

Research Article

Course Certificate Integration Based on Wireless Communication ‘1 + X’ Intelligent Finance and Taxation

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Due to the ever-changing market environment and fierce competition, tax personnel are increasingly pursuing intelligence. Based on the background of smart finance and taxation, this article explains the issues related to the “1 + X” certificate and analyzes the development ideas and reform directions of the teaching plan and certificate integration teaching mode. This paper presents a study on the integration of academic certificates under the background of “1 + X” intelligent finance and taxation wireless communication. From 2018 to 2019, the development trend of smart finance and taxation has been rising. In 2018, the lowest was 11%, and the highest was 25%; in 2019, the lowest was 16%, and the highest was 37%. The lowest growth rate in 2019 was 5%, and the highest was 21%; the results show that although many relevant personnel understand smart finance and taxation, they have not planned how to use smart finance and taxation to improve their professional capabilities. The results show that smart fiscal and taxation is becoming more and more important in social development and has been widely used. However, traditional fiscal and taxation teaching can no longer meet the requirements of today’s society for fiscal and taxation personnel, so related fiscal and taxation teaching should be innovated.

1. Introduction

In order to effectively alleviate the structural employment pressure in China, national and local higher education institutions are currently pursuing new education development models, such as the “comprehensive teaching plan and accreditation” education curriculum development model. Under this model, professional students learn professional knowledge, strengthen their theoretical and practical abilities, and obtain professional qualification certificates. The intelligent financial support system is a specific application in the financial field, which integrates the traditional support system and the artificial intelligence expert system.

Wireless communication is a communication method that utilizes the characteristic that electromagnetic wave signals can propagate in free space to exchange information. In the field of information communication in recent years, wireless communication is the fastest growing and most widely used. In recent years, artificial intelligence technology has been introduced in financial fields such as accounting,

taxation, and auditing, and the structure of the financial team will inevitably undergo tremendous changes. Financial artificial intelligence will realize financial automation in the future. Therefore, it is necessary to study the career planning of accountants and improve the training of talents. In the context of the rapid development of artificial intelligence, accountant career planning and training have become more and more important, and the training of new intelligent accountants has become a top priority.

The rapid development of information technology and the development of the world economy have brought tremendous changes to the development environment of the finance and tax industries. The original theories and methods of merging finance, taxation, and certification are difficult to adapt to today’s financial environment that combines architectural features for software-controlled soft error recovery. The design utilizes classic fault-tolerant technologies, such as error detection and instruction restart, implemented at the microarchitecture level, and adds instructions for error recovery. When the instruction is submitted to the architectural state, an error is detected. If an

exception occurs at this time, the software can restore the correct machine state and restart execution. Software recovery allows a comprehensive inspection of the machine to determine the root cause of the error. The newly added instructions also help chip verification of hardware and software recovery mechanisms. The design uses a commercial low-standby power 90-nanometer body process, and the prototype operating frequency is up to 336 MHz. Finally, Farnsworth et al. presented the results of proton irradiation. The processor demonstrated the correct recovery of the program operation from more than 500 detected errors, and the results showed that there were no unrecoverable errors [1]. Hida et al. found that in the era of the Internet of Things, it is necessary to extend the battery life of edge devices to achieve sensory connection to the Internet. The goal of Hida et al. is to reduce the power consumption of microprocessors embedded in such devices by using a novel dynamically reconfigurable accelerator. Traditional microprocessors consume a lot of power in memory access, registers, and control of the processor itself, which reduces energy efficiency. The dynamic reconfigurable accelerator reduces this redundant power by performing parallel calculations on the reconfigurable switch and processing element array. Hida et al. proposed a novel dynamically reconfigurable accelerator, which is composed of a dynamically reconfigurable data path and a static array. Static arrays can process instructions in parallel without registers and improve energy efficiency. The dynamically reconfigurable data path includes registers and many dynamically reconfigured switches to resolve the operand dependency between mapped instructions [2]. Wu and Fan found that providing reliable broadband wireless communications in high-mobility environments such as high-speed railway systems is still one of the main challenges facing the development of next-generation wireless systems. Wu and Fan conducted a systematic review of high-mobility communications. Wu and Fan first summarized a list of key challenges and opportunities in high-mobility communication systems and then comprehensively reviewed the technologies that can meet these challenges and take advantage of unique opportunities. The review covers a wide range of communication operations, including accurate modeling of high-mobility channels, transceiver structures that can take advantage of the characteristics of high-mobility environments, signal processing that can reap the benefits, and mitigate interference and damage in high-mobility systems. There are also mobility management and network architectures designed for high-mobility systems [3]. Dhillon et al. found that with the help of ubiquitous wireless connections, declining communication costs, and the emergence of cloud platforms, the deployment of IoT devices and services is accelerating. Most major mobile network operators regard communication networks that support the Internet of Things as an important source of new revenue. Dhillon et al. discussed the needs of wide-area M2M wireless networks, especially short data communications to support a large number of IoT devices. Dhillon et al. first briefly outline the current and emerging technologies that support wide-area M2M and then use communication theory principles to discuss the basic challenges and potential solutions of

these networks, focusing on the trade-offs and strategies of random access and scheduled access. Finally, Dhillon et al. put forward suggestions on how the future 5G network should be designed to achieve efficient wide-area M2M communication [4]. Bennis et al. have discovered that ultrareliable and low-latency communications for 5G wireless networks and other networks are essential and are currently receiving great attention from academia and industry. At its core, URLLC requires a departure from a network design method based on expected utility. In this method, relying on average numbers is no longer an option, but a necessity. On the contrary, there is lack of a principled and extensible framework that takes into account the delay, reliability, data packet size, network architecture and topology, and decision-making under uncertainty. To achieve this vision, after providing definitions of latency and reliability, Bennis et al. carefully studied the various enablers of URLLC and their inherent trade-offs. Subsequently, Bennis et al. focused his attention on various technologies and methods related to URLLC requirements and their application through selected use cases [5]. Rattso and Stokke studied how different national taxation plans interact with geographic differences in productivity and consumption facilities to determine regional populations and used equilibrium models to analyze the current nominal income tax system. The analysis is based on estimated regional income differences, taking into account observable and unobservable personal characteristics and empirical value. Given the regional differences in income and housing prices, quality of life and productivity are calibrated to simulate equilibrium. In contrast to the undistorted equilibrium of one-time taxation, the nominal income tax prevents it from being placed in productive, high-income areas. The deadweight loss due to regional inefficiency is 0.18% of GDP. Rattso and Stokke researched actual income tax and equal actual tax as an alternative tax system. Both of these options will produce a geographical distribution of the population that is closer to the undistorted equilibrium, so the loss is lower [6]. Bsenberg et al. developed an economic growth model to study the impact of extensive capital taxes (profits, dividends, and capital gains) on the macroeconomic outcomes of small open economies and to identify the steady state and transitional effects of shocks on economic outcomes. The selected framework is suitable for structural estimation, and given the simplicity of the model, it can fit well the data of 79 countries from 1996 to 2011. A counterfactual analysis based on the estimation model shows that capital tax relief has a positive impact on output and capital stock. These effects are economically significant and adjusted within a 5-year time window, after which there is no further economic response. It is found that the economic aggregate has the strongest response to changes in the corporate profit tax rate, while the response to dividends and capital gains tax is relatively weak [7]. Moriconi et al. first study whether product market regulation affects the taxation of commodities in open trading economies, and second, Moriconi et al. study the strategic interaction of regulatory measures between trading partner countries. Moriconi et al. proposed a two-country general equilibrium model, in which a destination-based commodity

tax provides funding for public products, and product market supervision affects the number of companies and product diversity in the market. According to the data of 21 OECD countries from 1990 to 2008, Moriconi et al. provided empirical evidence that product market supervision is a strategic supplementary policy, and domestic supervision has a negative impact on domestic commodity taxation [8]. Through the experiments of scholars, it can be seen that wireless communication is very necessary for the study of certificate integration under the background of “1 + X” intelligent finance and taxation. However, there are still some shortcomings in the experiments of scholar, which leads to low reliability of the experiment. In general, finance and taxation are very important to the country and society, and it is also very important to make good use of the integration of academic certificates in the context of wireless communication and smart finance and taxation.

The innovations of this article are as follows: (1) Introduced the relevant theoretical knowledge of intelligent finance and taxation and used the data mining method based on wireless communication to investigate and analyze how to develop the integration of academic certificates under the background of “1 + X” intelligent finance and taxation. (2) Based on the data mining method and the fusion algorithm, carry out the experiment and analysis of the fusion of academic certificates under the background of “1 + X” intelligent finance and taxation. Through investigation and analysis, wireless communications can improve the professional ability of taxation personnel in the context of “1 + X” intelligent taxation.

2. Data Mining Method Based on Wireless Communication

2.1. The Concept of Wireless Communication and Data Mining. In recent years, China has made certain progress in the development and application of intelligent financial systems. UIDA and Kingdee have developed Haibolong, Brio, and other business intelligence software [9]. Data mining refers to the process of searching for information hidden in a large amount of data through algorithms. Data mining is usually related to computer science and achieves the above goals through many methods such as statistics, online analytical processing, intelligence retrieval, machine learning, expert systems, and pattern recognition. However, current smart financial software is limited to the use of charts and tables to describe current data. The data mining structure diagram is shown in Figure 1:

As shown in Figure 1, to find the required information from the data, the first step is to collect data and use various visualization libraries to observe the content of the data, that is, data visualization, and the last step of data preprocessing. It is possible to perform mining with a small amount of data. In fact, most data mining algorithms can be executed with a small amount of data to obtain results [10]. However, too little data can also be analyzed manually, and too little data often fails to reflect the general characteristics of the real world.

Communication technology is a technology for popularizing information. Modern society has been very dependent on communication technology. In the past few decades, communication technology has made amazing progress, and the design and manufacturing technology of wireless communication integrated circuits have achieved leapfrog development [11]. Modern communication technology has changed people’s way of life in all aspects. People are increasingly relying on wireless communication technology and supporting the application of these technologies.

Wireless communication refers to the long-distance transmission and communication between multiple nodes without spreading through conductors or cables. Wireless communication can be carried out wirelessly. The wireless communication method is implemented through a wireless communication system. First, the various information to be transmitted is converted into electrical signals by sending terminal equipment, which is called baseband signal, as shown in Figure 2:

As shown in Figure 2, wireless communication includes a variety of fixed, mobile and portable applications such as two-way radios, mobile phones, mobile information terminals, and wireless networks. Modern society has higher and higher requirements for real-time information, and the role of communication technology in society is becoming more and more important. With the rapid development of communication methods, people have higher and higher requirements for the reliability of communication [12].

The analysis of basic data is carried out in the management layer, and then the analysis results are sent to the decision-making layer, and then, the decision-making plan is sent to the management layer. After the management layer has a specific understanding, it is decomposed into various business requirements and delegated to the accounting layer for execution, as shown in Figure 3:

As shown in Figure 3, the functions to be realized by smart fiscal and taxation should be based on the abovementioned traditional functions, through the application of data mining technology, analysis, and mining of multilevel and multiangle information, including current, historical, fuzzy, clear, external, and internal, using mathematical methods such as neural networks, fuzzy mathematics, and mathematical statistics, analyzing the collected effective data, establishing a model, and realizing the auxiliary role of dynamic and intelligent decision-making [13].

2.2. The Main Decision Tree Algorithm Based on Data Mining

(1) ID3 algorithm

To find the most suitable method for the sample, the function of the most balanced division must be realized, so it is necessary to realize the acquisition of information. The core of the ID3 algorithm is “information entropy.” The ID3 algorithm calculates the information gain of each attribute and regards high information gain as a high-quality attribute. Each time the attribute is segmented, the attribute with high information gain is selected as the segmentation

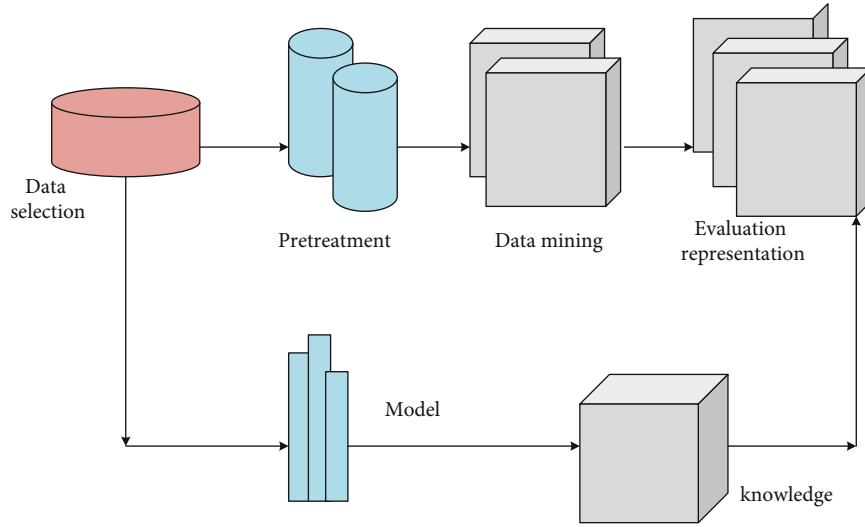


FIGURE 1: Mining process diagram.

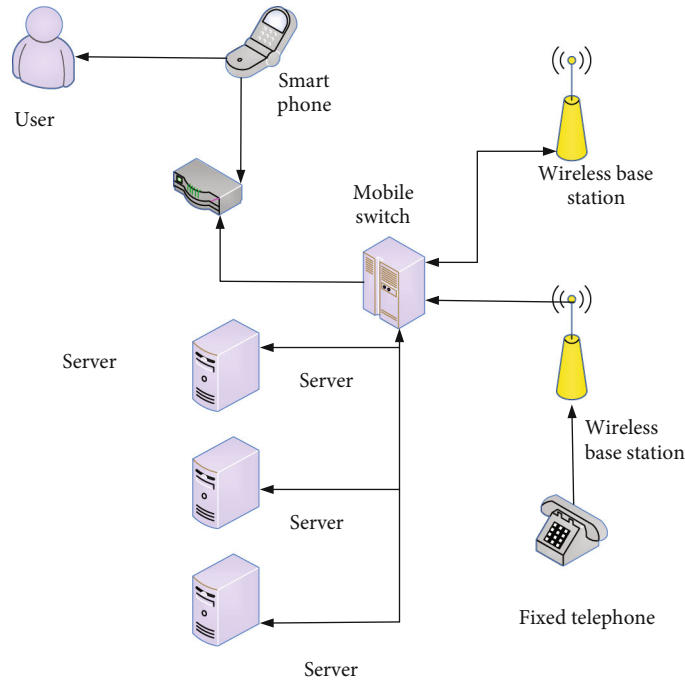


FIGURE 2: Wireless communication structure diagram.

criterion, and the process is repeated [14]. The derivation of its formula is as

$$I(a_1, a_2, \dots, a_M) = - \sum_{i=1}^m p_i \log_2 p_i \quad (1)$$

The ID3 algorithm uses information gain as an evaluation criterion when selecting the branch attributes of the root node and each internal node, so as to obtain the shortcomings of the information and select attributes with more numerical values. In some cases, this attribute may not provide too valuable information [15].

For a given subset a_j , its information expectation is

$$E(A) = - \sum_{i=1}^m P_{ij} \log_2 (P_{ij}). \quad (2)$$

Among them, $\log_2(P_{ij})$ is the probability of E in sample a_j .

After determining the root node, the same method is used as above to calculate recursively. Before the end condition is met, the decision will finally be generated, as shown in Figure 4.

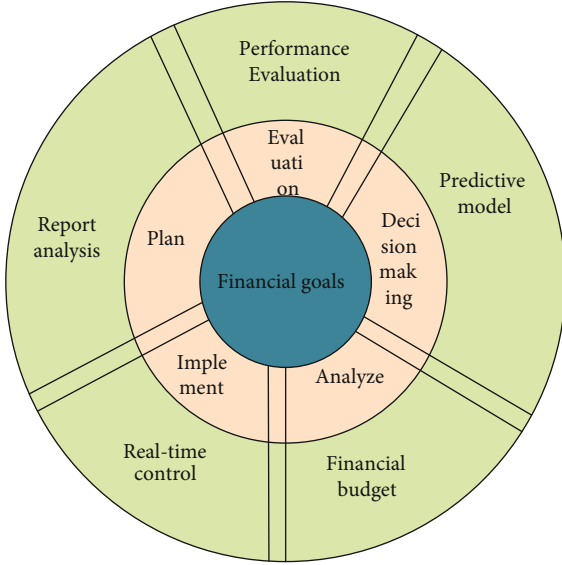


FIGURE 3: Financial support system diagram.

As shown in Figure 4, decision trees usually include decision points, key points, plan branches, and probability branches. Drawing multiple branches from the decision point, each branch represents an alternative, that is, a planned branch. Points are connected behind the branch of the plan, and various straight lines are drawn from the points to indicate different things [16].

(2) Improvement of ID3 algorithm

Dividing A into class V , record $\{A_1, A_2, \dots, A_V\}$ as the total number of instances, and the number of instances of class i is A_i , then the probability that an instance belongs to the i th class is $P(A_i)$, and

$$P(A_i) = \frac{|A_i|}{|A|}. \quad (3)$$

From the formula for calculating information entropy, then, the degree of decision tree to S is

$$H(A) = - \sum_{i=1}^V p(A_i) \log_2 p(A_i). \quad (4)$$

Supposing the attribute is A , its value is $\{A_1, A_2, \dots, A_V\}$, the number of instances of A_i belonging to the i th category is A_{ij} , and the probability of A_{ij} belonging to the category i is $P(A_i/w = a_j)$; then, its calculation formula is

$$P\left(\frac{A_i}{w = a_j}\right) = \frac{|A_{ij}|}{|A_j|}. \quad (5)$$

Among them, A_{ij} represents the number of instances of the molecule set, and the resulting instance is represented

by $P(A_i/w = a_j)$ [17]. The conditional entropy of the training set for attribute A is

$$H(B_j) = - \sum_{i=1}^V P\left(\frac{A_i}{B}\right) \log_2 P\left(\frac{A_i}{B}\right). \quad (6)$$

Then, the information entropy of node A is as

$$\text{Gain}(a, b) = h(b) - h\left(\frac{b}{a}\right). \quad (7)$$

Decision tree technology is a basic technology in the field of artificial intelligence, which can achieve better judgments for some relatively small and relatively simple models [18]. In the case of decision trees, there are often situations that are simple or do not require data preparation. In other technologies, the data must first be generalized, such as removing redundant attributes and blank attributes [19].

Q is the label of a certain category, S_1 is the probability that the sample belongs to S_n , S_1 is the number of samples on the category S_n , and the entropy that is divided into subsets according to the attribute Q is as

$$E(Q) = \sum \frac{S_1 + S_2 + \dots + S_n}{s} * I. \quad (8)$$

B is an attribute, with A different values, and the information gain is shown in

$$\text{Gain}(A) = I(B_1, B_2, \dots, B_n) \quad (9)$$

2.3. Single-Antenna and Multiantenna Models Based on Wireless Communication

(1) Single antenna model

In network management, multiuser downlink beamforming technology based on service quality constraints has been very popular in recent years, because this technology is very attractive for network management [20]. However, when there are a large number of users sharing the wireless channel, or when the service quality constraints are too strict, this problem will become infeasible and unsolvable. At this time, it is necessary to use access control. The single antenna model is shown in Figure 5.

As shown in Figure 5, the introduction of single-antenna model access control is a cross-layer method. That is, the joint optimization of multiuser downlink beamforming and access control ensures that as many users as possible can be served under the premise of satisfying service quality constraints. However, this core problem is often difficult to solve [21], and it can be compensated by convex approximation.

Now, the joint optimization problem of user access control and power control is modeled as a two-step optimization problem. The first-step optimization problem is

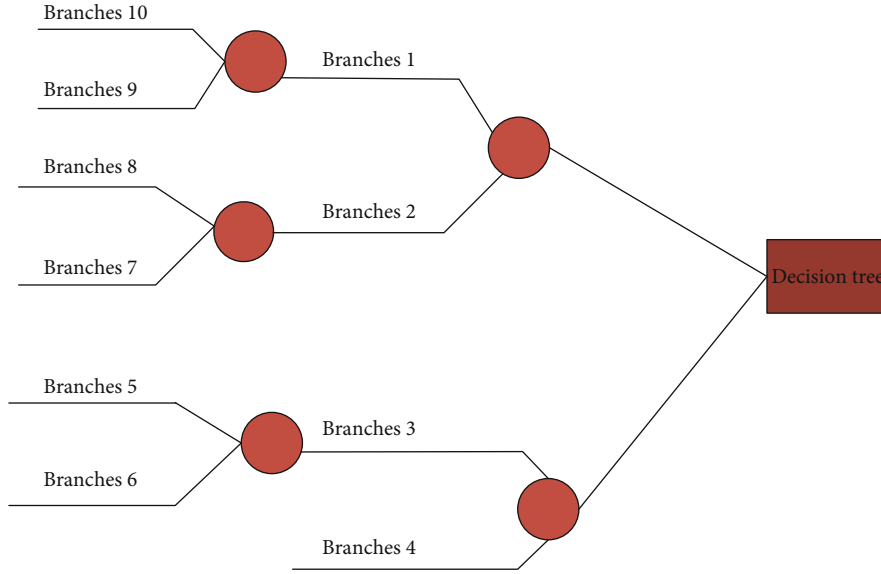


FIGURE 4: Decision tree structure diagram.

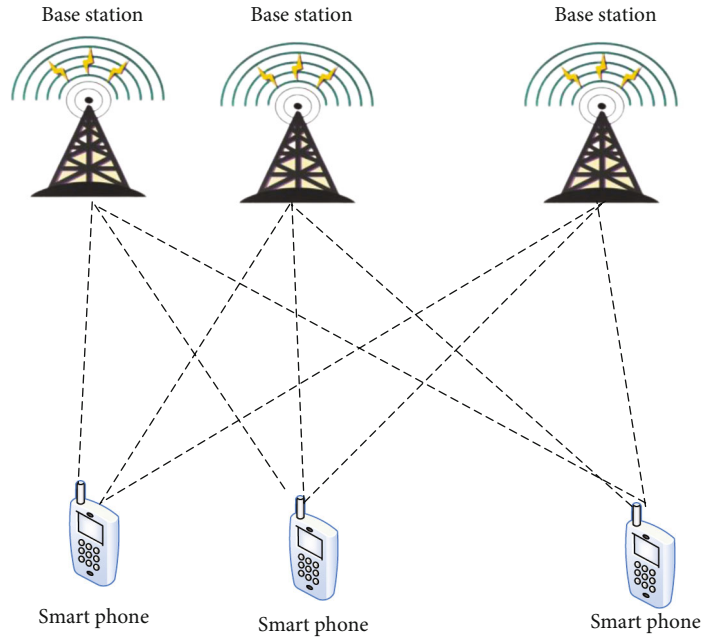


FIGURE 5: Example of a single-antenna model scheme.

expressed as follows. Among them, \mathcal{G}_{mm} indicates the set of accessible users, and p_{mm} indicates the cardinality of the set, as shown in

$$\text{SINR}_M = \frac{\mathcal{G}_{mm} p_{mm}}{\sigma_m^2}. \quad (10)$$

Using γ_m to represent the maximum allowed access set, and this set may not be unique. The second step is to minimize the total transmission energy in this set, as in

$$\text{SINR}_m > \gamma_m. \quad (11)$$

After a certain formula deformation, it can be proved that formula (10) and formula (11) can be integrated and equivalent to

$$\min \|y\|_0 + \alpha(p^{\max})^2 q = 0. \quad (12)$$

As a single-antenna model, formula (12) is very easy to solve. However, in the multiantenna model, the structure of the problem is not such a simple power control problem, so it cannot be converted into a simple single-antenna model [22].

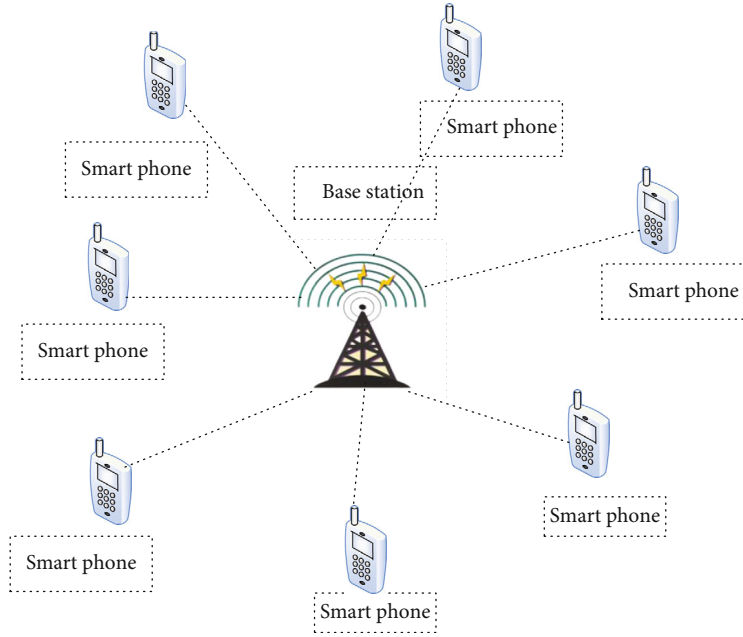


FIGURE 6: Example of a multiantenna model solution.

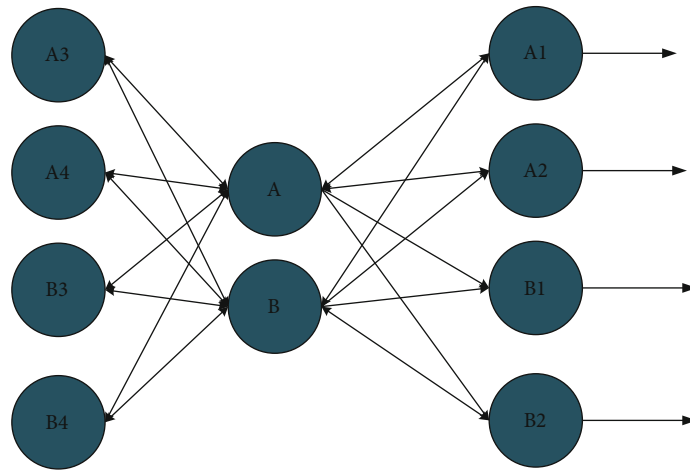


FIGURE 7: RBF neural network structure.

(2) Multiantenna model

This article will briefly introduce a user access control scheme in a multiantenna model. However, in the case of multiple antennas, compared to the single-antenna model, beamforming technology is additionally required to deal with, and the two research directions proposed in this paper are also realized by beamforming technology. Therefore, it is also necessary to give a brief introduction to beamforming technology [23], as shown in Figure 6.

As shown in Figure 6, consider a single-cell wireless communication network composed of a base station equipped with K antennas and M single-antenna users. Here, cooperative processing is implemented between base

stations, that is, each base station may serve any user [24–26]. Therefore, the transmit beamforming matrix is

$$Q = [Q_1, \dots, Q_M] = \text{SINR}_m. \tag{13}$$

The beamforming matrix U and auxiliary binary variables are

$$V_m = \min \sum_{m=1}^m \|U\|^2 + (S_M + 1)^2. \tag{14}$$

TABLE 1: A survey on the level of understanding of smart finance and taxation among 200 finance and economics students.

Learn degree	Quantity	Percentage	Effective percentage	Cumulative percentage
Learn	134	72.5%	72.5%	145%
Do not understand	66	27.5%	27.5%	55%
Total	200	100%	100%	200%

TABLE 2: 200 finance and economics students answered the crisis awareness survey form.

Crisis awareness	Quantity	Percentage	Effective percentage	Cumulative percentage
Yes	101	51.3%	51.3%	102.6%
No	99	48.7%	48.7%	97.4%
Total	200	100%	100%	200%

In particular, U and S will have restrictions, as

$$\delta \leq \min \frac{4\gamma^{-1}}{p \max \|h_n\|^2 + \sigma^2}. \quad (15)$$

2.4. Quantum Genetic Algorithm Based on Deep Learning. As a branch of machine learning, deep learning also uses learning algorithms to allow the computer itself to learn from a large amount of known data or extract the hidden laws and features. It is used to intelligently identify new unknown data or make reliable predictions about the possibility of unknown events [27, 28]. The radial basis function optimized by the quantum genetic algorithm is a neural network detection algorithm. The basic principle is to use the global optimization function of the quantum genetic algorithm to perform a rough search and then use the neural network to perform detailed detection, so as to overcome the problem of the network easily falling into the local optimum and achieve the purpose of ensuring the detection performance of the RBF network [29–31]. It can be seen that the algorithm consists of two main parts:

- (1) Radial basis function neural network (RBF neural network)

In the field of mathematical modeling, radial basis function network is an artificial neural network that uses radial basis function as activation function. The output of a radial basis function network is a linear combination of the input radial basis function and neuron parameters. Radial basis function networks have a variety of uses. The RBF neural network is a traditional 3-layer neural network, and its structure is shown in Figure 7:

As shown in Figure 7, radial basis function refers to a type of function whose value is only the distance from the origin. Any function that satisfies the above characteristics

is called radial basis function. The most commonly used radial basis function is

$$\psi_k = \exp\left(-\frac{\|x - c_h\|^2}{\sigma_h^2}\right), \quad (16)$$

where $h = 1, 2, \dots, n$, h is the i -dimensional input vector, c_h is the center of the h th radial basis function, σ_h^2 is the width of the radial basis function of the h th hidden layer neuron, and $\|x - c_h\|$ is the Euclidean norm of the vector $x - c_h$. Then, the output form of the n th node of the network is as shown in

$$x_n = b_n + \sum_{h=1}^n w_{nh} \cdot \exp(\sigma^2 h). \quad (17)$$

The training process of the RBF network is divided into two parts. First, the center and width of the radial basis function of the hidden layer are obtained through the learning method. Then, the label information is used to perform the connection weight of the output layer. The trained RBF network can implement tasks such as approximation and classification based on the label data.

- (2) Quantum genetic algorithm (QGA)

The QGA algorithm is based on the genetic algorithm and uses the quantum computing theory to improve the coding and update of the algorithm, so that the traditional genetic algorithm has a stronger global search ability. Compared with traditional genetic algorithm, QGA uses a new way of individual coding, called the Q gene. The Q gene is derived from the concept of qubits in quantum computing. Q bit is the smallest unit of information storage in two-state quantum computing, as shown in

$$\psi = \alpha^2 y + \beta x^2. \quad (18)$$

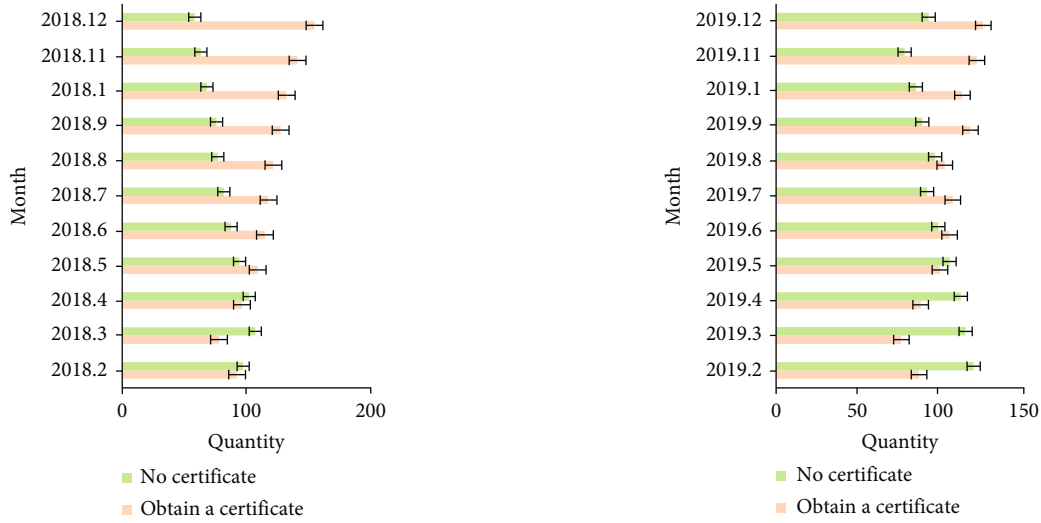
In the algorithm, assuming that the population size is α , and each individual is composed of k Q genes, the population inherited to any t th band can be expressed as

$$q_J^T = \begin{bmatrix} \alpha_1^t, \alpha_2^t, \dots, \alpha_n^t \\ \beta_1^t, \beta_2^t, \dots, \beta_n^t \end{bmatrix}. \quad (19)$$

During the operation of the algorithm, operations such as crossover mutation are used to perform genetic updates, and quantum gates are used to control the update direction of α , so that the individual state is close to the optimal

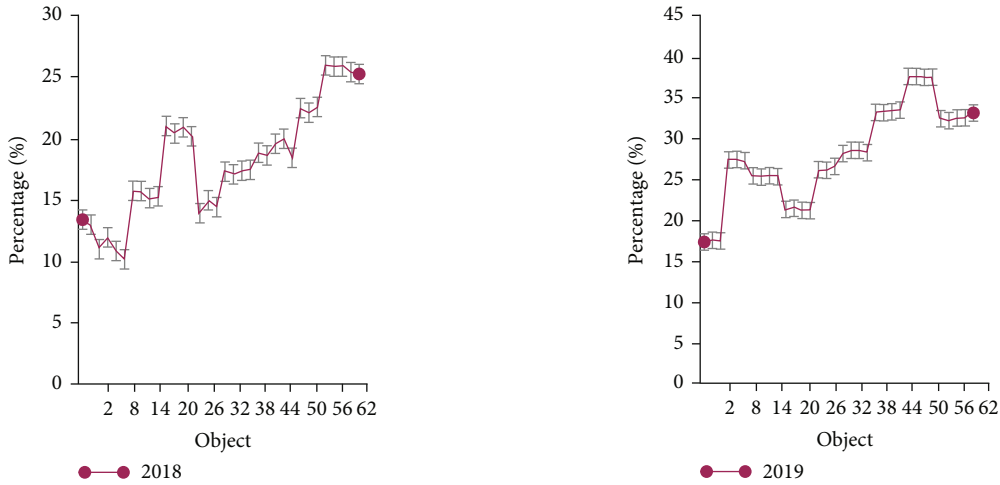
TABLE 3: Questionnaire on whether there are career planning for finance and taxation positions for 200 finance and economics students.

Career planning	Quantity	Percentage	Effective percentage	Cumulative percentage
Already planned	57	33.3%	33.3%	66.6%
Planning	38	20.5%	20.5%	41%
Do not want to plan	105	46.2%	46.2%	92.4%
Total	200	100%	100%	200%



(a) In 2018, whether financial students obtained the certificate of “1 + X” (b) In 2019, whether financial students obtained the certificate of “1 + X”

FIGURE 8: Comparison of whether financial students obtained certificates in 2018 and 2019.



(a) Trends in the development of smart finance and taxation in 2018 (b) Trends in the development of smart finance and taxation in 2019

FIGURE 9: Comparison of trends in the development of smart fiscal and taxation in 2018 and 2019.

solution. There are many methods, among which the most commonly used is the quantum revolving gate, which is

$$W(\theta) = \begin{bmatrix} \cos \theta, & -\sin \theta \\ \sin \theta, & -\cos \theta \end{bmatrix}. \quad (20)$$

In addition to these commonly used detection algorithms, there are still many improved algorithms with better performance. Most of the detection algorithms can only highlight one aspect of the detection performance and complexity, but it is difficult for both to be excellent at the same time. The following article will introduce detection

TABLE 4: Questionnaire on certificates obtained by 100 employment finance and taxation personnel.

Certificate type	Quantity	Percentage	Effective percentage
Nothing at all	45	48%	48%
Senior finance	26	27%	27%
Intermediate finance	12	10.5%	10.5%
Junior finance	11	10%	10%
CPA	6	5.5%	5.5%

algorithms that are constructed using deep neural network methods and have good performance and low complexity.

3. Experiments Based on the Questionnaire Survey Based on Fiscal Intelligence

It is difficult for traditional fiscal and taxation systems to extract necessary knowledge from it, so it is very difficult for fiscal and taxation personnel to learn new knowledge, so they have to process a large amount of data to obtain the required knowledge. For taxation personnel, due to the lack of necessary skills and tools, a lot of time and energy are often wasted. Intelligent fiscal and taxation is an effective method to solve this problem. It can effectively process a large amount of data and information and obtain relevant knowledge from it.

This article mainly uses questionnaire survey methods to study the theories of related career planning and analyzes the status quo, problems, and countermeasures of accountant career development. The rapid development of smart finance and taxation has brought huge challenges to the employment of accounting practitioners. Accountants should adapt to the pace of economic development, cultivate and use their unique management skills and knowledge flexibly, respond to the rapid development of artificial intelligence, and continuously improve themselves.

This article conducted a survey on the understanding of smart finance and taxation of 200 finance and economics students, as shown in Table 1.

Through the analysis of Table 1, it can be seen that there are 134 students who understand smart finance and taxation, accounting for 72.5%; it can be seen that most people still understand smart finance and taxation. According to the analysis of Table 1, there are 134 students who understand smart finance and taxation, accounting for 72.5%; 66 students who do not understand intelligent finance and taxation, accounting for 27.5%. The proportion is 43.5% higher; it can be seen that most people still understand smart finance and taxation.

This article investigates whether 200 finance and economics students have crisis awareness, as shown in Table 2.

Through the analysis of Table 2, it can be seen that there are 101 financial and economic students with job crisis awareness, accounting for 51.3%, and 99 students without job crisis awareness, accounting for 48.7%; it can be seen that most of the students still have a sense of job crisis.

This article conducted a survey on whether 200 finance and economics students have career plans for finance and taxation positions, as shown in Table 3.

Through the analysis of Table 3, it can be seen that there are 57 financial students who have planned their job and career plans; 38 are planning their job and career plans; 105 of them do not know how to plan their job and career plans.

Therefore, after analysis, it can be known that although most accounting personnel understand and have realized the impact of artificial intelligence on accounting positions. But there are still a large number of people who are aware of the impact, but do not know how to plan their careers. It shows that the awareness of career planning needs to be strengthened.

This article conducts a survey and comparison of whether financial students obtained certificates in 2018 and 2019, as shown in Figure 8.

As shown in Figure 8, the number of people who obtained the certificate in 2018 increased from 100 in January to 156 in December, and the number of people who obtained the certificate in 2019 increased from 106 in January to 147 in December. It can be seen that the number of people getting the certificate has been increasing. The basic accounting business of finance is mostly replaced by financial artificial intelligence robots, but the number of financial posts in the market has not changed much. This stage will have a serious impact on the work of accountants. The person in charge of accounting who is engaged in basic accounting work faces the risk of being replaced by artificial intelligence robots. With the emergence and gradual popularization of artificial intelligence technology, accounting personnel engaged in basic accounting, document classification, book binding, report processing, tax declaration, and tax adjustment are gradually replaced by artificial intelligence robots. At this time, the relevant personnel should strengthen their own abilities. Students majoring in finance and economics can work hard to obtain the "1 + X" certificate.

At present, the professional skills of accountants cannot meet the needs of financial management in the era of artificial intelligence. There are too many accountants in China, the education level is different, the financial management expertise is also different, and the overall personal qualities are also different. Some accountants have the qualifications of certified accountants, certified tax or internationally recognized accountants, and some accountants have intermediate and senior professional positions. Some accountants only have an accounting qualification certificate, and some corporate accountants have even been engaged in accounting for many years but have not yet obtained an accounting qualification certificate. This article investigates the development trend of smart finance and taxation in 2018 and 2019, as shown in Figure 9.

As shown in Figure 9, smart finance and taxation has developed rapidly. Among them, the "Smart Finance and Taxation" vocational skill certificate was formally established. This is mainly for accounting, financial management, and other majors in universities. The expert's reference

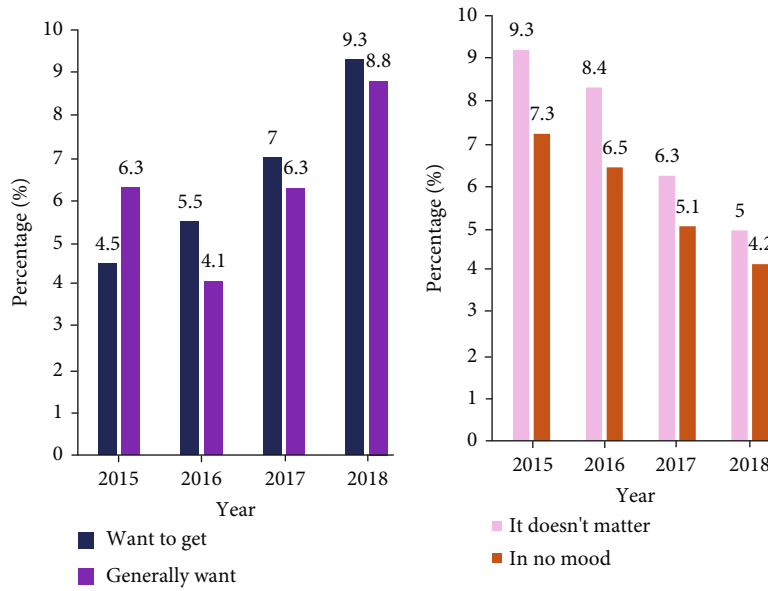


FIGURE 10: The degree of willingness of 200 finance and accounting students from 2015 to 2018 whether they want to obtain a “1 + X” certificate.

standards include three-level smart financing and tax professional skills, elementary, intermediate, and advanced levels. The level of professional competence requirements is different, and more detailed and higher-level requirements will be put forward for the recruitment of accounting talents in the future. From the current point of view, the accounting major of colleges and universities needs to actively introduce the “1 + X” certificate of smart finance and taxation to realize the comprehensive combination and positioning of the training target plan for accounting experts. This article conducted a survey on the certificates obtained by 100 taxpayers who have been employed, as shown in Table 4.

As shown in Table 4, the types of certificates obtained by 100 employed fiscal and taxation personnel include no certificate, primary qualification certificate, intermediate qualification certificate, advanced qualification certificate, and CPA. Among them, there are 45 people who have not obtained the qualification certificate, and the number of people who have obtained the primary qualification certificate is 26, the number of CPA is the least, only 6 people. It can be seen that there are not many people who have obtained certificates, and the ability of accounting personnel needs to be strengthened.

This article conducted a survey on the willingness of 200 accounting students from 2015 to 2018 to obtain a “1 + X” certificate, as shown in Figure 10:

As shown in Figure 10, the degree of willingness of accounting students to obtain the “1 + X” certificate is that they want to obtain it, generally want to obtain it, it does not matter to obtain it, and does not want to obtain it. It can be seen from Figure 10 that in 2015, the proportion of students who want to obtain the “1 + X” certificate is 4.5%, and the proportion of students who generally want to obtain the “1 + X” certificate is 6.3%. The proportion of students

who do not want to obtain the “1 + X” certificate is 7.3%, and the proportion of students who do not care to obtain the “1 + X” certificate is 9.3%. In 2016, the proportion of students who want to obtain the “1 + X” certificate is 5.5%, and the proportion of students who generally want to obtain the “1 + X” certificate is 4.1%. The proportion of students who do not want to obtain the “1 + X” certificate is 6.5%, and the proportion of students who do not care to obtain the “1 + X” certificate is 8.4%. It can be seen that the number of students who want to obtain a certificate is increasing year by year, and the proportion of students who do not want to obtain a certificate decreases with the increase of years. Therefore, more and more students agree with the certificate.

In order to obtain the “1 + X” smart finance and tax certificate, more schools have established the “certificate merger” curriculum reform model, which has realized the combination of accounting professional courses and smart finance and tax “1 + X” certificates. At the same time, especially with regard to students’ majors, it is necessary to clarify the evaluation content of the certificate and conduct more skill training. Therefore, in the context of the “1 + X” smart finance and tax certificate, it is very necessary to promote the development of the curriculum reform model of “consolidation of courses and certificates.”

4. Discussion

This article analyzes how to study the integration of academic certificates under the background of “1 + X” intelligent finance and taxation wireless communication. The concepts related to microprocessor wireless communication and intelligent finance and taxation are expounded, the related theories wireless communication are studied, and

the method of research on the integration of academic certificates under the background of “1 + X” intelligent finance and taxation is explored. And through the questionnaire survey method case, the importance of smart finance and taxation to contemporary society was discussed, and finally, the integration of data mining into smart finance and taxation as an example to explore the relationship between the two was taken.

This article also makes reasonable use of data mining algorithms. With the increasing range of data mining algorithms and their importance gradually becoming more and more prominent, many scholars have begun to match the theory of data mining algorithms with real-life application scenarios and put forward feasible algorithms. Data mining algorithm is a kind of mathematical operation. According to the calculation, wireless communication is essential for the study of certificate fusion under the background of “1 + X” intelligent finance and taxation.

Through the questionnaire survey method, this article knows that the research on the integration of academic certificates under the background of smart finance and taxation can promote the contemporary social economy. Therefore, combining the characteristics of the era of intelligent fiscal and taxation background and finding a new integrated curriculum that enables people to improve their professional capabilities is an important factor in promoting the development of the fiscal and taxation industry.

5. Conclusions

This article mainly focuses on the related concepts of smart finance and taxation, wireless communication. The beginning part introduces the necessity of smart finance and taxation. In the context of artificial intelligence, accountants are faced with huge challenges, and the number of jobs has been drastically reduced. Companies are increasingly demanding the ability of accounting personnel, and the types of accounting personnel required by companies are also changing. Therefore, the application of smart fiscal and taxation is essential. Then, the method part is based on the data mining method and neural network model of wireless communication. The application of data mining method and neural network model in smart finance and taxation is studied, and it is found that data mining method can play an active role in the study of certificate fusion under the background of “1 + X” smart finance and taxation. The last part of the experiment conducted a related survey of finance and taxation students and personnel and found that there are still relatively few people with certificates, and the abilities of relevant personnel cannot keep up with the requirements of modern enterprises for financial personnel. Therefore, it can be concluded that if want to continue to develop in the financial position, it must improve business capabilities and obtain corresponding certificates.

Data Availability

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Conflicts of Interest

The author states that this article has no conflict of interest.

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