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Research on the Reform Path of Finance and Accounting Education in the Digital Age

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Abstract

Big data and artificial intelligence have revolutionized the technical tools of finance, changed the working mode of finance, and driven the transformation of accounting specialty towards digitalization and intelligence. Accounting education in Colleges and universities generally has problems such as traditional training mode, solidified curriculum system and insufficient intelligent teaching equipment, which can not meet the needs of society for intelligent accounting talents. Faced with the challenges and opportunities of digital intelligence technology to the accounting industry, private colleges and universities need to reconstruct the education mode of Accounting Specialty in the digital intelligence era as soon as possible, build a "4-4-3" curriculum system, innovate teaching strategies and assessment methods, integrate digital intelligence education resources such as technology, equipment and talent teams, find a way of financial education with digital intelligence characteristics, achieve transformation and upgrading, and even overtake public universities in the curve of financial education.

Keywords

Digital Intelligence; Accounting Education; Private University.

1. Introduction

With the rapid development of modern information technology represented by the Internet, big data, artificial intelligence, cloud computing and blockchain, the world has entered a period of economic development dominated by the information industry. The integrated development of digitalization, networking and intelligence has profoundly changed the concept of accounting work, innovated the technical tools of Finance and changed the working mode of finance. The application of big data, financial cloud, electronic invoice and other information technologies in the accounting industry has led to fundamental changes in the way business operations and services are provided. A large number of repetitive, low value-added and structured jobs are being replaced by financial robots. Business processes are becoming more digital, networked and intelligent. Accounting has changed from just post supervision to a complex of prediction, in-process control and post supervision, which is helping enterprises operate.It plays an increasingly important role in supporting strategic decision-making and realizing value creation. It can be said that in the era of digital intelligence, the accounting profession has entered the digital intelligence transformation stage of the whole chain of "online business, digital operation and intelligent decision-making".

Big data and artificial intelligence technology have driven the development of accounting specialty towards digitalization and intelligence, accelerated the upgrading speed of social demand for accounting talents, and major enterprises have sought and started to practice the path of financial transformation and innovation. In particular, the demand for "professional + technical" financial cloud talents, blockchain accounting talents and financial technology talents is growing. College graduates of accounting specialty are required to understand enterprise

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finance Management and decision-making analysis, and be able to control new technologies, new methods and new tools, and have strategic thinking and innovation ability. However, college teaching still continues the traditional teaching mode, and the trained talents focus on basic business, do not have digital intelligence awareness and ability, and the connection between talent training and talent demand is seriously unbalanced, which can not meet the recruitment requirements of enterprises and institutions. Therefore, the transformation and upgrading of the training mode of accounting talents in Colleges and universities is imminent.

Private colleges and universities have a short history of running schools and have disadvantages in traditional accounting talents, equipment, student resources, etc., but they also have advantages in running schools such as small historical burden, large autonomy in running schools, and efficient resource integration, which can complete strategic adjustment in a relatively short time. The deepening development of digital intelligence technology has greatly subverted the traditional accounting industry. Private colleges and universities can make full use of their advantages in running schools, reconstruct the accounting training mode, integrate digital intelligence education resources, carry out transformation and upgrading, and even overtake public universities in accounting education.

2. Current Situation of Digital -Intelligence Accounting Education in Private Universities

2.1. Talent Training Orientation Ignores "Digital Intelligence" Skills

In the era of digital intelligence, the development of big data, artificial intelligence, blockchain and other technologies not only improves the efficiency of financial work, but also puts forward higher requirements for students' comprehensive practical ability and interdisciplinary knowledge reserve. However, most private colleges and universities have not fully realized the qualities and abilities that accounting talents need to possess in the new era, and still teach according to traditional teaching concepts, Attaching importance to theoretical teaching while neglecting students' practical ability leads to the fact that the knowledge learned by students in school is difficult to meet the requirements of actual jobs for their ability

2.2. The Curriculum System is Difficult to Meet the Requirements of "Digital Intelligence"

In the age of digital intelligence, accountants are required to have the ability of programming, data mining and data analysis in addition to mastering the knowledge of their own professional fields. However, at present, the courses of Accountants in many universities are still based on traditional financial knowledge, which does not match the actual situation in the age of digital intelligence and rarely involves the application of big data. Among them, basic courses lack introductory courses on big data, machine learning, Excel application and other computer aspects; Professional core courses are mainly accounting courses, such as basic accounting, intermediate financial accounting, financial statement analysis, etc. there are few professional courses on intelligent financial decision-making, big data, financial analysis and other information technology.

In addition, there is also a lack of information technology and comprehensive practical ability training courses in the practice courses, resulting in students' lack of understanding of the application of new technologies such as big data, cloud computing and artificial intelligence. At present, most colleges and universities have opened courses such as accounting computerization and accounting informatization, but they have only achieved the effect of expanding knowledge, and have not realized the deep integration of accounting professional knowledge and intelligent new technology courses for teaching.

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2.3. The Professional Teaching Team of "Digital Intelligence" has not Yet been Established

Although some colleges and universities have opened some courses and contents related to big data and informatization, due to the limited ability and low level of teachers, such courses can not be described in depth and can not achieve the expected teaching objectives. It can be seen that the quality of teachers needs to be improved urgently. Teachers are proficient in financial management, finance, economy and other theoretical knowledge, but they lack understanding of leading-edge technologies such as big data financial analysis and intelligent financial sharing, which makes it difficult to provide students with cross professional and practical guidance in the teaching process, which restricts the development of accounting professionals, and there are relatively few teachers in universities who have both professional knowledge and practical work experience, Teachers who are only engaged in intelligent research can not effectively integrate and impart data analysis technology and accounting knowledge to students, which makes it difficult for the current faculty of colleges and universities to meet the teaching needs in the era of intelligent finance.

3. Design of Digital Intelligence Accounting Training Mode

3.1. "4-4-3" Training Mode Framework

The "4-4-3" accounting talent training model includes four levels, four posts and three training methods, of which four training levels refer to basic finance, professional finance, business finance and Strategic Finance; The four positions refer to four different positions: intelligent financial accountant, intelligent financial engineer, intelligent financial operator and intelligent financial planner; The three training methods include financial theory teaching, digital intelligence technology teaching and digital intelligence financial integration practice teaching. Build a "4-4-3" digital intelligence accounting talent training mode, deeply integrate big data, artificial intelligence and accounting talent training, promote the reconstruction of accounting talent training mode, innovation of teaching mode, reengineering of organization process and quality evaluation reform, and promote the individualization, refinement and intelligence of accounting talent training.

In the "4-4-3" digital intelligence accounting talent training mode, mastering the basic financial level and the professional financial level is the foundation of the accounting profession, the embodiment of the professional basic ability of accounting talents, and the necessary foundation for the IQ of accounting talents; Proficient in business finance and strategic finance are the soul of financial management, the embodiment of the expansion and innovation ability of accounting talents, and the expansion of emotional intelligence of financial management talents. From the perspective of big data and artificial intelligence, intelligent financial accountants need to complete financial accounting through artificial intelligence software and intelligent algorithms, and their relevant abilities are supported by the teaching of basic finance; Intelligent financial engineers should design intelligent accounting systems according to the characteristics of enterprise production and operation, and extract valuable data for enterprises from massive data through artificial intelligence algorithms. They need to understand accounting principles, understand system design and intelligent algorithms, and their relevant abilities are supported by professional financial teaching; Intelligent financial operators need to participate in the whole production and operation process of the enterprise from procurement to production and then to sales. They need to understand not only the principles of cost accounting and management accounting, but also the characteristics of enterprise production and operation. They also need to master big data and intelligent algorithms, extract valuable information through artificial intelligence algorithms, and the relevant abilities are supported by the teaching of business finance; Intelligent financial

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planners need to be responsible for the connection between enterprise strategy and finance, and even participate in the formulation of business models and strategies. They need to master not only financial accounting knowledge, but also strategy, risk and macroeconomic knowledge. They also need to understand all aspects of ability, help enterprises formulate strategies, and help enterprises implement strategies. Therefore, their relevant abilities are supported by the teaching of Strategic Finance.

3.2. Ability System of "4-4-3" Accounting Education Model

The ability goal is the starting point of the training of accounting talents, and is also the measurement standard to measure the effectiveness of talent training. The "4-4-3" accounting talent training objectives in the digital intelligence era are as follows:

Firstly, consolidate professional knowledge and skills and master professional basic abilities. Digital intelligence technology drives business innovation, financial concept change and financial management mode upgrading, but it has not changed the financial essence. Therefore, mastering solid professional basic knowledge and professional skills is the basic guarantee for accounting talents to improve their professional basic ability and competitiveness, and also can lay a solid foundation for subsequent expansion and innovation. Therefore, colleges and universities should still strengthen the basic training of basic financial theories, principles, methods and tools to form basic financial skills such as financial accounting ability, tax planning ability, financial management ability and financial analysis ability.

Secondly, increase business strategy knowledge and improve the ability to expand innovation. In the era of digital intelligence, the expansion of financial scope and the renewal of financial functions provide better requirements for accounting talents. They should not only understand finance, but also understand operation and decision-making. Therefore, colleges and universities should pay attention to expanding the business strategic knowledge of accounting talents, mastering product financial management ability, supply chain financial management ability, capital operation financial management ability, business financial integration financial management ability, etc, Improve the understanding of professional knowledge and the ability to expand and innovate in practical work of accounting talents, and realize the transformation and upgrading from accounting finance to management finance.

Thirdly, build a three-dimensional practice system and strengthen the comprehensive application ability. Digital intelligence technology has changed the accounting environment and constantly innovated financial technical tools. It requires accountants to be able to control the new technologies, methods and tools of modern accounting work and improve the efficiency of financial work. Therefore, colleges and universities need to build a multi-level and three-dimensional practical teaching system. At the same time, they need to cooperate with the industry, rely on new technologies such as Internet information technology, distance education laboratory, production and education integration service platform, and offline intelligent financial laboratory, so that students can participate in the simulation process of accounting business, provide online or offline guidance to students' actual operations, and improve the comprehensive soft power of financial management talents in essence.

4. Measures for the Implementation of Digital Intelligence Accounting Training Mode

4.1. Reconstruction of Digital Intelligence Accounting Curriculum System

In the era of digital intelligence, the financial work has been further stratified, forming a new structure of "basic finance, professional finance, business finance and Strategic Finance". At the same time, the specific job structure has further evolved to include intelligent financial accounting, intelligent financial engineering, intelligent financial operation and intelligent

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financial planning. Compared with traditional accounting, in the era of digital intelligence, the course reconstruction of accounting should not only set up basic and core courses of finance, but also add courses related to big data, cloud computing and artificial intelligence, such as data visualization, machine learning and python, so as to cultivate students' awareness of big data, promote the development of students' ability in data mining, big data analysis and management, and lay a foundation for human-computer collaborative work in the future.

The course content can be further divided into three categories: basic, technical and integrated courses. The basic courses mainly meet the necessary knowledge and skills in finance, operation, strategy, etc. for different financial hierarchical and intelligent financial positions, including: Technical courses mainly meet the data technology and intelligent technology required by the post; Integrated courses are the cross professional integration of financial courses and digital intelligence technology, and meet the comprehensive application ability of the post.

4.2. Build an Intelligent Experimental Platform

With the financial sharing virtual simulation experiment course as the starting point, we will further expand the construction and application of relevant supporting laboratories, formulate plans for financial big data training platform, financial cloud training platform, blockchain accounting training platform and other experimental training platforms, and form a digital financial experiment system with complete functions.

Actively build an intelligent experimental teaching platform, construct a multi intelligent business scenario, and simulate and record students' real information application and decision-making process. Build "accounting and finance basic laboratory", "accounting and financial decision simulation laboratory", "Financial Sharing Service Simulation Laboratory", "financial big data analysis laboratory", "XBRL teaching and Application Research Laboratory", "audit data analysis laboratory" and other sub laboratories, and build a global strategy and enterprise operation simulation platform based on cesim, I practice platform, Oracle Hyperion business intelligence system, XBRL application system Accounting and finance teaching simulation platform and financial sharing laboratory with online teaching cloud platform, arbutus professional audit data analysis platform as the main body provide students with basic experiment and enterprise practice application simulation teaching environment.

4.3. Technology Empowers and Innovates Digital Intelligence Teaching Mode

Actively use digital technology to create a new model of information-based experimental teaching. Based on the intelligent teaching platform, teachers and students can realize online resource management and sharing, course information release, experimental report (homework) management, etc. by integrating professional knowledge and business practice scenarios, intelligent "teaching" and "learning" can be realized.

Create a new "network + end" intelligent experimental teaching mode, integrate teaching, problem-based learning (PBL) and team based learning (TBL), constantly stimulate students' interest and improve their learning enthusiasm, comprehensively improve students' comprehensive professional ability, and effectively promote the application and innovation of intelligent teaching reform and teaching methods.

In addition, talent training in the era of artificial intelligence should adopt diversified and process assessment and evaluation methods to objectively and truly evaluate students' skills and potential, and promote the comprehensive development of students' comprehensive application ability. In terms of assessment content, colleges and universities need to pay attention to the comprehensive evaluation of students' knowledge, ability and quality, and expand the assessment content from professional knowledge to innovation ability and comprehensive quality; In terms of assessment forms, it is necessary to combine the

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assessment of expression ability, on-site skill operation assessment, on-site investigation assessment, situational test, task test, paper writing, report defense and other flexible ways to cultivate students' innovative ability and comprehensive application ability.

4.4. Implement the Integration of Production and Education, and Expand the Intelligent Practice Scene

Industry education integration is a teaching mode in which universities and enterprises cooperate, regional industrial clusters and subject clusters integrate, and education system and industrial system jointly participate in training students and promoting education development. On the one hand, colleges and universities can rely on new technologies to display the accounting business processing methods of enterprises and institutions, let students participate in the simulation processing of accounting business, provide online or offline guidance to students' actual operations, and promote students to have a clear understanding of the needs of accounting work; On the other hand, universities can also use the cutting-edge information of enterprises and institutions to introduce the latest research results and practical cases into the classroom, increase students' understanding of the latest trends of accounting, and build a curriculum system that meets the integration of industry and education.

To implement the integration of industry and education, we need to expand the intelligent practice scene, cultivate students' data analysis ability, comprehensive application ability, innovation and entrepreneurship ability, and improve students' industry vision and strategic thinking through "building practice bases, jointly developing courses, organizing business competitions, and carrying out practical lectures".

5. Conclusion

After comprehensively considering the trend of financial professional stratification and the design of intelligent financial posts in the future, this paper proposes the "4-4-3" digital intelligence and accounting talent training mode, and emphasizes the construction of a training target system including professional basic ability, expanding innovation ability and comprehensive application ability. At the same time, in order to better implement the model change mode, colleges and universities need to do the following four things: first, reconstruct the curriculum system to support the goal ability; Second, build an intelligent training platform to support the cultivation of digital intelligence skills; Third, intelligent technology enables teaching and innovates teaching process; Fourth, promote the mode of integration of production and education, and create a digital intelligence financial practice scene.

In addition, colleges and universities need to provide necessary guarantees for the transformation of financial intelligence. First, it needs top-down top-level design to provide institutional support; Secondly, increase financial subsidies and build digital intelligence financial teaching facilities and equipment; Third, "Introduction + internal training" should be combined to build a good team of teachers.

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