in the new era"), and decided to implement the "six excellent and one top-notch" plan 2.0, which has become an important guiding document for the national undergraduate education quality reform. This document put forward these requirements: promote the formation of "Internet + higher education" new form, "Track overtaking" to promote the quality improvement of higher education with modern information technology, promote the in-depth integration of modern information technology and education and teaching, deepen the teaching reform around stimulating students' learning interest and potential, comprehensively improve teachers' ability to teach and educate, guide the comprehensive reform of the training mode and personnel training objectives of the finance and accounting major. On the basis of "40 guidelines for higher education in the new era", colleges and universities should cultivate students who have the ability to satisfy the needs of the current construction of socialist market economy. Students should have scientific spirit and the quality of integrity, master accounting, management, economy, law and computer application knowledge, have the "load", "power foot", "management", "good decision-making". Managerial Accounting students will be able to work in artificial intelligence, big data, the environment of Internet + in certified public accountants, tax accounting firms and other intermediary agencies, as well as government agencies, all kinds of enterprises and institutions work accounting and related[1].

3. Problems Existing in Managerial Accounting Personnel Training in Colleges and Universities

The construction and development of Managerial Accounting personnel training has gone through a rapid development process. Some changes have been made in the training program and curriculum of Managerial Accounting personnel in colleges and universities, and some achievements have been made. However, there is still a big gap between the ability of Accounting personnel training and the social demand. Under the background of rapid development of big data, artificial intelligence and mobile Internet, Managerial Accounting personnel training still has deficiencies and defects. It mainly includes the following aspects:

3.1 Curriculum setting is out of line with social needs

With the development of big data, artificial intelligence and other information technologies, financial robot has come into being, and most of the Accounting work with high repeatability and low difficulty has been gradually replaced, and it can guarantee accuracy and high efficiency, greatly saving the cost of human and material resources. Therefore, enterprises are more eager for applied, compound and intelligent Managerial Accounting talents with operational analysis, operational decision-making, big data processing and other abilities. However, at present, most colleges and universities still pay more attention to cultivating students' Accounting processing ability when formulating training objectives and curriculum setting. Basic accounting, cost accounting, intermediate accounting, advanced accounting and other accounting courses still account for a high proportion of class hours. Few courses such as operation analysis, risk management, big data processing, financial sharing center and financial management are conducive to the cultivation of comprehensive abilities such as managerial decision-making ability and risk control. Courses on artistic accomplishment, language communication and mathematical thinking are even rarer. To some extent, it hinders the personalized development of students, which leads to the gap between the training of accounting talents and the development of The Times and the actual ability needs of enterprises, as well as the strong homogeneity of graduates, less prominent competitive advantage and great employment pressure.

3.2 Lack of innovation in teaching methods and means

Most colleges and universities still give priority to theoretical teaching, and blackboard writing and PPT courseware are the main teaching means. Due to the tight time and heavy tasks, teachers still play a dominant role. Students "listening carefully in class, taking notes, doing homework after class, reviewing and consolidating" are a normal teaching practice. Students' low participation rate, lack of opportunities for independent thinking, unable to mobilize students' interest in learning professional courses, and unable to cultivate and improve the comprehensive ability of management accounting talents. The learning scope is limited to textbook content, and few students take the initiative to think about problems after class. As a result, most of the cultivated students often lack the attention and discussion of cutting-edge theories of accounting and hot issues of finance and economics. In the era of "big intelligence mobile cloud", teachers lack the skills to flexibly use Internet software, such as "micro class", "mooc", "rain class", "learning through" and other mobile terminal devices have not been applied to classroom teaching[2].

3.3 Single assessment criteria

The assessment standards of colleges and universities are relatively single, and "regular scores + final examination" is still the main means to test the learning effect

of students. Most of the test questions are objective questions, which can show students' comprehensive ability, divergent thinking and flexible application of knowledge. The average score accounts for 30%-50% of the total score, which reduces the requirements on students. After investigation, most students make a surprise attack before the exam and pass the exam, but they have basically forgotten the theoretical and practical knowledge, and their study remains superficial without in-depth understanding of what they have learned.

4. Countermeasures to Existing Problems in Managerial Accounting Personnel Training in Colleges and Universities

4.1 Managerial Accounting course system is diversified and comprehensive

The theoretical system of financial accounting focuses on cultivating students' accounting ability and solving the ability of enterprises' actual accounting; The Managerial Accounting system attaches great importance to cultivating interdisciplinary talents with comprehensive abilities such as operation analysis, risk management and big data processing, which overlap with multiple disciplines. Especially in the era of great wisdom moving cloud, when the new technology and new mode implement the reconstruction of accounting professional ecology, it is bound to require the systematic reform of course system and the organic renewal of course content.

The management accounting course system includes four modules: public basic course, professional basic course, professional direction course and professional development course. Under the background of national talent strategy, ministry of education's "40 guidelines for new higher education", Internet +, artificial intelligence, etc., each module takes the original course as the principle of "eliminating the emptiness and keeping the reality", and adds courses matching with The Times on the basis of practical courses such as: public basic courses with additional courses in mathematical analysis, data structure, introduction to information science and other big data related analysis methods. Professional courses include IT auditing, decision-making and planning accounting, business intelligence analysis based on big data, managerial accounting information system, etc., as well as courses of financial accounting and data analysis, capital operation and m&a, language communication, mathematical thinking, etc. By including above courses, it will help the extension of the width and breadth of the curriculum system[3].

4.2 Innovation in teaching methods and means

Process teaching:

The in-class teaching focuses on the analysis process of students' problems, and emphasizes the discovery, analysis and solution of problems in the process of students' problems analysis, so as to fully cultivate students' thinking ability and

communication ability. Through diversified teaching activities, teachers should focus on guiding and analyzing the problem solving process, including the selection of problem materials, analysis, discussion, reflection and other links. Teachers' guidance runs through the whole analysis process, realizing the transformation from knowledge impartation to ability cultivation.

Experiential teaching:

Teaching process, make full use of university-enterprise cooperation to build a third party platform, between the joint training, instant messaging tools, virtual social networking, intelligent terminal equipment, and university-enterprise cooperation unit's elite combat interaction, make up for the inadequacy of traditional classroom teaching and online network courses, help students to be familiar with the latest business information. At the same time, the digital platform can be divided into different modules according to learning, scientific research, employment and other fields. Enterprises provide real-time job requirements and job simulation, and students create learning groups in corresponding modules according to their learning situation, personal interests, learning levels and job intention, so as to break through geographical and temporal boundaries for all-round communication and learning.

Flipped classroom teaching mode:

This method reschedules time in and out of the classroom to shift learning decisions from teachers to students. It is a teaching model in which teachers create a teaching resource database, students learn independently after class according to teaching resources, and students share and exchange learning achievements and experiences in class, so as to achieve teaching objectives. Teachers' teaching focus depends on students' sharing, communication and understanding. It is truly student-centered, fully arouses students' learning enthusiasm, greatly improves students' enthusiasm to participate in classroom and extracurricular activities, and cultivates students' independent learning ability, observation ability and communication ability.

4.3 Diversified assessment mode

To improve the diversified academic assessment system that attaches equal importance to both ability and knowledge, the diversified assessment of courses refers to the comprehensive assessment of students' knowledge and skills in the whole process not only by paper final examination, but also by various means, with the ultimate goal of promoting the comprehensive development of students. The diversified assessment of courses mainly includes the diversification of examination methods, assessment contents and assessment indicators. Diversified assessment forms refer to assessment and examination, paperless computer-based examination and paper examination papers, open and closed examination methods according to the characteristics of the course and the application of intelligent APP. The diversity of assessment content means that during the assessment process, the assessment results are not only derived from the final test, but also include the course paper, the results of group discussion with open questions, the ranking of relevant competitions and other items that can reflect the ability to apply knowledge. Diversification of

assessment indicators means that various assessment contents are given different weights according to the training objectives in the assessment process, and various influencing factors are comprehensively considered. The final results can also include teacher evaluation, student self-evaluation, student mutual evaluation and other indicators.

5. Conclusion

With the rapid development of information technology, colleges and universities should actively embrace the artificial intelligence and big data. Cultivation of accounting professional talents should be based on the requirement of the economic and social development of the managerial accounting personnel guidance, main measures should include: perfecting the course system, renewing teaching content, the promotion of new teaching form, improve the ability and the assessment of the diversity of knowledge and academic evaluation system, etc. Main purpose is to guide students with self-management ability, stimulate students' interests and potential, promote students' autonomous learning ability, training to adapt to social demand and competitive management accounting environment.

Project

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