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Research on the Cultivation Path of Core Competencies of Finance Major Based on Modern Information Technology

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Abstract: *As a large category of business administration disciplines, the demand for its talent training is gradually expanding. In order to cultivate innovative financial management talents, a research on the core competence cultivation path of finance specialty based on modern information technology is proposed. Firstly, the characteristics and importance of core competence cultivation for financial management majors are analyzed. Then it analyzes the challenges faced by the current training of finance professionals in the context of modern information technology, and finally puts forward specific training paths, including the rational positioning of talent training objectives, the construction of a diversified curriculum system, and the cultivation of students' big data thinking. It aims to optimize the growth path of business talents and open up a new paradigm of business talent cultivation in the digital era.*

Keywords: *modern information technology; finance profession; talent cultivation; path investigation*

1. Introduction

At present, the quality structure, ability structure and skill structure of financial and accounting talents are facing more and more training requirements. In the Catalogue of Undergraduate Specialties of General Colleges and Universities (2020 Edition), financial management belongs to the specialties of business administration under the category of management, and at present, about 500 colleges and universities have opened financial management majors, and the annual graduates reach more than 100,000 people. However, the lack of intelligent financial talents with the ability of industry-finance integration, intelligent decision-making and business data mining is increasing day by day[1]. How to take the initiative to respond to the demand for financial management talents in the era of big data, optimize the talent training mode, build a first-class undergraduate program in financial management, cultivate talents matching the demand of employers, and make business professionals have a certain degree of competitiveness after graduation has become the main problem that needs to be tackled for the cultivation of talents in business majors at present[2]. Financial management plays a pivotal role in enterprise operation, and the cultivation of professionals in this field is essential for enterprise development. With the development of the market economy and the increase in the demand of enterprises for financial management, the financial management profession has gradually become one of the majors in colleges and universities that have attracted much attention. In recent years, the enrollment scale of financial management majors has been expanding, becoming one of the most popular majors in colleges and universities[3]. However, despite the fact that the current number of students majoring in business in colleges and universities has been maintained at a large scale, according to the investigation of students' entrepreneurial activities, it is found that the entrepreneurial achievements of financial management students are not satisfactory. This is mainly due to the fact that many students lack the knowledge of innovation and entrepreneurship in the process of entrepreneurship, and it is difficult to apply the learned professional knowledge in the actual entrepreneurship[4]. Compared with traditional financial management, financial managers need to master big data technology, intelligent technology and other advanced information technology to cope with the challenges of the big data era.

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2. Characteristics and importance of core competency development for financial management majors

2.1 Cultivation characteristics

The professional core competence of financial management mainly includes three parts, which are investment financing analysis and application ability, financial analysis and budgeting ability and accounting ability. Therefore, the cultivation of core competence needs to follow the following cultivation characteristics:First, clear regional positioning of talent cultivation. In addition to fostering a strong foundation in scientific theory, practical skills, and humanities, the training of financial management professionals should also aim at developing industry-specific expertise tailored to the local context. This approach will contribute to the supply of skilled professionals for the local and neighboring regional economic and social advancements.Second, focus on cultivating applied knowledge and ability. Universities and colleges should strengthen the professional counterpart training, focusing on the teaching of practical knowledge, and then continuously improve the applied ability of students, able to solve practical operational problems[5].

2.2 Significance

First, to adapt to the needs of the times. With the rapid development of Internet technology, financial management work has undergone radical changes, financial personnel in addition to professional financial management skills, but also need to adapt to the changes of the information age, with basic information processing capabilities[6]. Therefore, focusing on the cultivation of financial management core competence is the basic requirement of adapting to the times, and universities and colleges should strengthen the cultivation of students' ability to process information, and help students to combine financial management knowledge with information system application in an interdisciplinary way. From this, it can be understood that the core competence of financial management will change with the change of the external environment, and adapting to the times to cultivate the core competence of students will help to narrow the gap between the training of talents and the requirements of the society[7].

Secondly, the role of universities in promoting the training of human resources should be fully enhanced. Colleges and universities are important places to provide talents for the country and society, and timely combination of social demand for talents to carry out teaching reforms, which can clarify the positioning of professional talent training, and then better serve the development of the local community. Therefore, focusing on cultivating students' professional core competence is to combine local advantages and market demand to cultivate students' professional skills and practical ability, so that enterprises, markets and knowledge and skills to form a mutually reinforcing relationship[8].

Third, it helps to improve the comprehensive quality of students. Different institutions have different positioning for talent training, strengthening the training of students' core competencies is more conducive to the cultivation of application-oriented talents, institutions need to combine the core competencies of the profession to make appropriate adjustments to the teaching curriculum, so that the theoretical knowledge learned is in line with the development trend of the current enterprise, so that the students are able to work for the future work may be encountered in the study of the actual problem. This can effectively improve students' mastery of professional theoretical knowledge, information processing ability, practical ability, and thus enhance students' comprehensive quality.

3. Challenges brought by modern information technology to the training of finance professionals

With the rapid development of modern information technologies such as big data, blockchain and artificial intelligence, the field of financial management is experiencing an unprecedented change. The application of these technologies not only has a far-reaching impact on the financial management industry, but also poses new challenges to the training of financial professionals. The specific types of challenges are shown in the table 1 below[9].

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Table 1: Types of Challenges Facing Finance Professional Development

Type of challenge	Specifics
Job Replacement	Big data, blockchain, artificial intelligence and other technologies replace traditional financial management positions, resulting in reduced demand
Increased data capability requirements	Modern information technology requires financial management personnel to have the ability to mine, analyze and apply data
Increased demand for interdisciplinary knowledge	The cross-fertilization of financial management with finance, technology and other fields requires interdisciplinary knowledge and ability.
Cultivation of innovation ability	The development of new technologies requires financial management talents to have innovative thinking and problem-solving ability.
Accelerated updating of skills	Rapid development of information technology requires financial management talents to update their knowledge and skills.
Ethics and Compliance Issues	Ethical and compliance issues, such as data security and privacy protection, pose challenges to financial management talents.

First of all, under the current background of highly integrated information technology, the traditional financial management positions have been impacted in multiple ways[10]. A large number of traditional and repetitive daily business in the enterprise is gradually replaced by intelligent systems, which leads to the demand for conventional financial management positions is decreasing. In order to reduce management and operating costs, many enterprises even outsource their daily financial operations to specialized financial management consulting firms, using financial information technology for intensive management[11]. This trend has challenged the employment opportunities of traditional financial management positions and prompted the need for financial professionals to continuously adapt to the development of new technologies and update their knowledge structure.

However, modern information technology also brings unlimited possibilities for enterprise financial management. The requirements of enterprises for financial management personnel are no longer limited to traditional account processing and report preparation, but pay more attention to the ability to mine, analyze and apply data. In the era of big data, financial management personnel need to have the ability to collect, organize, analyze and predict data, and be able to extract valuable information from massive data to provide strong support for corporate decision-making[12].

In order to adapt to this trend, the training of financial management professionals needs to break the traditional disciplinary boundaries, strengthen the cross-fertilization with other disciplines, and cultivate composite talents with interdisciplinary knowledge and capabilities. This not only requires students to master basic financial and accounting knowledge and methods, but also need to have knowledge and skills in data science, computer technology and other aspects[13].

In summary, modern information technology has brought many challenges to the training of finance professionals. In order to adapt to this change, colleges and universities and training institutions need to constantly update their training concepts and modes, and strengthen the cultivation of students' data ability, interdisciplinary knowledge and innovation ability. Only in this way can we cultivate finance professionals who can adapt to the needs of the times and provide strong support for the digital transformation and development of enterprises. Mastery of computer science and technology, data science and big data technology and other specialized extension diffusion refers to the gradual outward expansion of a certain cultural phenomenon from its original distribution area, so that it covers an increasingly large area. This type of diffusion is characterized by a continuous geographic space, with the old distribution area located within the new distribution area.

4. Cultivation Path of Core Competencies for Finance Majors

4.1 Reasonable positioning of talent training objectives

In the era of big data, the financial management specialty of colleges and universities should be closely aligned with the needs of employers in the era of big data, establish the ability of students,

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quality structure system, and formulate professional training objectives in line with the needs of social and economic development. In response to the needs of employers for financial management talents in the era of big data, the financial management major should not only "practice socialist core values, have a sense of social responsibility, public awareness and innovative spirit, have a humanistic spirit and scientific literacy, master modern economic management theories and management methods, have an international outlook, and have the ability to learn and understand the world", but should also have the ability to learn and understand the world, and have a good understanding of the world. In addition to the cultivation objectives of "practicing socialist core values, having social responsibility, public awareness and innovative spirit, having humanistic spirit and scientific literacy, mastering modern economic management theories and management methods, and possessing international vision, local sentiment, innovative consciousness, teamwork and communication skills", students should also be cultivated in the ability to use big data technology to solve financial problems. Therefore, the cultivation program of M-school puts forward the cultivation goal of cultivating innovative and compound professionals with "financial management + big data", which is refined into five sub-goals of political quality, legal quality, professional quality, practical ability, humanistic quality, etc., among which the goal of practical ability puts forward that "students should be able to skillfully and appropriately use computers, big data and other modern technologies to solve financial problems". In the practical ability objective, the practical ability objective of "being able to skillfully and appropriately use computers, big data and other modern tools to collect and analyze financial data and information" is proposed, and the graduation requirement of "having reasonable information technology financial management problems" is put forward[14].

4.2 Constructing a diversified curriculum system

Scientific and reasonable curriculum system is the core content of talent training program, the basis for achieving the training objectives, and the core link of innovation and optimization of financial management talent training program. Schools should design the corresponding professional curriculum system according to the training objectives of financial management talents. According to the national standards, the curriculum system of financial management majors includes two aspects of classroom teaching and practical teaching, and the classroom teaching includes general education courses, professional compulsory courses, professional elective courses and other contents[15]. Financial management talents in the era of big data not only need to master financial management professional knowledge, but also need to have big data thinking and be able to skillfully use various technical tools. When setting up the professional curriculum system, firstly, according to the requirements of the National Standards, traditional financial management courses such as management, economics, strategic management, accounting, financial management, auditing, economic law, tax law, etc. are set up to ensure that students acquire professional basic knowledge. Secondly, set up courses such as mergers and acquisitions and reorganization, investment project evaluation, and securities investment science to cultivate students' ability to apply what they have learned, and to discover, analyze, and solve financial problems. Finally, increase big data-related courses, such as Python language, big data financial management, business modeling and decision-making, big data and financial decision-making, intelligent finance, etc., so as to enable students to master the basic principles and basic methods of big data application, data mining, and technological innovation management, and to cultivate the ability of acquiring, analyzing, and reporting financial data under the conditions of new technology, and to be able to use professional analysis methods and tools to analyze and Solve complex financial management problems to meet the needs of the big data era.

When setting up professional courses, the following points should be noted: First, some courses have repetitive content, and the relevant teachers should coordinate and communicate with each other before determining the course content, so as to effectively integrate and divide the course content and prevent the occurrence of repetitive teaching. Secondly, we should pay attention to social and economic development and technological changes, eliminate outdated and backward courses, highlight the cultivation of applied, innovative and entrepreneurial talents' core competence, and avoid the phenomenon of "setting up courses according to people". Thirdly, we should integrate big data, blockchain, cloud technology and Internet of Things with traditional courses, build special courses, and strengthen students' information technology literacy. Fourthly, the proportion of compulsory courses should be compressed, the proportion of elective courses should be increased, the integration of different disciplines should be strengthened, and the personalized development of students should be promoted. In a word, universities should combine faculty strength and teaching resources to scientifically and reasonably set up a curriculum system suitable for their own schools.The financial management major of M-school has established a diversified curriculum system of "general education

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+ professional literacy + big data", and at the same time set up a module of "big data financial management", with data thinking, and a module of "big data financial management". At the same time, it has set up the module of "big data financial management", with courses on data thinking, management information system, Python language and financial shared services, and revised the syllabus of auditing, e-commerce, logistics and supply chain management, etc., incorporating the relevant contents of information technology.

4.3 Developing Big Data Thinking in Students

The traditional teaching of financial management courses is mainly based on "PPT + lecture", and teachers are mainly "preaching", with a low degree of student participation. In the era of big data, teachers should change their roles, play the role of learning organizer, make more use of modern teaching methods such as flipped classroom, case study teaching, heuristic teaching, online and offline blended teaching, and apply modern information technology in teaching to guide students to actively think and actively learn knowledge. Financial management students need to have the ability to collect, organize, analyze and present data, and have data sensitivity. Therefore, in the course teaching, it is necessary to apply more case teaching and experimental teaching. Teachers can choose comprehensive cases with authenticity and typicality at home and abroad for students to study and discuss, and can also introduce a virtual simulation comprehensive training platform for simulation of operation and business operation, gradually forming a teaching mode that is mainly based on student learning and supplemented by teacher guidance. Through group discussion and graded simulation confrontation, students can cultivate their sense of cooperation, communication skills, and skills of finding information, so that students can feel the use of financial management in the enterprise under the big data through hands-on simulation practice, and learn how to find and analyze the data under the big data to obtain useful information. In addition, it can also increase the number of practical training courses related to big data technology and tools such as management information system, so that students can skillfully use the modern general economic management analysis technology and tools to cultivate and improve students' practical ability. Finally, centralized practical sessions such as financial accounting practical training, big data financial management practical training and big data tax practical training are set up to cultivate students' ability to analyze and solve economic management problems by comprehensively applying economic management professional knowledge, professional analysis methods and tools.

Teachers should guide students to integrate big data technology into financial management case study, leave students with sufficient time for thinking and analysis, strengthen students' divergent thinking, gradually cultivate students' data sensitivity, enhance big data thinking, and learn to utilize big data and other information technologies in the decision-making process.

5. Conclusion

To summarize, the study of the core competence cultivation path of finance profession based on modern information technology is a crucial work. Facing the challenges of the new era, we must keep exploring and trying, with a view to finding a more effective and scientific method to cultivate financial management talents with high professionalism and innovation ability. This will not only help improve students' competitiveness in employment, but also help promote the progress of the entire financial management industry. Through an educational pathway based on modern information technology, we can provide students with a broader vision and a richer knowledge structure, so that they can better cope with future challenges and create greater value for society.

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