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Teaching Reform and Application of Accounting Informational Course under the Background of Intelligent Finance Based on Information Technology

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Abstract: *With the development of the information age, the degree of information of various industries is accelerating, and the traditional mode is greatly impacted. Any industry should continue to optimize and innovate, and constantly improve its own model to meet the requirements of the information age. Therefore, in the process of undergraduate financial accounting education, we must speed up the process of reform and innovation, explore and optimize the teaching mode and method. Only in this way can we cultivate financial accounting talents to adapt to the development of the times and make contributions to China's modernization. This paper aims to study and analyze the current situation of Informational Accounting course in Colleges and Universities under the background of big data, intelligence, mobile Internet and cloud computing. This paper makes an in-depth study and analysis of the problems and shortcomings of the Informational Accounting course in Colleges and universities, and provides some feasible and constructive suggestions for improving the teaching level and quality of the Informational Accounting course in Colleges and universities. The results show that accounting AI is one hour faster than accountants, and the error rate of accounting AI is 2% lower than accountants.*

Keywords: *Intelligent Finance, Accounting, Information and Course Teaching*

1. Introduction

Financial information is an advanced form of accounting information. Our country has taken the enterprise financial containerization as the key project of enterprise reform. With the development of information technology, it is urgent for enterprises to realize computer financial information. However, the lack of compound talents restricts the development of financial information in China.

With the advent of the era of big data, intelligent information processing technology has become a hot topic in the field of computer applications. Many experts have studied the accounting informational course, for example, some domestic teams have studied the financial management system under the ERP Teaching Simulation Environment of SOA, analyzed the unreasonable teaching situation, course experiments and teaching methods of the course, combined with the teaching practice and teaching effect of this course. This paper discusses the implementation principles and requirements of the teaching system mode of accounting informational course, discusses how to use the teaching system of accounting informational course to provide the best teaching means and methods, and how to use the teaching system of accounting informational course based on intelligent tools. A conceptual model of FFP decision-making process is proposed. By using intelligent agent and web services technology, an architecture supporting FFP decision-making process aggregation is proposed. A prototype system supporting FFP decision-making is proposed, which shows the system structure and business value of mufti-agent based on Web services. This paper proposes a hybrid neural network composed of two independent artificial neural networks, and compares it with the independent artificial neural network model and econometric model to evaluate its performance in foreign exchange futures and options Financial Engineering (integrated) derivatives trading. This paper tests the financial profitability and market timing ability of the competitive neural network model, and compares its attributes with the models based on linear and nonlinear statistical prediction. It is found that for each currency analyzed, the trading strategy guided by the proposed dual network is financially profitable, and produces a more stable revenue stream than other models [1]. Some experts have studied the intelligent classroom teaching of financial process, and introduced how to teach a new assurance service, namely risk assessment, in the course of accounting information system. Spastic Special Committee on assurance services has identified the new assurance services as a major source of income and growth for CPAs.

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These new services require additional training for certified public accountants and require academia to include such training in their curriculum. It provides relevant aspects of risk assessment services, including risk dimensions, COSO control framework and relevant knowledge. This paper introduces how to teach these frameworks and knowledge in the course of accounting information system. This includes discussing the main learning objectives of integrating risk assessment into the accounting system course, integrating risk assessment into the revenue cycle, and integrating risk assessment into the popular system project system understanding help. This paper introduces an intelligent information security teaching system. The intelligent teaching system is suitable for the students of information security advanced course in College of engineering and information technology. Through it, students will be able to learn the course and solve related problems. The intelligent teaching system has been evaluated and achieved good results [2]. Some experts have studied the application of Micro-teaching in the teaching of basic accounting course. In view of the characteristics of traditional intelligent information processing technology course and the problems existing in the teaching process, this paper discusses the case teaching of intelligent information processing technology course from two aspects, including the basic principles of teaching case design and the content design of teaching case. Through heuristic discussion and algorithm design, the autonomous learning mode is realized. This paper introduces the application of intelligent teaching system in engineering courses. This paper introduces how to adapt the course to the needs of students and teachers. User adaptability is provided through the so-called teaching strategies, including how to continue to show the content of the problem, so that students can better absorb knowledge. This paper expounds the adaptation mechanism in its, so that students can learn better and professors can teach better [3]. Although the research results of accounting informational course are quite abundant, there are still some deficiencies in the teaching reform of accounting informational course under the background of intelligent finance.

In order to study the teaching reform of accounting informational course under the background of intelligent finance, this paper studies the teaching of Intelligent Finance and accounting informational course, and finds out the association rules. The results show that artificial intelligence technology is conducive to the teaching of accounting informational course.

2. Method

2.1 Intelligent Finance and Accounting Informational Course Teaching

(1) Active learning

Active learning opportunity is an important factor in curriculum design [4]. At present, most of the lectures and courses do not provide any obvious way to encourage him to study actively. Two complementary strategies contribute directly to this goal [5]. One is hyperlink teaching, which is another mode of classroom teaching [6]. To implement this teaching mode, we need to prepare the lecture notes as the moderator of the discussion, and share the control of classroom behavior with students [6]. The second is smart slides, similar to our information base enhanced by electronic links, so that students can explore concepts outside the classroom. Implementation of this approach requires the use of existing slides, including electronic hyperlinks across relevant materials, and the provision of materials to students through the world wide web [7].

(2) Action oriented teaching method

Action oriented teaching method has a complete operating system, from consultation to planning, then from decision-making to implementation, and finally from inspection to evaluation, all links are closely linked, meticulous and clear, forming a standardized teaching chain [8]. It not only requires the standardization of teachers' teaching process, but also advocates the full coverage of teaching content from book knowledge to action guidance [9]. It is not enough for a complete and effective teaching environment to rely on one-way transmission of teachers. It also requires students to give full play to their own functions, to have a comprehensive understanding of the whole process, and to create a comprehensive learning state of "hands-on, brain, and heart" [10]. At the same time, the training goal of vocational education has also changed from the cultivation of a single practical talent to the cultivation of a professional, multi ability compound talents. Action oriented vocational education must conform to the employment needs of society and enterprises, break through the teaching content limited to book knowledge, make students contact with more comprehensive teaching activities in advance by simulating the actual working environment, adapt to job requirements, and consolidate vocational skills to cope with the increasingly fierce employment environment [11].

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(3) Artificial intelligence

Artificial intelligence (AI) is a functional machine that can respond to problems like human beings. Artificial intelligence is essentially a mathematical model, which imitates the neural mechanism of animals and human brain to process data. In artificial intelligence, information processing is realized by adjusting the relationship between a large number of internal nodes of neurons.

2.2 Association Rules

The probability of association rule XY is calculated by dividing the support of {x} by the support of {x, y} (this probability is also called confidence in the field of data mining)

$$X,Y = \frac{\sup port(X \cup Y)}{\sup port(X)} \times 100\% \tag{1}$$

The premise of association rule XY is: it has support degree s, that is, it can make at least s transactions in transaction database d contain x y at the same time; it has confidence degree C, that is, at least C transactions in transaction database d contain x transactions contain y at the same time. It is shown in formula (2)

$$\mathrm{Im}\, por\tan ce(X \Rightarrow Y) = \log(P(Y \mid X) \setminus P(Y \mid X)) \tag{2}$$

A coefficient created by L.J. Cronbach was used to test the reliability of the attitude scale

$$\partial = \frac{k}{k-1}(1 - \frac{\sum s_i^2}{s^2}) \tag{3}$$

3. Experience

3.1 Experimental Object Extraction

Software architecture plays a very important role in software development. The financial management simulation system organization structure based on SOA, combined with the new way of agile service in the current system application, makes the financial management system under the ERP teaching simulation environment more flexible, can simulate the financial management process in different industries, and flexibly build the corresponding application and business process. Adopting the architecture framework of SOA can improve the re-usability of the system and reduce the coupling of the system. The system manages the business process, can realize the automation of work flow in the financial management simulation system, and can be seamlessly integrated with other systems in the ERP teaching simulation environment. The core of service-oriented financial management simulation system is service, and its core technology is business process management. The goal of financial management simulation system based on SOA integration is that with the change of different businesses in different industries, the system can quickly modify the business process according to different business needs and needs in the teaching process, so as to make the system more flexible.

3.2 Experimental Analysis

Using Java as the implementation language, we can provide platform independent access through potential users' web browser. The application uses an attractive, user-friendly graphical user interface (GUI) to guide students through the process of gradually learning data communication. For students, the proposed tutorial course consists of 7 modules, each module has about 20 automatic questions, so that they can test their concept knowledge online, and an instant answer can let them know what they are doing. In addition, the flash animation of the selected characters in the course is helpful to the realization of the network concept. They can see their point of view in the chart. The proposed approach relies on the use of a bottom-up approach. In this method, students can learn Telecom (bottom layer) before learning data communication (upper layer), that is to say, students can learn signaling, coding, modulation and error detection before learning to transmit data through Internet. In this way, there is no need to open two courses: one is telecommunication course, the other is data communication course. This teaching tool has been used in many students' classes. The results show that compared with the traditional education and training, the teaching tool has significant advantages,

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because it reduces the cost, improves the consistency, provides flexible scheduling, improves scheduling, and supports streamlined logistics.

4. Discussion

4.1 Application Effect of Accounting Artificial Intelligence in Enterprises

Artificial intelligence technology has a strong ability in information and data collection and processing. Similarly, accounting artificial intelligence system has stronger ability than human in dealing with accounting information and data. Accounting artificial intelligence can quickly sort out, analyze and research the collected data, and can also improve the deficiencies of the collected data according to the existing research results. This characteristic of accounting artificial intelligence technology makes the quality of enterprise accounting information more timely and accurate. Before the application of accounting artificial intelligence system, due to the complexity of business, accountants need to deal with a large number of original bills every day. If it is not handled in time, it will affect the timeliness of accounting information to a great extent, and it needs to invest a lot of time and manpower in the process of processing. When people are affected by energy and emotional fluctuations, it may be wrong to record the process and analyze the results. After the introduction of AI, Sinochem International compares the working ability and AI of accountants. The workload of 50 projects was used to compare the working time and error rate between them. The comparison results are shown in Table 1.

Table. 1. Comparison of accounting personnel and accounting artificial intelligence work ability

category	Time consuming	Error rate
accounting personnel	5 hours	3%
Accounting artificial intelligence	2 hours	1%

It can be seen from the above that the accounting staff work time is 5 hours, the error rate is 3%, the accounting artificial intelligence work time is 2 hours, the error rate is 1%. The results are shown in Figure 1.

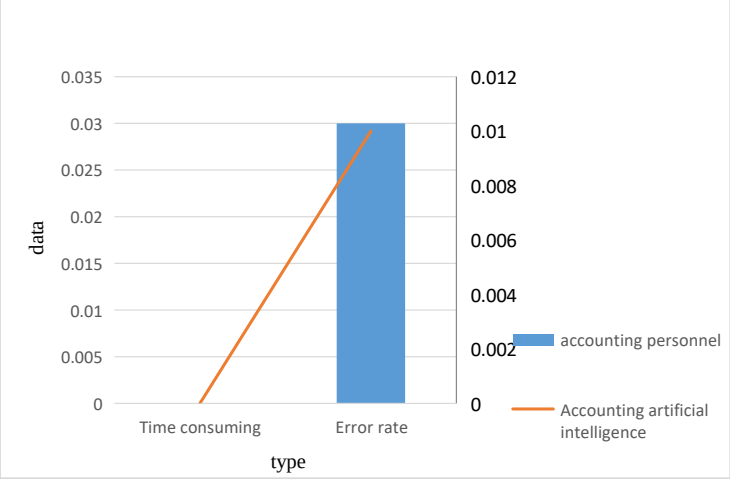

Figure. 1 Comparison of accounting personnel and accounting artificial intelligence work

It can be seen from the above that the accounting artificial intelligence takes one hour faster than the accounting staff, and the error rate of accounting artificial intelligence is 2% lower than the accounting staff.

4.2 The Cultivation of Practical Ability of Accounting Major is Guided by Post Demand

This paper mainly explains the content outline of the accounting qualification examination for students, deeply understands the financial laws and regulations, defines the relevant work responsibilities, and ensures that students become truly qualified accounting practitioners through continuous simulation of the qualification examination. Let students be familiar with the basic methods

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and professional skills of accounting. Clarify the responsibilities and authority of each accounting position, and cultivate students' competence for each position. As shown in Table 2.

Table. 2 Practical ability training of accounting students

practical ability	Proportion
Communication skills	23%
Cooperation ability	25%
innovation ability	52%

It can be seen from the above that the proportion of practical ability training and communication ability of accounting major is 23%, the proportion of cooperation ability is 25%, and the proportion of creative ability is 52%. The results are shown in Figure 2.

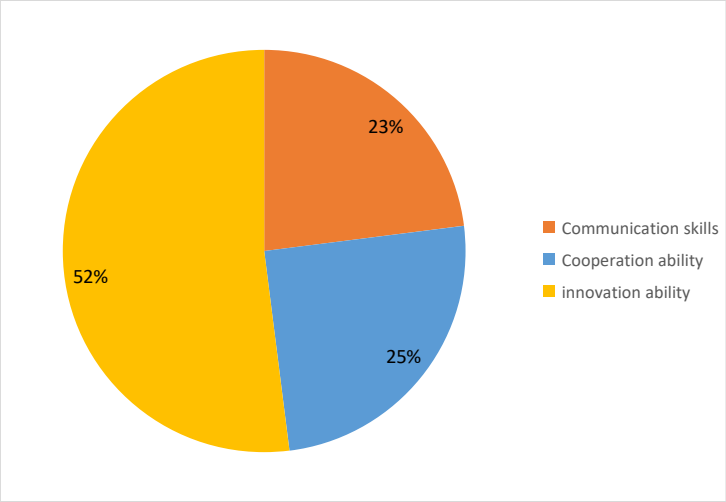

Figure. 2 Practical ability training of accounting students

As can be seen from the above, accounting professional practice ability pays more attention to the cultivation of innovation ability, accounting for 52%.

5. Conclusion

With the rapid development of computer, Internet, intelligent Internet and other information technology, information technology is more and more widely used in the field of education, flipped classroom came into being. In Colleges and universities, flipped classroom is a new attempt. According to the teaching content and characteristics of accounting foundation course for financial management major, this paper discusses the design concept of modern teaching mode in flipped classroom teaching. From the perspective of accounting informational course system and teaching reform, this paper provides ideas for further improving the teaching of accounting informational course. An intelligent transportation system online teaching system based on B / S mode is designed and developed, it provides a flexible, convenient and efficient teaching method for this course.

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