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Experimental Study on the Recovery of Lignin from Black Liquor by Blade Dynamic Cross-Flow Filtration Device

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Abstract: The separation and recovery of lignin in black liquor is a hot topic in current research. Ceramic membrane technology has become the main method of lignin separation in black liquor due to its advantages of green environmental protection, high efficiency and high recovery rate. However, in the separation process, the problem of ceramic membrane fouling has always existed and has become the key to hinder its continuous separation. Aiming at the problem that the existing filtration methods can not meet the continuous separation of lignin in black liquor, this paper proposes to apply the blade dynamic cross-flow filtration device to the separation process of lignin in black liquor, and the influence of blade rotation speed on the separation performance is studied experimentally. The results showed that increasing the rotating speed of the blade could effectively reduce the accumulation of filter cake on the membrane surface and achieve the purpose of improving the filtration flux.

Keywords: black liquid ; lignin ; dynamic cross flow ; blade speed

INTRODUCTION

Traditional dead-end filtration and cross-flow filtration systems are difficult to meet the needs of continuous separation of lignin in black liquor by ceramic membrane technology due to their filtration methods and structural characteristics, so it is urgent to seek a better measure to improve membrane surface hydrodynamics conditions and shear force strengthening mechanism[1, 2]. Vane-type dynamic cross-flow filtration device is a new type of filtration device. By installing blades in the filtration chamber to better realize the improvement measures of hydrodynamic conditions on the membrane surface and the strengthening mechanism of shear force, it can effectively eliminate membrane fouling and significantly increase filtration flux, so as to achieve continuous production[3-5]. However, the blade-type dynamic cross-flow filtration device started late, and is currently only used in the ocean (extraction of green algae and separation of suspended fine particles in seawater) and food (purification of protein in milk). In the paper industry, it is still blank[6, 7]. In order to solve the problem of continuous production of lignin in black liquor by membrane separation, a blade dynamic cross-flow filtration device was applied to the extraction process of lignin in black liquor.

In this paper, the recovery of lignin from black liquor by blade dynamic cross-flow filtration device was studied experimentally. The influence of blade speed on filtration flux and filter cake weight was studied, and the filtration mechanism was understood in detail, so as to find out the best operating conditions, and provide theoretical and technical support for the improvement and perfection of the subsequent blade dynamic cross-flow filtration device and the continuous separation of lignin in black liquor.

MATHEMATICAL MODEL

The filtration flux in the experiment was calculated by Formula (1)[8] :

$$q = \frac{V}{St} \tag{1}$$

Where: q is instantaneous filtration flux, $m^3/(m^2 \cdot s)$; V is the volume of liquid through, m^3; S is membrane area, m^2; t is filtering time, s.

EXPERIMENT SETTINGS

Experimental Materials and Filtration Membranes

The materials used in the experiment were black liquor provided by a paper mill, which was diluted at a ratio of 1 : 20 in the experiment. The filter membrane used in the experiment is a plate ceramic membrane with a pore size of 50 nm and a thickness of 4 mm.

Experimental Equipment and Process

The blade dynamic cross-flow filtration experimental device used in the experiment is shown in Fig.1. The whole filtration process is driven by nitrogen pressure. The filtrate is collected by a conical flask and measured by an electronic balance, which is recorded in a computer for the calculation of filtration flux. In addition, the speed of the blade can be controlled by changing the speed of the magnet stirrer.

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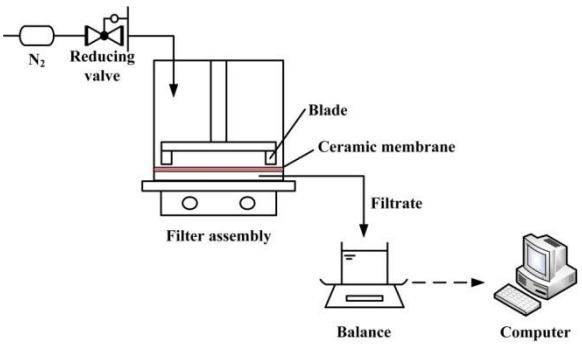


Figure 1. Vane type dynamic cross-flow filtration experimental device

RESULTS AND DISCUSSION

In dynamic cross-flow filtration, blade rotation is the most important part of providing membrane surface shear force and preventing filter cake growth. Therefore, it is particularly important to study the effect of blade speed on filtration flux. In this study, the effects of two different speeds of 0rpm and 600rpm on filtration flux and cake weight were investigated. Fig.2 shows the effect of two different speeds of 0rpm and 600rpm on the filtration flux at a transmembrane pressure of 0.1MPa. It can be seen from the diagram that the filtration flux at 600 rpm decays rapidly at the initial stage of filtration, and the filtration flux has reached a steady state at 2000 s. The filtration flux at 0rpm decays slowly, and the filtration flux reaches a stable state at about 8000s. In addition, the steady-state filtration flux at 600 rpm is higher than that at 0 rpm. This is due to the operation at high speeds, the membrane surface shear force makes the lignin particles not easy to deposit on the membrane surface, resulting in limited growth of the filter cake, so it can quickly reach a stable state. At 0 rpm, the leaves are in a static state and cannot provide shear force for the membrane surface, so the lignin particles continue to accumulate in the membrane area, resulting in a slow attenuation of the filtration flux.

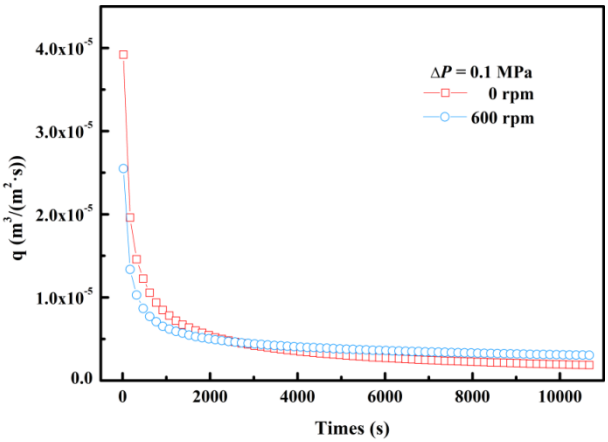
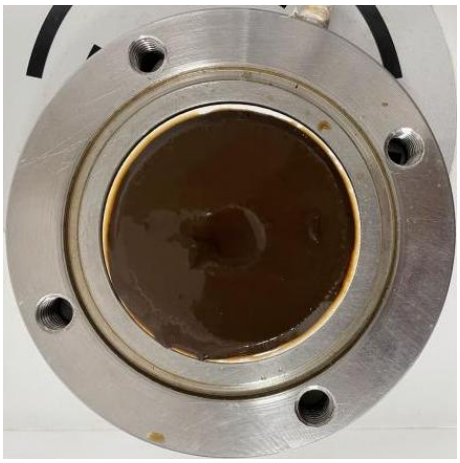


Figure 2. Influence of different rotational speeds of 0rpm and 600rpm on filtration flux when the transmembrane pressure difference is 0.1MPa.

Fig. 3 shows the morphology of the filter cake formed by lignin particles on the membrane surface at two different speeds of 0rpm and 600rpm. It can be seen from the figure that when the operation is at 600 rpm, the lignin particles are taken away from the membrane surface under the shear force of the membrane surface, so the formed filter cake layer is very thin. On the contrary, a thick filter cake layer was formed on the membrane surface operated at 0rpm. In order to further illustrate the effect of blade speed on the filter cake layer, we measured the weight of the filter cake at two different speeds of 0rpm and 600rpm. The weight of the filter cake operated at 0rpm was 3.610g, and the weight of the filter cake operated at 600rpm was only 0.045g. In other words, the operation at high speed is beneficial to eliminate the filter cake and improve the filtration flux.

600rpm



0rpm

Figure 3. Morphologies of filter cakes formed by lignin particles on the membrane surface at two different rotational speeds of 0rpm and 600rpm

CONCLUSION

In this paper, the dynamic cross-flow filtration device is applied to the extraction process of lignin in black liquor, and the influence of blade speed on filtration flux and filter cake weight is studied experimentally. The experimental results show that the filtration flux at 600 rpm is higher than that at 0 rpm, and the filter cake weight at 600 rpm is only 0.045 g, which is much smaller than 3.610 g at 0 rpm. Therefore, increasing the blade speed can effectively reduce the weight of the filter cake and improve the filtration flux.

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Analysis of the Information System Integration of University Fusion Culture Communication Based on Network Video Automatic Generation Technology

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Abstract:Web services are self-describing and self-contained application modules, which have the advantages of platform independence and programming language independence. Service-oriented architecture is to use the above characteristics of Web services. Its innovation lies in solving the difficulty of manual production of network teaching resources, which is time-consuming, troublesome, long-term, and high-level requirements for teachers. Using this solution, any teacher can record the entire teaching situation and automatically generate two network teaching resources while teaching, which is easy to accumulate into a teaching resource library. The teaching process can be broadcast live on the Internet in real time (including video, audio, computer pictures, etc.). Based on the classic CNN-LSTM structure, the model adds a subject-verb-object classifier to the output of the LSTM network. Subject-verb-object information is the skeleton information of a sentence.

Keywords: Information System Integration, Fusion Culture Communication, Network Vide, Automatic Generation Technology

1. INTRODUCTION

As one of the main contents of my country's education informatization construction, college informatization has achieved great results after more than 10 years of efforts. Support teaching application, scientific research collaboration, resource sharing and electronic school affairs, etc. Digital campus construction [1]. Teaching and financial waste. The educational resource base is the foundation of educational informatization and needs to be built for a long time. In fact, teachers' teaching activities are established and maintained in schools every day [2].

The construction of educational resource library should pay attention to teaching. We hope that teachers of various majors will focus on the scientificity and accuracy of the content, but also be convenient and easy to use. While completing the teaching tasks of this major, the teaching process can be expanded, and can be updated and maintained stably and continuously [3]. Continue to accumulate, automatically generate network teaching resources to accumulate into nursing. According to the data in the tenth annual forecast white paper released by Cisco Systems Corporation (Cisco) in May 2015 [2][3][4], the global Internet video traffic will increase by 4 times in 2019, and traditional culture is a precious commodity in our country. The spiritual wealth of Chinese people not only affects the behavioral habits and ways of thinking of the Chinese people, but also has a great guiding role in personal development and social construction [5].

There are a lot of ideological and political education materials in our traditional culture, and integrating them into the teaching of ideological and political education can not only enrich the content of textbooks, improve the overall integration of the knowledge system and the degree of communication is not high, and become "information islands" [6]. However, the requirements of inter-departmental collaborative office and university information portal require that the university's information system is a highly integrated and open system [7]. There are multiple sets of information systems in different departments or within the same department in colleges and universities, with their own databases and independent application programs. Each application system is highly independent, and data and business cannot be shared. The last strategy is the language-based method [8].

It is similar to the template-based method, but uses a deep learning method to obtain text words from visual information, and then generates descriptive sentences through a language model. In 2015, Fang et al. [9] used multiple instance learning (Multiple.Instance.Learning. MIL) method to extract from images. The solution process of video description task can be divided into two stages: video feature extraction and Text generation. Due to the CNN network's excellent results in the field of computer vision, researchers generally extract visual features based on the CNN structure [10].

With the expansion of the university scale and the establishment of the campus network, all departments of the university have adopted the computer as an auxiliary management method, and developed various management systems as support. Nowadays [11], in the construction of teaching resource database in colleges and universities, teachers usually focus on the analysis of course content in their normal teaching process and lead students to research and develop a certain topic [12].

Throughout the selection of teaching methods and the focus of work on the instructional design process, developers need to have multiple roles [13]. If the teaching process is optimized in the course, it is no longer necessary to start the teacher development from the script, he must also carry out the teaching design. The global monthly network video traffic in Fixed Internet (fixed Internet access) and Mobile (mobile phone mobile network access) The growth of video traffic is fast, especially the latter, which increased by more than 12 times in 2019 compared with 2014. It can also play an

effective role in the cultivation of students' values and the optimization of moral quality [14].

Under the background of informatization education, innovating education and teaching methods and improving teaching quality have become research hotspots in major universities; how to integrate traditional culture with ideological and political courses [15]. Web service is an object deployed on the Web that can be invoked by users or It has the characteristics of good encapsulation, loose coupling, protocol specification and high integration performance [16].

2. THE PROPOSED METHODOLOGY

2.1 The Network Video Automatic Generation Technology

Computers and videos for teachers' lectures are installed in the classrooms to utilize the existing teaching resources, including Microsoft Visualizers, mixers and other systems, and are connected to the campus network. Word, Excel, PowerPoint> Charts, graphics, this program adds a camera (head), function curves, three-dimensional animation, sound and even movies on this basis. Used to shoot teacher videos. The previous chapter introduced the VD-FF model that only added video features in the first unit.

The model adopts CNN-LSTM structure, encodes video information based on CNN network, and then uses LSTM network to decode. However, the previous chapter introduced the VD-FF model that only added video features in the first unit. The model adopts CNN-LSTM structure, encodes video information based on CNN network, and then uses LSTM network to decode. However, this text modeling method based on LSTM network only learns the sentence order information, and the quality of the generated text is not high. At the same time, it is suitable for teachers to record it, so that teachers with rich teaching experience will not be burned into CDs or uploaded. The teaching idea ofautomatically generating a network on the server is not familiar with computer applications, and there is no dedicated network multimedia teaching resource library, which supports students' on-demand playback. That is, there is a preference difference problem between video owners and viewers, as shown in Figure 4-2. There are both subjective and objective reasons for this difference: one is that the default thumbnails given by the system may have poor representation; the other is that video owners only choose thumbnails according to their own wishes and needs. The text involved in the video description set is too simple, and the training samples of the data set are too few. When the network is complex, it is prone to overfitting. Therefore, this chapter verifies the model in this chapter on the image description set. The image description problem is similar to the video description problem.

2.2 The Integrating Cultural Communication in Colleges and Universities

The service provider such as the embodiment of Confucianism in the life of contemporary Chinese people and the communication of Chinese ideas and sustainable development is the owner of the service, it registers with the service agent to configure and publish the service, and patiently waits for other services and users Provide its own functionality; the service requester is the consumer of the Web service. The reason for the first problem above may be that the language information learned by the model is still relatively small. Especially in the case of only video feature input, it is difficult to learn complex and diverse language structures. The reason for the second problem may be due to the lack of relational constraints between visual and textual information in the model. Between the two modalities. The left end of the channel is the video feature extraction part. The average value extraction method based on the AlexNet network is used to extract a frame feature every 10 frames to obtain the average value of all frame features.

And use the LSTM network decoder to get the description sentence at the right end. Service-Oriented Architecture is an IT strategy that organizes disparate application functions into interoperable, standards-based services that can be quickly combined and reused to meet business needs. Therefore, how to adaptively present the corresponding video thumbnails is also very challenging for research. This chapter attempts to propose a unified solution framework, which not only needs to ensure that the generated thumbnails are clearly visible, have better accessibility and content representation, but also needs to provide video owners and video viewers with personalities that meet their respective needs as much as possible. Thumbnails.

2.3 The Integration of The Information System for the Integration of Cultural Communication in Colleges and Universities

Interfaces are usually published in public registries or directories, where they are categorized by the different services offered, like businesses and phone numbers listed in the yellow pages of a phone book. For some liberal arts majors for newspapers, professionals, or those unfamiliar with computer applications, the text can systematically express abstract and general knowledge; including browsing on video sharing site pages and quick access to video search results check out etc.

Therefore, under the current application background, a good and effective video thumbnail generation recommendation method has a great application prospect. Including browsing on video sharing website pages and quick review of video search results. Therefore, under the current application background, a good and effective video thumbnail generation recommendation method has a great application prospect. The first layer is the existing program resources, the second layer is the component layer that encapsulates the functions of the underlying system, the third layer is the service layer composed of various functional services provided by the underlying components, and the fourth layer is the use of various functional services. The constructed business process layer.

As the basic structural element of distributed services on the network, the ESB integration approach treats the system as interconnected discrete distributed services through an asynchronous,message-oriented communication infrastructure. The service bus is used to construct each independent Web service, and the campus network server is engraved into a CD-ROM for long-term storage, so that the class or direct playback of video and VCD, so that the love and art of watching online teaching materials can be well displayed in the network courseware. The job is like being there. Automatically generate network multimedia teaching resources. This process does not need to count the dragon screen, and is compatible with a variety of file formats.

3. CONCLUSIONS

This paper discusses the thinking and process of developing this system, emphasizing analysis and design modeling. From system requirement analysis, design, implementation to testing, UML modeling method is always followed. And the number of key frames of each shot is dynamically determined according to the change of visual content in the shot. This method only uses the global HSV color histogram features, so it runs very fast. The experimental results obtained by testing on multiple videos show that the extracted key frames can effectively characterize the main visual content of the entire video. The introduction of SOA provides a solution for colleges and universities, the application of SOA can effectively utilize and exert the value of the existing system.

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Mobile System Design of Higher Vocational English Listening and Speaking Course Based on SPOC Integrated Online Evaluation Software Design

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Abstract:In this paper, the course design process from analysis to evaluation in blended teaching based on SPOC model will help college English teachers to update the content and structure of traditional courses under the background of information technology. First, a model of course ideological and political teaching based on SPOC teaching is constructed, and then the practice is carried out. activities to deepen college English teaching and optimize the educational value of English courses. Finally, the determination of the assessment and evaluation system and the online and offline teaching are designed, and the curriculum construction and teaching design of the online teaching of the course are elaborated. Under the new model of SPOC flipped classroom blended teaching, it is proposed to effectively eliminate these five types of negative motivational factors.

Keywords: Mobile System Design, Higher Vocational English, Listening and Speaking Course, SPOC Integrated Online

1. INTRODUCTION

With the deepening of English teaching reform and the rapid development of Internet technology, fundamental changes have taken place in the public English teaching mode of higher [1] vocational education. Course ideological and political is to deeply excavate the ideological and political elements and resources rich in each course itself, combine explicit education [2] with invisible education, run ideological and political education throughout the entire talent training system, and build a peer-to-peer and interconnected large-scale education system [3]. The pattern of ideological and political education. Promoting the ideological and political construction of courses is also of great significance for comprehensively improving [4] the quality of talent training and building a higher-level talent training system. Under the SPOC teaching mode, learning activities are constructed with students as the center, making learning activities more autonomous and personalized [5].

At the same time, SPOC also facilitates the development of interactive and conversational teaching, so in the new stage of development, the SPOC model is organically linked with specific disciplines [6]. Interactive teaching transformation. Students' classroom learning is no longer dominated by passive acceptance of teachers' knowledge. The online course construction started in 2012 has laid an important platform guarantee and resource foundation for large-scale online teaching [7].

During the epidemic, the Ministry of Education organized 22 online course platforms to open more than 24,000 online courses for free [8], covering 12 undergraduate disciplines. Under the background of the rapid development of Internet and information-based education technology, MOOCs, SPOCs and other online courses began [9] Major universities have promoted it, and its related research has also blossomed everywhere [10]. Judging from the research results, the current research focus is mainly on MOOCs. With the advent of the era of big data [11], the traditional static and dogmatic higher vocational English teaching model has been unable to meet the individualized and professional needs of students. The foreign language teaching of the times [12] should be based on the development of learning ability, thinking ability development and professional ability development, which is both instrumental and humanistic [13].

The high-quality and rich MOOC resources are deeply integrated with the advantages of traditional classroom teaching to form a hybrid teaching model [14], which reconstructs and innovates the teaching process, breaks the traditional teacher-centered model of English teaching, and reflects the student-centered model [15]. The teacher-led teaching concept provides an effective solution to the current teaching bottleneck. The Fox team took the SPOC model to four other universities, including Hawaii Pacific University, and got good feedback [16]; Professor Brian White of MIT conducted a SPOC teaching experiment in the "Basic Biology" course and found that students' The enthusiasm for learning is significantly improved, and it is concluded that SPOC is practical [17].

The second stage of classroom teaching reform is the transformation from single teaching method to multiple teaching methods. The traditional classroom teaching is fixed at a fixed time and place [18], and students use books and tangible learning materials to complete the course learning. With the development and utilization of multimedia equipment and software technology, video presentations slideshows. This article attempts to explore the teaching content of college English classrooms from the perspective of curriculum ideology and politics, and tries to use the ADDIE model.

On this basis, some scholars summarize the SPOC model as "classroom+ MOOC", classroom and MOOC, so the SPOC model is also called "blended teaching". In 2014, Shanghai Jiaotong University Good University Online, Love Course and China University MOOC were launched. In addition, apps that support [20] mobile learning such as Rain Classroom, UMU and Lanmo Cloud Class have also emerged as the times require. These high-quality and rich online course resources

and unique online course platforms have laid a solid foundation for the effective development of online teaching. The questionnaire data is collected and counted by statistical software and the online analysis tool of Questionnaire Star, and the method of descriptive analysis and factor analysis is used to detect the reliability of the questionnaire

2. THE PROPOSED METHODOLOGY

2.1 The SPOC Fusion Online Evaluation Software Design

The SPOC course solves the above problems with an innovative learning process: teachers make or collect micro-lectures or other video teaching resources related to learning topics before class, and transmit the videos to students through the network platform as pre-class study assignments. CNKI database Through keyword search for the provincial English teaching reform project from 2019 to the first half of 2021, which combines network information technology and "college English curriculum ideology and politics", it can be seen that there are currently many researches on the combination of information technology and college English curriculum ideology and politics. Focus on the theoretical level, such as the theoretical significance, practical value, and practical strategies of studying the ideological and political courses.

On the SPOC platform built in the education field, there are a large number of different types of educational resources, whether it is course video, course audio, or auxiliary learning materials, etc., all are readily available. Open, diverse and inclusive educational resources on the SPOC platform. Taking the SPOC course constructed by the MOOC platform of Chinese universities as an example, from the course teaching concept, teaching resource construction, organization and implementation of online teaching, improvement of assessment and evaluation system, online and offline It can be seen from Table 2 that the loadings of the five items involved in factor 1 are all greater than 0.8, indicating that the learner's lack of interest is the primary internal factor that induces negative motivation. Due to the lack of English foundation, independent learning ability, and team communication skills before class, learners' self-confidence in the courses they study decreases.

SPOC (Small Private Online Course) is a small-scale restricted online course. SPOC, that is, a small-scale restricted online course, is composed of micro-videos, instant exercises, interactive discussions and learning tests. The concept It was first proposed and used by Professor Armand Fox of the University of California, Berkeley. It interweaves and integrates elements such as micro-videos, interactive discussions and learning tests. It matches the teaching objects, course objectives, difficulty and students' existing knowledge accumulation.

2.2 The Vocational English Listening And Speaking Course

It should be noted that the micro-lecture is not an independent resource entity, but a part of the SPOC course. Therefore, the selection of materials should be connected with the flipped classroom teaching, and the content of the micro-lecture should be flappable. The intuitive content presented by the micro-video should be clear and distinctive, and the manifestations such as animation and images should be based on the premise of highlighting and assisting the process of knowledge analysis. Design is the focus of teaching practice.

In this stage, the process elements are formulated according to the teaching objectives and teaching activities. From the perspective of the content of the "College Foreign Language 1" textbook, it is divided into eight units, and in each unit, the students are familiar with the elements as the starting point to guide the students. Entering into the unit study stage enables students to gain a certain amount of reflection after completing the unit course. Therefore, teachers can arrange learning resources and design the learning process with hotspots with ideological and political elements. In order to better achieve the teaching goals, teaching designers need to refine the macro teaching goals into multiple operational modules, and design the staged tasks that each module needs to achieve. Online learners do not show the behaviors expected by teachers, such as actively participating in online discussions and actively realizing high-level interaction, but still have the phenomenon of waiting and seeing and escaping. In order to give full play to the practical role of online teaching.

More than 30% of students think that the SPOC videos of the course are too long, half of the videos are more than 10 minutes, and they are easy to get distracted while watching. Also, the resolution of SPOC videos, lack of subtitles, school network. Blended learning is to combine the advantages of traditional learning with the advantages of networked learning, not only to play the leading role of teachers in guiding, inspiring and monitoring the teaching process, but also to reflect the initiative of students as the main body of the learning process.

2.3 The SPOC-Integrated Higher Vocational English Listening And Speaking Assessment Software

Guided by students' learning outcomes, teachers integrate the knowledge framework of courses, push high-quality SPOC videos and a variety of teaching resources, and achieve the purpose of stimulating students' interest and improving students' self-efficacy through effective multi-interaction. The teaching goal is the combination of knowledge goal and ability goal improvement. The hybrid foreign language teaching model based on SPOC integrates multi-dimensional and three-dimensional learning space, and aims to test the effectiveness of this model in improving the English application ability and cross-cultural communication ability of vocational students.

3. CONCLUSIONS

The SPOC course organically combines Internet resources and platforms with classroom teaching, innovates the classroom teaching mode, and stimulates students' classroom vitality and teachers' enthusiasm for teaching. The design of the English SPOC course revolves around the completeness of students. On the basis of this, it is proposed that under the new hybrid teaching mode of SPOC flipped classroom, by constructing a result-oriented SPOC flipped classroom teaching mode, SPOC hybrid teaching integrates various online and offline teaching resources, extremely Dadi has released the time and space of classroom teaching, which is in line with the teaching practice of higher vocational English.

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Clustering and Mining Algorithm of Factor Structure Data of Physical Education Teachers' Teaching Behavior Based on Internet Information Retrieval Algorithm

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Abstract:Integrating visual word list and Rocchio algorithm, constructs an implicit relevance feedback retrieval model in semantic space, and judges information retrieval preference. User demand mining is introduced, Jensen-Shannon divergence is used to calculate the relative entropy distance between the probability distributions of document sets, and similarity matching is calculated to complete interactive information retrieval. Teaching ability is gradually formed by teachers in long-term teaching practice, and is stably and comprehensively reflected in teaching viewpoints, teaching methods, teaching skills, teaching style and so on. The weight analysis of each index in the evaluation index system was carried out by using the analytic hierarchy process, and the selection of the evaluation subject was completed through the third round of expert questionnaires, and the evaluation criteria were formulated in combination with the opinions of tutors and some expert teachers.

Keywords: Clustering and Mining Algorithm, Factor Structure Data, Physical Education, Information Retrieval Algorithm

1. INTRODUCTION

So far, scholars at home and abroad have made great achievements in the research on the teaching ability that physical education teachers should have. Most researchers are not the same in the selection of teaching ability evaluation indicators and the construction of the system [1], and the degree of real-time needs to be strengthened and improved. Compared with the past, today's Internet information has undergone earth-shaking changes, and the capacity of information is exponential. showing an increasing trend [2]. There are countless websites about travel on the Internet. Whenever a user searches for relevant travel information through a search engine, the results returned by the search are a large number of advertisements and travel advice [3].

Semantic information retrieval [4] (referred to as “semantic retrieval”), as the latest mainstream technology of information retrieval technology, is based on natural language processing technology [5], and through neural network model [6], it trains the language that the computer can understand and recognize. From the semantic point of view, the recall and precision of the document are improved. It is also the fundamental requirement of college ideological and political education work, and an important criterion to measure the ability of colleges and universities to respond to online public opinion [7].

In the basic network construction stage, the construction goal of this stage is to build the Internet network within the school to ensure basic network communication requirements, such as the deployment of wired and wireless networks in various areas of the campus. The second stage: the construction of departmental informatization [8]. The goal of this stage is to build an informatization platform that meets the needs of each functional department. Through the analysis and mining of the big data platform, each individual student can be profiled, and their learning, life, Psychological and other aspects can be comprehensively profiled, and at the same time, the entire student group can be classified, analyzed and profiled, and the student data can be displayed intuitively [9].

By establishing a student behavior analysis system, the system can be used in the evaluation of poor students. Cluster analysis, frequent pattern mining and so on [10]. Among them, the cluster analysis technology is mainly used to discover the internal structure of the data. The object set is divided into multiple categories (clusters) according to the similarity, so that the similarity between objects in the same category is larger, and the similarity between objects in different categories is higher [11]. Smaller, senior middle school physical education teachers are facing huge challenges, and the current teaching ability can no longer meet the needs of reform [12].

By constructing a scientific and reasonable evaluation system for the teaching ability of physical education teachers in senior middle schools, an objective and fair evaluation of the teaching ability of physical education teachers in senior middle schools in Henan Province has been carried out [13]. Most researchers are not the same in the selection of teaching ability evaluation indicators and the construction of the system, and the real-time degree still needs to be strengthened and improved [14].

Only a comprehensive and systematic evaluation of the teaching ability of physical education teachers. Ability directly affects a person's ability to quickly and successfully complete a certain task. Physical education ability refers to the synthesis of individual psychological characteristics that meet the requirements of physical education activities and affect the quality of teaching. Physical education ability is composed of a series of factors. Regarding the problem of information retrieval, experts in related fields have obtained some research results. Reference [15] proposes an information retrieval algorithm for monitoring network hybrid intrusion under big data. The genetic algorithm is used to optimize the selection

of feature sets to form an optimized feature set and build a redundant information elimination model [16].

There are many researches on retrieval algorithms abroad, and there are many research results. At present, the relatively mature retrieval algorithms include PageRank algorithm, HITS algorithm, word frequency, position weighting algorithm [4], DirectHit algorithm [17], Alexa [618 and so on. The most influential ones are PageRank algorithm and HITS algorithm. Boolean model [19] is the simplest method in information retrieval, and the model is based on set theory and Boolean algebra. It relies on the use of boolean operators. Boolean models are characterized by binary logic, i.e. 0 or 1, correlated or not.

2. THE PROPOSED METHODOLOGY

2.1 The Internet Information Retrieval Algorithms

When users use search engines, they are most concerned about the accuracy of search results. When a user searches, the search engine will only match the webpage content related to the search item, and return the sorted results to the user, without considering the real needs of the user.

Therefore, this section proposes a secondary ranking based on the user interest model, which is to establish a user interest model for each user. The key to the relevance feedback of interactive information search results is to complete the evaluation according to the characteristics of eye movement visual behavior. The visual theory stipulates that the retrieval results that attract users and are viewed by users for a long time can be clicked by users, and visual behavior is a necessary condition for users to click and browse information. The consumption of the campus card system card can generate more than 60,000 transaction records per day, and the educational administration system generates as many as 300,000 student grade records per semester. as many as ten thousand.

Before using the clustering results to assist the application in related fields, it is first necessary to evaluate the clustering results to determine whether they conform to the inherent distribution characteristics of the data, that is, to verify the validity of the clustering results. Because only reasonable and effective clustering results can provide correct decision support. When a user browses a page, if they encounter content that they are interested in, they will perform various operations on the page, such as: printing, copying, and adding the content to favorites. When users perform these operations, they are actually interacting with the search system. These interactive behaviors can be regarded as implicit feedback information of users. The product needs to use the information records of students swiping ID cards to analyze students' participation in organizational activities The software can detect the information of students with low activity frequency, and then send emails to remind or guide the condolences to these students with low activity rate.

2.2 The Factor Structure of Physical Education Teachers' Teaching Behavior

General factors of physical education teaching ability. It generally refers to the perceptual knowledge about teaching and learning accumulated by teachers in the long-term teaching process and the behavioral way of dealing with teaching problems. In the idea, the whole is decomposed into various parts and various aspects, and the feedback algorithm based on semantic space is used to realize the extraction of user retrieval interest features. Firstly, the user's gaze point coordinates and gaze time are obtained through eye movement data, and the eye movement information is processed visually.

From April to May 2016, the author conducted a survey on the current situation of teaching ability evaluation among senior middle school physical education managers and physical education teachers in Henan Province. 150 questionnaires were distributed, and 126 valid questionnaires were recovered, of which 119 were selected with teaching ability evaluation plan. Counting, sorting and analyzing the questionnaires. Most experts focus on the following points in the selection of indicators: first, the ability to implement teaching; second, the ability of physical education teachers to control the classroom; third, the ability to design teaching links; Fourth, teaching summary ability; fifth, teaching evaluation ability. However, compared with traditional data processing methods, data mining methods are more effective for data processing, because general mathematical statistics methods cannot analyze massive data, Therefore, the analysis and mining of massive data must be realized by more effective processing methods.

According to the requirements of the teaching syllabus and teaching plan, the ability to formulate scientific and feasible annual teaching plans, semester teaching plans, unit teaching plans and class-hour teaching plans based on the physical and mental conditions of students and the actual situation of the school. The purpose of physical education teaching ability evaluation should be a combination of reward and punishment and development. Through the implementation of curriculum reform, most physical education teachers have a new understanding of the purpose of evaluation. The survey found that: 86.5% of senior middle school physical education teachers think that evaluation is to promote the development of physical education teachers' teaching ability. Based on the above information, a fixation point influence area can be obtained, and the size of the influence area is proportional to fixation time.

2.3 The Clustering and Mining Algorithm of Factoa

In order to obtain a more accurate user retrieval preference, the relevant information is reordered, and the reordering process can be regarded as the process of forming a visual word list of user retrieval intentions [8], as shown in Figure 1. If there are M related areas, the initial visual word list of each related area is. At present, the big data platform architecture with mature technology system includes resource layer, perception layer, service layer, portal layer and application layer. This platform architecture can be applied to all In the big data application, the architecture in Figure 4.1 is formed after the resource layer is refined to the service layer, which involves basic resources. Cluster analysis divides the data object collection into several classes composed of similar objects, but this is not its ultimate purpose ; Through further analysis and interpretation of the clustering results, we hope to obtain more meaningful information.

Common methods are described in the introduction, such as analyzing the distribution characteristics of each cluster with respect to attribute values, or the distribution of data in each cluster. Although these methods have explained the clustering results to a certain extent. The most important thing in the evaluation system is the evaluation index. The quality of the evaluation index directly affects the validity of the evaluation system, thereby affecting the authenticity and reliability of the evaluation results of physical education teachers. sex. The

indicators in the evaluation index system are a system that is both interrelated and mutually restrictive, so when selecting evaluation indicators, scientific rationality should be followed, not only to truly understand the teaching ability of senior middle school physical education teachers.

3. CONCLUSION

In order to effectively improve the accuracy of interactive information retrieval and provide users with a better service experience, this study proposes a new interactive information retrieval algorithm based on the theory of human eye gaze behavior. Physical education teachers should combine teaching with scientific research if they want to be top-notch in teaching. In the pursuit of teaching art, teachers have the courage to carry out teaching reform experiments and summarize their own teaching methods in a timely manner. In order to effectively improve the accuracy of interactive information retrieval and provide users with a better service experience, this study combines the theory of human eye gaze behavior to propose A new interactive information retrieval algorithm.

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Visual Modeling of the Communication Network of the Media Interaction Platform in the Collaboration of Education and Party Building Work

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Abstract:This article expounds how to use the information-based new media platform to create and organize diversified educational activities for party members, so as to improve the enthusiasm of party members to participate in the activities. The design of the interactive education mode of ideological and political theory courses under the network platform is extremely necessary. The necessity of the model, the definition of its connotation, and the implementation strategy are some of the main issues that need to be discussed. We integrate different types of data such as social networks, biological networks, technical networks and other data to further provide the comprehensive modelling of therelated studies, and through the discussions, the performance is then validated to be efficient.

Keywords: Visual Modeling, Communication Network, Media Interaction Platform, Party Building Work

1. INTRODUCTION

Network science has attracted the attention of researchers from different fields. In fact, complex networks are an efficient representation of the relationships between entities in real society [1]. In real life, the Internet is everywhere. For example, in sociology networks represent relationships between people. The empirical model is a formula derived from statistical [2] analysis of a large number of test results. The method of this model to predict path loss is simple and does not require detailed environmental information. The calculation is very fast [3]. However, it cannot provide very precise path loss values. At present, the work carrier of party building in colleges and universities based on new information media platforms is only [4] based on party building websites. These party building websites are single in form and monotonous in content, mainly focusing on the learning of the party's knowledge [5].

Therefore [6], these advantages of the Internet are conducive to promoting sufficient and in-depth dialogue and exchanges between teachers and students, and students and students, and provide a good platform for the interactive education mode of [7] ideological and political theory courses. The extensiveness, immediacy and openness of the Internet , sharing, interactivity and other characteristics make it increasingly an important position in the ideological field. In order to adapt [8] to the new development situation, most colleges and universities have connected the Internet to their student dormitories [9]. At the same time, online games and various online content are trying their best to attract and seduce our college students [10].

Party building work needs to proceed from the actual situation and reasonably carry out online party building work under the guidance of relevant theories, so as to meet the needs of the development [11] of the times. The online party building work is an innovation and extension of the traditional party building work. Online party building work refers to introducing modern tools [12] on the basis of traditional party building work, effectively integrating various resources, and improving the efficiency and quality of party building work. To sum up, some achievements [13] have been made in the current academic research on the networking of party building work, but there are still some problems that need to be solved, but the new situation and new environment have raised new problems that need to be solved [14]. The party organs and party work are also facing the opportunities and challenges of informatization. Therefore, the party affairs work methods must be continuously optimized and improved in terms of network technology and network culture [15].

Only by consciously adapting to changes in the objective environment, changing working methods in a timely manner, and quickly mastering network means. Relying on information sharing and related analysis of party [16] and government organs at all levels, we can achieve sustainable development within the party and update our party's governing concept from the inside [17]. According to the author's experience in actual work, the endogenous party building should first start from the following aspects. Innovating the path of party building work, opening up new work positions, developing new ways of party [18] building in colleges and universities, and creating new work carriers have become a new topic that party building work in colleges and universities must face. The deterministic [19] model is the direct application of electromagnetic theory to the specific environment. The method is related to the accuracy of the propagation top measurement and the accuracy of the environment modeling, and the calculation speed is slow [20].

Deterministic models include ray tracing method, time domain finite difference square, and integral equation square. The current form of party member education activities in colleges and universities [21] is single, the theme is not prominent, the degree of participation in activities is low, the effect of activities and the educational influence of activities are not strong, some activities [22] Too formal. How to enhance the effect of party members' educational activities in the party member group, and how to truly exert the value of party members' educational activities. The world of human

life is divided into the real physical world [23] in the traditional sense and the virtual network world in the modern sense, and these two worlds are intertwined. The research on the interactive education mode of ideological and political theory courses under the network platform brings the modern meaning of the network world into the research field of vision, so that the orientation of the life world of college students is more complete [24].

2. THE PROPOSED METHODOLOGY

2.1 The New Media Interactive Platform

Facing the challenges of the Internet era in the new era, we deeply study the new situation and new characteristics of college students' party building work under the new situation and the new trends in information technology represented by the Internet [25], occupy the network position with correct and healthy ideology and culture, and continue to expand the new era. The new fields and new methods of party building work are important and also urgent issues faced by the party building work in colleges and universities.

The introduction of the party building and ideological and political work in colleges and universities into the Internet is conducive to combining the excitement of current college students. In the process of general online party building, the communication between higher-level party organizations and lower-level party organizations, party organizations and party members is more convenient and fast.

The use of the Internet to carry out party member activities has changed previous mode of face-to-face communication. Party members can open their hearts and speak freely in the online environment. The party building work in our country is facing various challenges in the network age, but at the same time we should see that this kind of challenge is actually an opportunity and also make full use of the opportunities brought by the challenge and make better use of the network to serve the needs of the party building work. Under the new situation, new and faster development of party building work will be realized.

2.2 The Collaboration of New Media Interactive Platform in Education and Party Building Work

The emergence and formation of the public opinion on the Internet provides netizens with the fast and effective way to express public opinion, and also then also provides a more comprehensive and focused way for decision makers to listen to public opinion.

Moreover, we took advantage of the convenient information dissemination characteristics of the new media platform to innovate the training mechanism for party members.

Combined with the thematic education work of the Party Central Committee, we organized some highly participatory party member activity projects through various forms of video education and online forum exchanges, while enriching the the organizational life of party members. Online party building has reformed the work methods of fighting corruption and promoting integrity, and the power of public opinion has played a good role in supervision and exposure. People can supervise multiple tasks in the process of party building through the Internet.

The party building website should play the role of party organizations in communicating with party members and the masses to enhance interactivity. First of all, it is necessary to define the concept of "interactivity".

3. CONCLUSIONS

Building a network platform and building a bridge between college students' party building and the Internet is an inevitable requirement for college party building work to adapt to the new situation, solve new problems, straighten out new ideas, seek new development, and open up new situations. Innovate the network party building work mode and other aspects to construct the network party building strategy, so as to promote the effective development of the network party building work that play an active role in network party building.

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QoS Guarantee Framework of English Literature Course Online System Based on Concurrent Optimization Network Environment

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Abstract:First, the initial connection isolation method ICS is established to separate false connections generated by malicious network behaviors from normal established connections, and form a controllable initial connection table. A strategy combining extended RSVP protocol and DiffServ model is designed to ensure the realization of QoS in large campus network. The simulation test results show that the application of this model can effectively improve the QoS of large-scale campus networks, and the problems that need to be paid attention to when running the parallel operation of the database management system correctly in the network environment. Especially to prevent data corruption and loss when developing multi-user systems.

Keywords: QoS Guarantee Framework, English Literature Course, Concurrent Optimization Network Environment

1. INTRODUCTION

QoS (Quality of Service, referred to as QoS) refers to the performance attributes exhibited by the data packets of network services or applications when they pass through one or more networks [1]. And a collection of techniques such as packet loss and their parameters. Digital campus involves all aspects of school teaching, life, communication, scientific research, security [2], etc. It is the main and key content of educational informatization, and has high application and research value. At the same time, due to its rich connotation, it integrates various information resources and ensures smooth information [3].

The main purpose of organizing and carrying out the teaching practice of English literature courses for college students in colleges [4] and universities usually involves two specific aspects: one is the basic "listening, speaking, listening, speaking, and listening skills" for college students in colleges and universities [5]. Reading and writing" language practice and application ability level is properly cultivated. Under the current background of "Internet +", the "online-offline" blended teaching of college English [6] courses has flourished. The Outline of the National Medium- and Long-Term Educational Reform and Development Plan pointed out that no matter where China's economy is headed [7].

Such as: passive off-line intrusion detection, content auditing and billing systems, active on-line state-based firewall [8], intrusion prevention and network address translation. These systems usually use a hash table to manage concurrent connection sessions, forming a connection table. According to the field test results and the parameter settings of the existing network [9], we initially planned to implement optimization and adjustment in terms of multi-carrier activation, service offloading, parameter optimization, and wireless environment optimization [10], but the results of the first simulation test did not meet the requirements. By definition [11], a transaction is the unit of integrity and recoverability, and the execution of a transaction is the transformation of the database from one consistent (consistent) state to another consistent state [12]. That is, it is true when a transaction executes in isolation.

It can also reflect the English professional quality of college students. Therefore [13], teachers must pay more attention to English reading teaching, and use the online and offline teaching mode to break the limitations of time and space, break through the shortcomings of traditional English teaching [14], and promote English reading teaching. Diversified development of models. With the continuous development of campus network, a large number of network application technologies with high real-time requirements have appeared [15], such as video conferencing, video-on-demand, online education and other real-time multimedia applications. QoS is not only a concern in the Internet. The traditional digital [16] campus system adopts the mode of its structure limitation and autonomous management, which makes its limitation more and more prominent in information sharing and resource utilization [17].

At the same time, because each school develops the digital campus system independently, there are disadvantages such as low resource utilization [18], difficult maintenance, high overall cost, and repeated construction. As well as the construction and development level of their own comprehensive language communication practice ability, it is impossible to achieve [19] gradual improvement and optimization. Under the direct influence of the above factors, the vast majority of colleges and universities in my country are in the process of organizing and implementing the teaching activities of English literature courses [20]. At present, the blended teaching carried out in colleges and universities in our country is only an aid to classroom teaching, and the traditional "lecture-type" [21] teaching mode and method still dominate, which overemphasizes teachers' "teaching" and ignores students' autonomous "learning". It is difficult to meet the requirements of English talents for the development of globalization and digital society [22]. When connection management runs in a high-speed network environment, especially when network attacks occur, connection management will face great threats and challenges [23].

The network measurement results show that the number of concurrent connections in the high-speed backbone network can reach hundreds of thousands, or even millions to one. This

will result in [24] a huge join table and inefficient lookup. From the information provided by the user, we can see that the minimum guaranteed uplink rate of each video surveillance terminal is 500kbps [25]. Through our on-site test, we found that the actual rate of each user can meet the requirements after reaching 400kbps. If it is necessary to ensure that 15 users can concurrently [26] Do HSUPA business. A set of transactions if each transaction is executed concurrently and interleaved, and the execution of each transaction is independent of each other. Since they are executed concurrently and interleaved, they may interfere with each other. Causes inconsistencies in the database state.

2. THE PROPOSED METHODOLOGY

2.1 The Concurrent Optimization Network Environment

Connection management is the basis for semantic-level traffic analysis of network devices, and has been widely used in various network security systems, such as firewalls, intrusion detection system ports, and so on. First, enable three carriers in the base station here. After the three carriers are enabled, some parameters need to be optimized and adjusted, and the function of multiple HSUPA services being distributed among carriers is realized by realizing the CAC function of the maximum number of users. Causes individual transactions to run incorrectly or produce incorrect results. Concurrent operation of a collection of transactions is correct and equivalent to the serial execution of some sequence of these transactions. The concurrency control mechanism is the DBS system component responsible for this task. Application-oriented colleges and universities can put relevant videos on the Internet when teaching English reading, so that English reading knowledge can be widely disseminated, and students can learn English reading through the video teaching mode of fragmented and thematic explanations.

Regarding the organization of the connection table in connection management, many works have discussed the optimal design of the connection table, and strive to reduce its access operation overhead. For connection tables commonly used in network packet processing. But the test result found that it still could not satisfy the simultaneous upload of 15 UPA services on the vehicle inspection line, and the multi-user program running on the network was compared with the program running by a single user. The difference in design technology is mainly to solve the problem of resource sharing. This can be achieved by the system's concurrency control mechanism to properly arrange the scheduling. And there are cases of dropped calls. On the network management, we real-time monitoring found that not only the 15 HSUPA users in the 2 and 3 areas of the vehicle inspection line, but also other 3G users that exist in the area simultaneously perform voice and data services. had an impact.

Compared with the previous teaching mode, the online and offline hybrid teaching mode will be more precise when the teaching mode is cut in, and it can also expand the learning space of students to a certain extent. Malicious network behaviors, especially SYN flooding attacks, have strong destructive power to connection management.

2.2 The English Literature Course Online System

The main data flow plays a decisive role in various applications, and its real-time performance is seen by users as the performance of the system's usability and usability. Handling this problem is not only critical to the original system, but also the first key to various applications under the cloud platform. Timely and effective communication activities based on specific subject knowledge content elements have caused extremely significant adverse effects, leading to the fact that students in colleges and universities in the process of specifically participating in the learning experience of the knowledge content of English literature courses, once encounter specific learning understanding and cognition Sexual problems or dilemmas.

As a result, students cannot construct and obtain a stable and strong learning experience atmosphere in the process of actually participating in the learning experience of English literature course knowledge content. Teaching evaluation is the evaluation of students' learning effect and teachers' teaching work process. Teaching evaluation is an important means to test the teaching effect. Teachers can timely improve and perfect the method and content of teaching design through the feedback of teaching evaluation. Application-oriented colleges and universities can design a special extracurricular English reading teaching APP, and students can directly use their mobile phones to memorize vocabulary and grammar encountered in English reading training. In addition, the student learning record section can be set in the APP.

2.3 The QoS Guarantee Framework of Online System for English Literature Courses

Specifically, the integrated service requires all routers to process the signaling messages of each flow on the control path and maintain the path status and resource reservation status of each flow, and perform flow classification, scheduling and buffer management on the data path. The integrated service provides the QoS capability for the IP network by means of the reservation setting and control provided by the Resource Reservation Protocol (RSVP). Amendment requirements are sent to the service decision-making platform through the campus cloud OpEx interface to achieve ratings for applications, thereby quantitatively managing and improving service quality.

It is related to different service publishers. To organize and carry out the teaching design of English literature courses in the context of the development of online education, we should gradually get rid of the intervention and restraint of the traditional teaching practice ideas of English literature courses, and combine the development and evolution characteristics of the specific expression of English literature and art in a specific historical development stage.

3. CONCLUSION

By studying the technical characteristics and service capabilities of various new elements of campus cloud integration, the node snapshot mechanism is proposed as the presentation layer technology of user experience. Then, take the data flow characteristics in the campus cloud as another main line, and then put forward the worst response time rule based on QoS guarantee. And from the four aspects of teaching resources, teaching design, teaching implementation, and teaching evaluation, an "online" is constructed. The

guarantee system for the implementation of the blended teaching model.

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Online System Construction of Music General Education in Higher Vocational Colleges Based on Internet-Assisted Spectrum Signal Transmission

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Abstract:In this paper, a synchronizing method, which is fully realized by software, is proposed in the transmission of digital signal transcoding, and a detailed theoretical description of music is presented, and the steps and methods of it to achieve synchronization are proposed. This article attempts to study the relationship between general music education and campus culture construction, and finds that general music education is the way to realize campus culture construction, and campus culture construction makes general music education more comprehensive. It suppresses the characteristic components of the interference spectrum in the process of signal transmission, extract the statistical characteristics of musical instruments, and use the joint parameter estimation method to estimate the scale and time delay of home control signals. The cultivation of music literacy, the development of music education resources, and the improvement of music teachers, etc., propose the application of teaching subject information technology Combination strategy with informatization of music education practice process.

Keywords: Online System Construction, Music General Education, Higher Vocational Colleges, Spectrum Signal Transmission

1. INTRODUCTION

With the continuous advancement of higher education reform, the cultivation of college students' comprehensive quality has attracted much attention [1]. As the main way of aesthetic education, the educational practice of general music is of great significance to the strengthening of students' musical literacy. It is necessary to constantly try and explore new ideas for educational reform.

However, due to the problems in the curriculum system, the current general music education cannot be further carried out effectively [2].

From the connotation of the aesthetic education and general music education, schools can carry out general music education under the guidance of aesthetic education [3]. Music classes are offered in China's education system from kindergarten to high school, but for various considerations, including music The status of various types of art education in China has not been paid attention to [4]. Looking at the setting and development of general education courses in Chinese and Western universities, the essence of general education is a comprehensive training of humanistic quality, thinking ability and scientific spirit, and it is a combination of morality and values. Education is the inheritance of the freedom and humanistic tradition. It has limited effect on the improvement of national artistic accomplishment [5].

Education informatization is an educational service model that adapts to the characteristics of social automation and implements the form of "professional education + general education" [6]. Informatization research mainly focuses on the understanding of value and meaning, the establishment mode of network resources, and the classroom application of information technology [7]. Since radio and television entered our country in 1958, it has been one of the important media for citizens to obtain news and information from the outside world [8].

Radio and television programs are converted from the digital code of radio and television into the spectrum encoding of digital signals that can be transmitted in satellite and optical fiber through the code conversion of the previous system [9]. It is a novel and high-speed digital signal transmission method. The bit binary signal is used as a frame frequency domain signal, and the phase and amplitude of this signal are encoded. The resolution of high-precision equipment such as electron microscopes and nuclear magnetic resonance is then greatly affected by the environmental interference magnetic field [10]. The device studied in this design is mainly for the magnetic field. The interference is tested and analyzed, so as to provide the basis for the corresponding environmental interference magnetic field suppression device or to evaluate its effect [11].

Combining with wireless communication interfaces such as WiFi, Bluetooth and ZigBee, the IoT transmission control model of smart home is constructed [12], and the wireless sensor communication design method is used to carry out online transmission of mobile Internet smart home control instructions. The system has the ability to perceive and evaluate available resources [13], reducing the spectral loss. Among them, spectrum sensing, as a key technology to realize cognitive radio, has become a research hotspot. It enables the system to have the ability to sense and evaluate available resources, and reduces the spectrum loss [14].

Among them, spectrum sensing, as a key technology for realizing cognitive radio, has become a research hotspot. The performance of optical network for ultra-high-speed and long-distance transmission mainly depends on transmission impairment [15]. Transmission damage includes the chromatic dispersion (CD) and polarization mode dispersion of the signal introduced into the optical fiber, and the noise introduced by the network components, such as optical amplifiers [16]. Give new space to general music education. The construction of campus culture, as the organic soil for the healthy development of students' physical and mental health,

gives play to the interpretation of music culture in the construction of campus culture, which can make students' perception of music more fully. From the current curriculum of music general education, it can be found that the curriculum mainly includes four parts: music theory, music practice, music appreciation and related cultural courses [17].

The music theory course mainly refers to the basic theory of music. Under the role of the employment baton, in colleges and universities, professional knowledge has become the only criterion for evaluating college students, and general education in music art has become dispensable. Especially in higher vocational colleges [18].

At the same time, most students do not have the opportunity to contact music, and they do not pay attention to the study of music lessons. In addition, the ratio of the music teachers is seriously insufficient, and most music teachers need to then improve their informatization awareness and the application of informatization methods.

2. THE PROPOSED METHODOLOGY

2.1 The Internet-Assisted Spectrum Signal Transmission

Due to the core dominant component of the main frequency characteristic signal, as well as main frequency characteristic detection method is used to conduct the automatic test of the mobile Internet smart home control signal, and analyze the correlation of each characteristic quantity, and improve the detection accuracy of the control signal.

According to the above analysis, the discrete sequence distribution model of the mobile Internet smart home control signal is constructed, and the wavelet noise reduction method is used to filter the output signal of the mobile Internet smart signal control.

2.2 The Higher Vocational Music General Education

The teacher resources of music general education are also divided into three categories, namely management teacher resources, public class teacher resources and professional class teacher resources. As the name suggests, managing teacher resources is the teacher who manages students. Most of these teachers do not teach students professionally, but are responsible for daily management and teaching management of students. The purpose of the general music education in colleges and universities is not to cultivate specialized artistic talents, but to improve students' cultural accomplishment and aesthetic taste by means of this. But this does not mean that general education classes are improvisations. In the general music education environment of higher vocational colleges, in addition to being exposed to music in general music classes, there are also music cultural atmospheres in the campus environment. In addition to the traditional professional curriculum construction, the importance of campus culture construction cannot be ignored. The construction of the general music education curriculum system under the guidance of aesthetic education can first help students integrate into the current aesthetic trend, because the times are constantly changing and developing, so the popular aesthetics in society will also change accordingly. Reasonable setting of educational goals. The education of students in ordinary vocational colleges is not a professional education for the purpose of learning music professional knowledge. Therefore, music skills and music theory knowledge are not our focus. It is necessary to take the artistic works that higher vocational students love as a breakthrough, use information technology to guide students to pay attention to cultural education at the spiritual level, broaden their artistic and cultural horizons, focus on students' inquiry-based learning and research, and use network databases, electronic journals and network interaction with the learning platform is used as a means.

2.3 The Online System Construction of General Music Education In Higher Vocational Education

The professional setting of vocational education in our country is derailed from the actual needs of the labor market, and the teaching training system does not adapt to the development of vocational education. Music can stimulate inspiration and cultivate people's imagination.

Therefore, when setting up the curriculum system, teachers should start from the perspective of students, provide students with opportunities to fully display themselves, and allow students to form the own unique aesthetics through continuous learning. and transmit humanistic knowledge. It is undeniable that the teaching objectives of many music teachers in higher vocational colleges are very vague, and the teaching content and methods cannot be reasonably adjusted according to the music foundation and characteristics of students. Teaching, the effect can be imagined. The upper computer software part is mainly used to display the processed magnetic signal in time domain and frequency domain. Qt is a multi-platform C++ graphical user interface application framework developed by Norway's TrollTech company, and is currently mainly used for development under Linux. The second is aesthetics as the main line running through the basic theoretical knowledge of music.

3. CONCLUSIONS

This article attempts to study the relationship between general music education and campus culture construction, and finds that general music education is the way to realize the campus culture construction, and campus culture construction makes general music education more comprehensive. Through the efficient learning, the ideas are proposed and validated.

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The Construction of an Intelligent Information System for the Management Strategy of Tennis Clubs in the Era of Big Data

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Abstract:This article briefly describes the intelligent information system of the tennis club business strategy in the era of big data, and uses five power models and internal and external analysis methods to conduct a comprehensive analysis of the external environment and market demand of the DK tennis club, and find out what companies are facing Opportunities and threats; using resource theory, IFE matrix, EFE matrix, and SWOT analysis to systematically analyze the internal conditions of the company, and clarify the company's own advantages and disadvantages. On this basis, relying on strategic management analysis tools such as the blue ocean strategic layout, six-path framework, four-part action framework, etc., the market strategy layout of DK Tennis Club was reconstructed, and the verification of the business strategy was completed.

Keywords: Intelligent Information, Management Strategy, Tennis Clubs, Big Data

1. INTRODUCTION

Tennis is one of the most popular sports in the world. Tennis can be stretched, fast or slow. It is a form of sport that combines fun and efficiency. Tennis has a long history and is the lifespan of all sports [1]. One of the longest items, this is mainly due to its own sports characteristics: the net is against each other, even if the participants carry out high-intensity, high-load training [2], there will be no physical collisions, thus, unnecessary in the exercise process Injuries can be greatly reduced. Participants can arrange fitness plans with corresponding [3] exercise intensity according to their own conditions, and achieve the purpose of strengthening physical fitness, strengthening the body and mind [4], and maintaining health in scientific and interesting sports; tennis is not restricted by age and gender. An activity suitable for men and women in any age group between 3 and 90 years old [5].

In February 2011, in the National Fitness Program (2011-2015) promulgated by the State Council, it was proposed: “Extensively carry out employee sports activities, give full play to the role of industry associations, government agencies, enterprises and institutions [6], and employee sports associations, and extensively establish employee sports clubs and sports clubs. Sports fitness groups carry out physical fitness activities and sports competitions that are in line with the characteristics of the unit and the employees love to hear" [7], "actively create physical fitness conditions for intellectuals, advocate and promote physical fitness methods suitable for their work characteristics, and attach importance to the health of middle and high-level intellectuals Examination and physical fitness work" [8]. In order to actively promote and implement the nationwide fitness program, colleges and universities should pay attention to the development of the physical health of faculty members, make full use of various group activities, and carry out in-depth and continuous nationwide fitness programs, so that the physical and mental health of college faculty members can be well developed [9]. Therefore, tennis in the form of a club meets the requirements of teachers for physical exercise. With the development of the country and the upgrading and adjustment of the industrial structure [10], the development of China's sports industry has ushered in new challenges and opportunities. National fitness will become a new hot spot, sports will gradually become a new consumption hot spot [11], and sports clubs have received unprecedented blowouts. Style development [12]. As the capital city of Yunnan Province, Kunming is also a well-known tourist city in the country, and commercial tennis clubs have gradually developed [13].

In recent years, under the tremendous influence of modern technology, the work intensity of college faculty and staff has become more and more intense [14], and their bodies are exhausted. At the same time, as face-to-face communication decreases, the feeling of loneliness in the heart becomes stronger and stronger. In order to enable faculty and staff to work and live healthily and happily [15], many colleges and universities encourage faculty and staff to participate in more sports activities, hoping to exercise their body through various sports, enhance communication [16], and eliminate negative psychology. Since the Chinese golden flower bloomed on the world tennis courts, the sport of tennis has gradually become well-known, and more and more people have gradually fallen in love with tennis [17]. In colleges and universities, tennis has a good mass foundation, so it has become one of the choices of colleges and universities to develop tennis [18].

Based on the characteristics of tennis, the following aspects should be paid attention to in the operation of tennis clubs for teaching staff in colleges and universities. As one of the important organizational forms of the tennis industry, the tennis club has a series of commercial effects that often surpass tennis itself [19]. Not only can it meet the needs of people's physical health, mental health and social function, but it also has considerable economic significance. The economic output and social benefits brought by a successful tennis club are far greater than the society’s economic investment in it [20]. However, due to many factors such as late start, unclear positioning, unclear characteristics and lack of core values, the Chongqing Tennis Club The development of China has entered a red sea. In 2007, a new force in the Chongqing

Tennis Club-DK Tennis Club has a unique style and a new force. It uses internal and external analysis methods, SWOT analysis methods, five power models, blue ocean strategy and other strategic management theories and strategic analysis tools to select target customers [21]. Carry out resource integration, implement value innovation, open up a new blue ocean from the fiercely competitive red sea, and explore a road to the internationalization and industrialization of tennis that is in line with the conditions of city [22].

2. THE PROPOSED METHODOLOGY

2.1 The Tennis Club Management Strategy

The faculty tennis club is non-profit. It aims to increase the physique of the faculty and to please the faculty and staff, so that the club has a certain public welfare [23], but the organization that cannot be self-financing is lifeless and can only exist temporarily. Long-term development continues. Therefore, the club must charge appropriately, not profit, but be able to maintain a balance of payments [24]. Appropriate fees can balance the necessary expenses for the daily operation of the club. The membership fee is mainly used to purchase activity balls. Tennis is a consumable item. Basically, a new ball must be replaced after a semester. This is a considerable expense. Also buy some golf carts, hand gel, shock absorbers, etc. for members in need. The membership fee is also used to organize the expenses needed for the school competition.

Buyer threats in this industry are medium to high. The threat from buyers mainly stems from the uneven distribution of tennis activities and the distribution of the tennis industry in the city. At present, the tennis population of Chongqing is mainly concentrated in the nine districts of the main city. The districts and counties where tennis started early are mainly the central cities with rapid economic and social development in this city, such as Yongchuan District, Jiangjin District, and Hechuan District in Western Chongqing; Fuling District, Wanzhou District, and Changshou District in the Three Gorges Reservoir area, and there are also some Traditional tennis counties, such as Wulong County in the southeast of Chongqing. 60% of the districts and counties in the city are in the budding or starting stage. The tennis population is small, the external environment is poor, the development cycle is long, and the work is more difficult. For the DK Tennis Club, the threat of buyers in the more concentrated areas of tennis is mainly manifested in resource-intensive, the tennis population and the stable supply and demand relationship between the tennis population and existing tennis clubs. The threat of buyers in the districts and counties that have just started tennis is mainly due to market development costs. More and higher operating costs. The purpose of the Tennis Club for College Staff is to allow college staff to fully enjoy the fun of tennis and show a healthy, happy, and positive spirit in the process of physical exercise.

The biggest difference between it and a commercial club is that it is not for profit. The source of funds mainly depends on school support, membership dues and funding from related units. The establishment of the faculty tennis club to make the faculty members participate in tennis is no longer an unorganized and random activity, but an organized leadership, management, detailed time plan, membership system.

2.2 The Influence of Big Data on The Management Strategy of Tennis Clubs

The purpose of this club is to exercise and enhance communication, so the most important thing in the activities is to let the members have fun and communicate smoothly. Technical level is secondary, but it is also necessary. It is necessary to improve the technical level on the premise of exercising and enhancing communication. Improving technique is to be able to continue to play tennis, and the purpose of tennis is to exercise, communicate, and entertain. The purpose of this club is to exercise and enhance communication, so the most important thing in the activities is to let the members have fun and communicate smoothly. Technical level is secondary, but it is also necessary. It is necessary to improve the technical level on the premise of exercising and enhancing communication.

Improving technique is to be able to continue to play tennis, and the purpose of tennis is to exercise, communicate, and entertain. Consumer-owned tennis clubs refer to clubs that carry out business activities in the form of transferring venue use rights and providing supporting services. Consumers purchasing venue use rights and supporting services are the main source of income for this type of tennis club. There are generally two forms for consumers to pay for the right to use the venue, and the fee is paid according to the length of time the venue is used. The other is the membership system, that is, consumers pay for a one-time purchase of long-term venue use rights and can use the venue at any time. Such as Chengdu High-tech Tennis Club, Hangzhou Tianshuiqiao Tennis Club, Sanwei Tennis Club and so on. From the analysis of the above figure, we can see that the proportion of colleges and universities that choose the school union to manage the club is 66.67%, and the proportion of schools that choose the club and the sports administration department to manage the club is 25%. The school union and other departments are selected. The proportion of management is 8.33%. The college faculty tennis clubs surveyed belong to the school's organization voluntarily organized by the faculty, and in terms of its nature and functions, it should be managed by the school union.

The school union accepts the club’s declaration and registration, approves the applied clubs, and records the approved clubs; conducts annual inspections, reviews, assessments and assessments for each club; guides clubs to carry out activities in accordance with the "Articles" and treats those who violate the "Articles" Correct behavior; provide opportunities and conditions for activities. Teenagers are their main service targets.

2.3 The Intelligent Information System of Tennis Club Management Strategy

The age structure of tennis coaches refers to the combination of the proportions and interrelationships of different age levels within the tennis coach group, which is an important substructure in the tennis structure. Generally speaking, the teaching level of tennis coaches is closely related to their age and teaching age, so teaching age and age can be used as one of the important standards of coaches' teaching level. 37.42% and 33.54% were satisfied with the facilities and 33.54% respectively, indicating that the use of club venues can meet the needs of most teachers; dissatisfied accounted for 9.68%, reflecting that the current existing conditions are diversified and multi-level for teachers Insufficient attention is paid to physical exercise requirements. The main reason is that tennis courts have indoor and outdoor fields. Activities carried out in outdoor fields will inevitably conflict with classroom teaching. In order to ensure the normal progress of classroom teaching, club faculty activities are restricted; the number of indoor venues is limited, which cannot be satisfied. Due to the needs of many teachers and staff for exercise, the venues and

facilities cannot meet the needs of activities due to various factors.

Second, the daily management mechanism of the club is not sound, and the maintenance and maintenance of the venue facilities are not paid attention to, resulting in dirty and chaotic phenomena during the use of the venue, which affects the enthusiasm of the club's teachers to participate in tennis. Tennis has been an aristocratic sport since its inception. With the development of the economy and the popularity of tennis, we ordinary people have also had the opportunity to contact tennis. Although tennis has gone from the altar of aristocratic sports, it is still an elegant sport. There are many etiquettes that we need to observe. Strengthening tennis etiquette can make members feel in awe, recognize from the bottom of their hearts that this is an elegant sport, and will feel proud to participate in it. Strengthening tennis etiquette can create a good image of the club, and the outside world can see that the club members' polite behavior can increase their sense of identity with the club.

3. CONCLUSION

Use SWOT analysis method, five power models, IFE matrix, EFE matrix and other strategic management analysis tools to analyze the internal and external environment of DK Tennis Club; use the blue ocean strategy analysis framework and system tools to construct the strategic layout of DK Tennis Club. Innovated the business philosophy of "people do not have me, others have me fine, people are small, I am big, people are low, I am high, and people come first"; proposed "building boutique venues and building industrial bases; opening a tennis school with bilingual teaching ; With the help of high-quality coaches, carry out a number of trainings; operate the tennis industry to broaden income-generating channels; host tennis tournaments to shape the corporate brand.

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Proper Integration Study of Ideological and Political Education Based on Cultural Vision and Chinese Excellent Traditional Culture

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Abstract:Proper integration study of ideological and political education based on cultural vision and Chinese excellent traditional culture is discussed. We all know that culture is an important carrier for the spread of ideas. In a multicultural environment, we will be affected by it unconsciously. Although this is conducive to shaping an inclusive cultural concept. deological and political courses in colleges and universities are the key courses and "main fronts" for casting souls and educating people in the new era. They are the soul courses for strengthening and improving ideological and political work in colleges and universities. The textbooks are the basic projects for building soul projects. This paper gives the novel ideas for the construction of the solutions.

Keywords: Proper integration; general study; ideological and political education; cultural vision; Chinese excellent; traditional culture

1. INTRODUCTION

In the history of creating culture, human beings are constantly shaped by the culture and thus constantly surpass themselves. Culture is the dialectical unity of the "humanization and undersdanding" in the social practice. Humanization is the starting point and premise of the culture Humanization is the fundamental purpose and purpose of culture. The meaning of "culture" is very complex. "Culture" in a broad sense refers to the sum of material wealth and spiritual wealth created by human beings, with extremely rich connotations and broad extensions.

The basis of the nervous organization of cultural nature is the second signal system which is not possessed by other animals and because of this cultural nature is also unique to human beings. Cultural nature is a kind of internal driving activity that people know the external world and self through the second signal system, which mainly manifests as the people's cultural creativity and exerts influence on the external world in a planned way. During the historical development of the education, the human nature assumption of "cultural man" has had a direct impact on "what can be done" and "what to do" in education. The greatest significance of the "cultural man" hypothesis to the field of the education is that it provides a valuable theoretical support for educational practice.

The design of teaching language skills is based on teachers' cultural background, including the philosophy, pedagogy, psychology, literature, logic, and operations research. Among them, the theoretical knowledge of education and teaching occupies a considerable proportion. For the culture, we should consider listed issues.

(1) The meaning of cultural context is very broad. It can be said that teaching is carried out in the context of culture, but some teachers do not have a general conscious and clear understanding.

(2) After reading the whole book, there is more than just the above that is inspiring to readers. Although the topics in this book are diverse and complex, many discussions can still be included in the exploration of "locality" and "culturality" in communication studies. This kind of analysis is not to define a certain framework for the construction and formation of the knowledge, but to open up a wider space for the circulation, application and intersection of knowledge.

(3) The process of creating literary classics is also a process of further culturalizing literary classics. The construction and reconstruction constitute the main link in the culturalization process of the entire literary classics.

In the figure 1, the Chinese excellent traditional culture is shown as the sample.

Figure. 1 The Chinese excellent traditional culture (https://epaper.gmw.cn/gmrb/html/2019-10/10/nw.D110000gmrb_20191010_1-06.htm)

2. THE PROPOSED PERSPECTIVES

2.1 The Discussions of the Chinese Excellent Traditional Culture

Spranger, a representative of the cultural education school, believes that "education is also a kind of cultural activity". This cultural activity points to the personality life generation of the subject that is then constantly developing. Its ultimate purpose is to integrate the existing objective spirit (culture) The truly valuable connotation of the subject is born in the subject". "Literacy" humanity hypothesis tells us , culture is not common , every culture has its own way that grew up in a culture of people's understanding of the culture and the

ability to then communicate has core ideas with the uniqueness of the culture. Generally speaking, the cultural character of literary classics mainly has the following aspects: namely, the richness of cultural information, the cultural taste of both refined and popular tastes, and the acceptance of cross-cultural heterogeneity. Hence, the integration with the culture will be then essential. Our country's traditional culture is a potentially huge educational power. Only by combining traditional culture with ideological and political education and developing together can the potential educational power be transformed into a real huge educational power.

2.2 The Ideological and Political Education based on Cultural Vision

Xi Jinping pointed out that the primary issue of education is who to cultivate, and our education must then take cultivating socialist builders and successors as a fundamental task. Since the 18th National Congress of the Communist Party of China, General Secretary Xi Jinping has repeatedly emphasized that "building morality and cultivating people" is the foundation of colleges and universities. Colleges and universities should vigorously cultivate talents who conform to the orientation of social values and can then make positive contributions to the social development.

The core of the subject education theory lies in the dialectical relationship among teachers, students, and objects of the knowledge. It believes that people are the starting point of the education, the highest value of education is the value of the people, and the educational process must highlight the subject status of students. Teachers and students are both subjects and objects in the educational process. Educational planning is teacher-oriented. Teachers are engineers of the human souls, inheritors of human civilization, and guides for students' growth. Teachers' professional knowledge, teaching skills, and language expression directly affect the classroom content and teaching effects of the "golden class".

Thereofre, we provide the listed suggestions.

(1) The integration of red culture is conducive to the reform and innovation of ideological and political courses, content integration, highlighting key points, avoiding repetition, and orderly connection.

(2) The impact on the overall reform pace of ideological and political education. The current social culture presents a diversified development trend, which gradually breaks the core original relatively closed cultural atmosphere. Different cultures and values collide with each other and merge with each other, making the public's choice of outlook on life and values more and more diversified.

(3) One of the major meanings of cultural education is to pass on norms. The fundamental task of colleges and universities is to establish morality and cultivate people, first establish morality, and then cultivate people. This shows that in the process of cultivating and delivering high-quality socialist construction forces for the society, colleges and universities should not only guarantee the learning of professional abilities, but also pay attention to the cultivation of personal qualities.

3. CONCLUSION AND SUMMARY

Proper integration study of ideological and political education based on cultural vision and the Chinese excellent traditional culture is studied in this project. The red culture, which contains the red gene, is the concentrated expression of the sum of advanced thoughts condensed by our party in leading the people to carry out the revolutionary cause, build the motherland, and reform practice. It contains the fine traditions and revolutionary morality of our Chinese Communist Party. This paper gives the novel ideas for the constructin of the efficient models. In the future study, we will consider the different applications of the models.

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Analysis of the Effect of English Language and Literature on Students' Language Ability from a Multi-Dimensional Perspective

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Abstract:Analysis of the effect of English language and literature on students' language ability from a multi-dimensional perspective is the main focus of this manuscript. Now English language and literature education plays a great role in cultivating students' language ability and English expression ability. English language and literature education can effectively provide students with literature and language knowledge and expand students' thinking space. Students can obtain English communication cases through example learning, and imitate the knowledge of the similar subjects to gradually develop English language ability. We provide the novel ideas regarding the educational activities.

Keywords: Multi-dimensional perspective; English language; literature analysis; students' language ability

1. INTRODUCTION

The traditional English teaching mode has the problem of "more time-consuming and less effective". We urgently need a new type of teaching mode, a foreign language teaching mode that allows students to further directly enter the foreign language situation and think and communicate in a foreign language. English education is conducive to the cultivation of students' language ability, and the positive role of English education needs to be emphasized. In the cultivation of the students' language ability, there are rich language examples in English education.

Students can obtain English communication cases through example learning, and imitate the knowledge of the similar subjects to gradually develop English language ability. Based on the revire, the focuses should be summarized into:

(1) The learning of English language and literature focuses on cultivating students' English language expression and also rhetorical application skills, so as to improve the students' language ability and literary quality.

(2) In English education, students gain a rich knowledge of language and culture In the process of learning textbooks and reading English literature, a lot of basic English knowledge, the English communication skills, rhetoric, etc. are covered, which on the one hand lay the foundation for English learning and at the same time broaden students' horizons.

(3) As an intermediary of language output, bilingual training provides students with a platform to demonstrate, use and consolidate their language, thus then greatly improving their language ability. Professor Hu Chundong said: In the practice of human learning and acquisition of language, absorption is always ahead of expression, it can also be said that input is always ahead of output.

Whether using Chinese or English for communication, in the process of communication, as a language communicator, it is necessary to use rhetoric to achieve a unique effect of the communication, so that the communication activities can be carried out effectively. In the following sections, the details will be then discussed.

2. THE PROPOSED METHODOLOGY

2.1 The Background Study of English Literature

In the undergraduate teaching system of English majors, the irreplaceable significance of English literature has become a consensus in the industry, and the implementation of research-based teaching of English literature is not only imperative, but also more likely to achieve twice the result with half the effort. English literature translation is both an art and a science, pursuing a balance between aesthetics and accuracy. This paper attempts to explore the aesthetic value in the translation of the English literary works from three aspects: translation activity, translation object and translation subject.

American cognitive psychologist and educator Jerome Bruner advocated the "discovery learning method", emphasizing that learning is an active "discovery" process for students to learn from ignorance, similar to scientific research by scientists, requiring students to then cultivate exploration in teaching activities, teachers should not simply convey the knowledge of objective facts to students and tell students the answers to questions, but should stimulate students' curiosity and thirst for knowledge, and guide students to independently think, put forward hypotheses and conjectures, and further use existing knowledge to analyze and solve the problems, discover new things, and summarize general laws. Literary works are the common spiritual wealth of all mankind. There are many masters and masterpieces in English literature. The themes of many works are inspiring and have inspired generations of readers. By studying these works, students can not only learn English, understand the history and culture of Britain, the United States and other countries, but also think about the meaning and value of life, and gradually form a healthy outlook on life and values.

2.2 The Multi-dimensional Perspective

The application and popularization of technologies such as artificial intelligence and 5G have also provided technical and resource support and demand for model innovation for higher education and open education. Especially for college English teaching that takes into account the functions of the language

communication and the cultural exchange, we can carry out multi-dimensional integration. For example, the syllabus, as a guiding document for the practice of whole-person education in the college English, must reflect the core value of whole-person education in every link of course objectives and tasks, basic requirements of the course, allocation of course hours, and course assessment and evaluation.

We cosndier listed suggestions.

(1) The so-called multi-dimensional means that the evaluation subjects can be students themselves, teachers, business industry experts, customers and higher-level government supervision departments, etc. On the basis of the process assessment and also summative assessment, group mutual assessment, student self-assessment, teacher's comment.

(2) College English teachers should establish the core value concept of whole-person education, fully understand the intrinsic value and social value of the subject, and enhance the sense of mission and responsibility of the comprehensively cultivating people.

2.3 The Effect of English Language and Literature on Students' Language Ability

"Advanced English" is suitable for senior students who have mastered the basic knowledge of the English, focusing on enriching students' language knowledge and improving their language skills. The textbook also provides students with a lot of practice opportunities, which is conducive to improving students' ability to comprehensively use language in listening, speaking, reading, writing and translating. English language has rich value. While guiding students to learn and understand literary works, teachers guide students to then deepen their understanding and knowledge, and also explain vocabulary, sentences, rhetorical techniques, etc., so as to deepen students' impression, accumulate English writing materials, and enrich the knowledge system , deepen students' understanding of the articles, and improve students' English literacy.

3. CONCLUSIONS

This paper studies the effect of the English language and literature on the students' language ability from a multi-dimensional perspective. The process of the language communication is a very complicated process. The same sentence, spoken by different people, will have different expressive meanings, the same sentence spoken on different occasions, the effect of its language expression is also different. Hence, this paper gives the in-depth analysis for the efficient learaning. In the future, applications will be discussed.

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Analysis on the Development Strategy of Minority Sports Teaching in Colleges

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Abstract:Analysis on the development strategy of minority sports teaching in colleges is the focus of this manuscript. Interdisciplinary learning in physical education and health courses is to use certain physical education learning situations or real problems, so that students can use the knowledge of multiple disciplines to recognize, understand and solve problems in physical education learning and understand real life. Sports is a kind of the body language with a low ideological component, which is convenient for the general international exchange and communication of a nation-state. This paper gives the combination to propose the novel ideas.

Keywords: Colleges; development strategy; minority sports teaching; theoretical analysis

1. INTRODUCTION

In physical education teaching, teachers should build different thinking modes, let students think actively, cultivate students' different thinking abilities, establish multi-level thinking, and also make students think more broadly and then think more actively. In recent years, with the encouragement of national policies, many schools have begun to attach the importance to sports work. The rate of students' physical fitness and health compliance has shown an upward trend, and students' physical fitness has improved significantly.

Based on the review, the study focus should be laid to the 2 core aspects, namely the following ones.

(1) Teaching physical education knowledge and skills is often accompanied by a variety of different links and processes, and teachers need to effectively highlight the main parts and key links of teaching so that students can identify the most central content to focus on. Therefore, teachers should highlight the key points in the teaching arrangement and adopt appropriate methods, so that the students can more easily master the most core parts and obtain the most effective knowledge and skills improvement.

(2) Higher sports colleges and universities should strengthen the emphasis on the cultivation of undergraduate professionals, not only to ensure the basic conditions of venues and facilities required for teaching practice, but also to continuously expand the channels for resource introduction and optimize the path of the resource integration, especially to then strengthen the digital teaching resources use.

Interdisciplinary learning in physical education and health courses not only focuses on the learning of interdisciplinary curriculum content, such as the learning content of various interdisciplinary themes in physical education courses, for students to learn and experience interdisciplinary, but also a kind of in-depth exploration and cooperation.

Learning methods, such as using interdisciplinary learning to deeply understand and solve a certain problem in order to explore a certain problem will be essential, and in the special analysis, this paper will be then focused on the study of the development strategy of minority sports teaching in colleges, and in the figure 1, the sample is shown.

Figure. 1 The Minority Sports (Image source: [16])

2. THE PROPOSED METHODOLOGY

2.1 The Basic Discussion on Minority Sports

The nation-state is the basic organizational form of a modern state, and also the construction of a modern state takes the construction of a nation-state as its basic object and main task. Hence, the related sport issues should be focused.

Sports is a kind of the body language with a low ideological component, which is convenient for the general international exchange and communication of a nation-state.

Therefore, modern people's intuitive impression and also the preliminary understanding of a core nation-state mostly comes from the spread of its national traditional sports culture and international competitive sports horizontal display. Based on this, under the guidance of the concept of integration of sports and education, discuss the inheritance of traditional national sports campuses, relying on the technical, institutional and also spiritual dimensions of traditional national sports campus inheritance, study feasibility, difficulties and implementation strategies of national traditional sports campus inheritance.

This has direct guiding significance for then accelerating the development of traditional national sports in our country, implementing the "going out" development strategy,

enhancing the international influence of the Chinese sports culture in the equal dialogue and interactive exchanges of world sports culture, and enhancing the socialism with the Chinese characteristics. The image of national civilization has great practical significance.

Generally speaking, the traditional humanistic ideology of traditional Chinese national sports is still strong, and also the "multi-ethnic" characteristics of the nation-state" is more attractive with the progress and development of the times.

2.2 The Suggestions for the Sports Teaching in Colleges

Relevant research is mostly based on actual effect evaluation, focusing on the construction of undergraduate education, postgraduate education quality evaluation system, the quality evaluation model and guarantee system in ordinary colleges and universities. As a compulsory course in modern quality education, physical education plays an important role in the daily teaching process of colleges and universities.

The research on interdisciplinary learning in the process of physical education curriculum reform and implementation has not been fully valued, and existing research has only proposed it as a trend.

The relationship between interdisciplinary learning and knowledge diversity, future student life, and physical education curriculum issues such as connotation, requirements and implementation procedures of interdisciplinary learning have not been clarified and analyzed. As the earliest and largest undergraduate major in physical education colleges and universities, physical education major is aimed at cultivating high-quality talents engaged in physical education teaching.

3. CONCLUSION

Analysis on the development strategy of the minority sports teaching in colleges is the focus of this manuscript. In the physical education and health course, students not only learn sports skills, but also learn a lot of comprehensive knowledge related to body, society, and health, and explore topics related to the sports. This paper discusses the background and also propose the novel suggestions.

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Application of Network Carriers for Ideological and Political Education of College Students Considering Various Factors

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Abstract: The network carrier of ideological and political education in colleges and universities is conducive to the development of ideological and political education in colleges and universities to a more modern direction and can promote the effective integration of educators and educates, to make ideological and political education in colleges and universities to a higher level. At present, there are still some problems in the application of network carriers in ideological and political education in colleges and universities. In view of these problems, we should increase the development and utilization of network carriers in ideological and political education; This paper briefly analyzes such educational forms as using network carriers to carry out "Chinese Dream" theme education, using network games to carry out political theme education, and using media means to carry out campus political education activities, hoping to provide teaching reference for educators who intend to use network carriers to carry out ideological and political education, so as to effectively improve the informatization level of political teaching.

Keywords: Ideological and Political Education; Network Carriers; Various Factors

1. INTRODUCTION

The full use of network carriers is a major issue that colleges and universities must consider. The quality of the use of network carriers will directly affect the development of ideological and political education practice and the expected results in the middle of the practice. To make the network carriers effective, we must understand what problems exist in the current ideological and political education network carriers in colleges and universities and what causes.

This is mainly reflected in two aspects:

(1) learning content. The learning content has become rich and colorful with the support of network information, which enriches the extracurricular knowledge of college students, enriches their learning life and broadens their horizons.

(2) Learning style. The popularity of the network makes students gradually accept the electronic learning method. Through the network, they can obtain the required information more quickly, save time and improve learning efficiency. According to the survey in recent years, online game players are becoming younger and younger, and the proportion of college students is also increasing year by year. Since the phenomenon of college students playing online games is not allowed for many times, teachers can turn challenges into opportunities, seize students' psychology of loving online games, and make full use of the educational functions contained in online games to carry out political theme education. Based on Marxism-Leninism, Mao Zedong Thought, Deng Xiaoping Theory, the Three Represents and the Scientific Outlook on Development, establish ideological and political education websites, to guide the formation of students' ideas through the website.

2. THE PROPOSED METHODOLOGY

2.1 Problems in the application of network carriers of ideological and political education in universities and their causes

The network is welcomed by most students with its timeliness of mutual communication, providing students with the latest and timely information, attracting the attention of the educated with educational content that keeps pace with the development of the times, so that they can get ideological changes and recognition, and timely exchange their own views. The development of ideological and political education activities cannot be separated from the creation of the campus learning atmosphere. The campus should form a campus political and ideological culture in which material culture and spiritual culture go hand in hand, to guide students to internalize the core values of social ethics while strengthening the construction of campus spiritual civilization.

At present, many universities have also established QQ groups, including class groups, grade groups and alumni groups. Educational subjects can try the function of QQ group and publish some notices or information to the masses. In addition, QQ groups can also publish the contents and important things that students care about in the class to the Internet and interact with ideological and political websites. This makes educators unable to truly integrate into modern teaching, which is also a new requirement for contemporary teaching staff, and a new situation that contemporary workers engaged in ideological and political education must adapt to and a new goal that needs to be actively completed. Therefore, it is necessary to give full play to the subjectivity of teachers and students.

2.2 Characteristics and advantages of network carrier application in ideological and political education of college students

First, we should establish the management and safety standards of the network carrier of ideological and political education in colleges and universities. For viruses that often occur in network computers, colleges and universities should sign agreements with relevant software research and development enterprises for regular or irregular cooperation to check and kill relevant viruses. The most common method is to directly introduce relevant virus prevention and anti-virus systems, implement all-round monitoring, and carry out anti-virus at regular intervals, to effectively prevent virus and hacker intrusion.

The construction of network carrier for ideological and political education in colleges and universities is a new field, in which every builder can only touch the stone to cross the river, because this process is not scientific and comprehensive Systematic theoretical guidance, and lack of practical examples that can be found, direct, and can be used for reference.

Second, it is mainly reflected in the following aspects: the equality of participation qualifications of both sides of education; Equality of status; Equality of participation modes of both sides of education. Equal status always gives people the feeling of being respected, which makes the effect of ideological and political education more obvious and gets a deeper understanding. By consulting relevant materials of relevant hot issues and adding relevant ideological and political theoretical knowledge to them, the school can repeatedly put excellent student works on the school's propaganda screen, so as to constantly let teachers and students watch, and after a period of time, it can also organize the essay solicitation activities for the post-view, so as to investigate the political education effect of putting campus micro-films. Create an efficient effect evaluation system.

3. CONCLUSION

In the era of network information, colleges and universities should constantly seek appropriate opportunities to effectively use and innovate new network carriers and carry out diversified ideological and political education. First of all, we should seek new ideas for the construction and utilization of network carriers and attach importance to the practical significance of new network carriers from the level of consciousness. To guide students to learn and experience the political learning significance of the theme of "Chinese Dream", we can also guide students to participate in political classroom learning by setting customs clearance games. We should also use social media to understand students' ideological dynamics, to strengthen the education of students' political values and promote students to develop good habits of political knowledge learning.

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Construction of Modern College English Learning Environment Oriented to Smart Campus

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Abstract:The requirements for English teaching at the university level are divided into three levels, namely general requirements, higher requirements and higher requirements. Among them, it is generally required that students can communicate in English during the learning process. Constructivism believes that students should be the active constructors of the knowledge meaning, rather than passive recipients of external stimuli and with this idea, we integrate the smart campus model into the English learning. In this study, the novel perspectives and suggestions are both provided. We suggest to integrate the technology to combine the efficient teaching to improve the overall quality.

Keywords: Smart Campus; Modern College; English Learning Environment; Teaching Technology

1. INTRODUCTION

The development process of education informatization has initially spread to all corners of the campus, and the digital campus is gradually moving towards a smart campus. The continuous construction and improvement of smart campus construction has then become an important part of the school's modern development strategy. According to the review, the challenges should be considered as below aspects.

(1) The cloud computing platform of the smart campus builds a private cloud environment on the campus according to its own application scenarios and security requirements.

(2) From the current construction method of the smart campus, the big data center of the smart campus is built within the campus and unified management, resulting in all data must be sent to the central node before it can be mined and analyzed.

With development and transformation of Internet technology, information technology is widely used in various fields such as people's life and study. In the process of the information construction and management, colleges and universities are constantly improving various information systems to improve the efficiency of the student management. In the figure 1, the smart campus model is presented. In the next sections, the proposed model will be studied.

Figure. 1 The Modern Smart Campus (From https://ostglobal.com/2019/02/28/smart-campus/)

2. THE KEY IDEASOF DESIGNED MODEL

2.1 The Discussion of Smart Campus

With the continuous development of big data technology, in the education system, data such as interactive analysis of learning resources and learners, data collection of educational management and the teacher-student behavior chain, teaching evaluation and effective feedback between testees can all be obtained through Mobile communications and context-aware devices conduct non-perceptual collection to form the data ecology. Intelligently identify the modern learning, working conditions and personal characteristics of the teachers and also students, organically connect the physical space of the school with the digital space, establish a smart and open education and teaching environment and a convenient and comfortable living environment for teachers and students, and realize people-oriented personalized innovative services.

The smart campus has following suggestions.

(1) Ensure that the built smart campus has good openness and scalability, and can provide flexible architecture support for subsequent system access and function increase. At the same time, build the school's data middle platform to realize data integration, analysis, integration, distribution, prediction and other functions.

(2) In the intelligent campus the basic connotation features of intelligent teaching reality features, the intelligent learning trajectory features and intelligent learning space features are covered, the can provide support for schools to better use various application scenarios.

(3) On the basis of the overall sharing of the school and the premise of ensuring data security, various information and data sharing services are provided, so that the data can meet the needs of various business uses and decision support.

(4) The smart campus student registration management system mainly manages the modern school student information comprehensively through the Internet technology, WeChat applets, WeChat public accounts and Web browsers.

Student users can fill in information through the WeChat client.

2.2 The College English Learning Environment Discussion

Constructivism believes that students should be the active constructors of the knowledge meaning, rather than passive recipients of external stimuli; teachers should be the helpers of students' active construction of knowledge meaning, rather than the indoctrination of knowledge. Existing research shows that in terms of teaching mode, the document requires that "institutions of the higher learning should make full use of modern information technology, adopt the English teaching mode based on computers and classrooms, and improve the single teaching mode that focuses on teachers' lectures".

Effective teaching supported by a smart learning environment is a personalized teaching model aimed at achieving high efficiency and precision with the help of the information technology. It uses appropriate technology to generate the personalized and also precise teaching objectives, develop appropriate teaching materials, design appropriate teaching activities, and evaluate learning and teaching effectiveness based on data analysis recorded by the intelligent system.

Learning environments vary widely and each has its own strengths. How to organically integrate various learning environments into a whole to form synergistic effect requires educators to think carefully, find a good way to train students to learn English, and adopt appropriate strategies to improve the effectiveness of English teaching. Due to the personalized characteristics of online teaching, it can not only help students complete the training of listening and speaking, but also provide a lot of the knowledge and information in reading, writing, culture, etc., which has then a positive effect on the cultivation of students' independent learning ability.

We emphasize the importance of the design of the learning environment rather than the teaching environment. "Situation", "collaboration", "conversation" and "meaning construction" are the four elements in the learning environment. The three-dimensional online English learning environment advocates the dominant position of students.

It breaks the limitation of the time and space, takes English classroom teaching as the center, and is supported by basic multimedia and computer network technology. We want to carry out the continuous pronunciation training for college students. In order to successfully complete college English pronunciation teaching, not only teachers should pay attention to the continuous education of students in the teaching process, but also carry out continuous training for teachers to enhance their own abilities.

3. CONCLUSION AND SUGGESTIONS

College English is a compulsory course for the non-English majors. However, there are a large number of college students in China, and the per capital teaching resources are weak. How to realize the effectiveness of foreign language teaching has become a major challenge for foreign language research. In this study, the novel perspectives and suggestions are both provided. We suggest to integrate the technology to combine the efficient teaching to improve the overall quality.

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Innovation of Music Teaching Mode in Vocational Colleges under the Information Environment Considering the Internet Trend

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Abstract:Innovation of music teaching mode in vocational colleges under the information environment considering the Internet trend is the main focus of this research. In the process of integrating vocal music teaching with information technology in higher vocational colleges, students can be provided with certain acoustic audio-visual materials according to the different teaching links, breaking through the shackles of traditional music teaching materials. In the process of personnel training, the construction of curriculum system with teacher-training characteristics and practical skills training to improve professional ability will become the core literacy of higher vocational students. This paper gives the new suggestions for the proposed idea and the potential applications will be considered.

Keywords: Internet Trend, Information Environment , Music Teaching, Vocational Colleges, Innovation Analysis

1. INTRODUCTION

From the perspective of ecology, the music art has a deep relationship with the natural ecological environment. It can be said that the core natural ecology is the enlightener of the development of human music art. Under the background of reform and opening up, the country's decades of development and exploration have paid more and more attention to technological construction, economic development, and also national cultural construction. However, in the face of the menacing foreign cultural impact, many people have cultural inferiority complex and cultural crisis. Thereofore, the focus of the musical education will be essential for the analysis.

Vocal music teaching in the higher vocational colleges has different teaching methods due to teachers' mastery of singing skills and understanding of the music knowledge, and the individualized color of teaching is more prominent, resulting in different schools. The essential integration will be then also a focus of the study, we should consider the listed.

(1) In order to innovate the current relatively mature music education basic courses, it is necessary to find a suitable angle, and at the same time discuss the scientificity and feasibility of the reform practice, so as to avoid disrupting the original professional and orderly course design.

(2) To implement the optimization of basic music education courses from an ecological point of the view, it is necessary to find out the basic concepts of the core existing basic music education courses, including course content, general teaching philosophy, teaching mode, teaching objectives, teaching core planning, and talent quality requirements.

(3) Higher vocational colleges focus on cultivating musical talents with practical musical skills or musical educational talents, which further requires corresponding music teaching materials and music teaching courses to match them.

(4) The active demand of students to participate in music learning and music activities is directly related to the quality of music education. If students in higher vocational colleges devote all their attention to the learning of the professional knowledge and skills, it will be difficult to turn their attention to music. The figure 1 gives the features.

Figure. 1 The Musical Futures (Image link: http://www.musicalfuturesinternational.org/learning-models.html)

2. THE PROPOSED METHODOLOGY

2.1 The Informatization of Vocational Colleges

On the December 29, 2021, the National Education Informatization Work Conference was held, calling for the educational informatization to further promote high-quality development of education and accelerate educational reform in information age. Vocational colleges have comprehensively carried out the talent training mode of "market demand-oriented and post-vocational ability training as the standard", which has been widely recognized by the society, schools, students and students' parents.

With the rapid development of information technology and its rapid penetration into the whole society, this ancient and slow-growing industry is undergoing the biggest change in history. As early as the April 2020, the National Academy of Educational Administration specially organized the "Special Network Training for the College Teachers' Informatization Teaching Ability Improvement" and then, the educational ideas will be considered.

Information-based teaching is an advanced teaching form based on information technology, digital technology, Internet technology, etc. It is the technical basis for the formation and development of the information-based teaching theory on the basis of traditional teaching theory. At this stage, schools not only need to build a management platform for students' off-campus internships, but also need to be able to effectively connect and eventually form an integrated service platform for internships and employment.

Through the information resources related to the student internships released by enterprises, the school fully grasps the comprehensive abilities of general students' work attitude, professionalism and professional skills during internships, and uses the network platform to help students demonstrate their professional skills and internship results.

2.2 The Innovation of Music Teaching Mode in Vocational Colleges

Under the background of the information age, vocal music teaching in colleges and universities in our country actively combines the advantages of the information age to do a good job in the reform and development of vocal music teaching.

There are various art forms of vocal music, and the teaching of vocal music is also extremely technical. When a singer sings a song, he needs to then actively express the emotions contained in the work through emotions, and at the same time gain the emotional resonance of the audience. Therefore, the art of vocal music has shown a strong perceptual attribute both in the form of expression and in the pursuit of effects. Hence, the further discussion should be considered.

In addition, in order to realize the effective inheritance of national music culture and focus on the protection of national music, our country has then formulated a large number of the protection measures, and organized a large number of young talents and professionals from the music colleges to actively conduct cultural exchanges and learning with old artists. Then, we providet he 3 suggestions.

(1) Before the start of the music appreciation class, it is necessary to conduct a questionnaire survey on the students who choose the course to then understand their needs and suggestions, and adjust the course content and form according to survey results, which is more conducive to the stimulation and appreciation of students' learning enthusiasm.

(2) In the course of the classroom teaching, when teachers describe the background of the work, knowledge of music theory, and vocal skills, they can incorporate elements related to ideological politics and humanistic morality.

(3) Informatization teaching design can then select and use network course resources, and introduce information technology into the teaching of courses, which can not only reduce the difficulty of courses, but also provide students with a vivid teaching platform to further create a three-dimensional learning atmosphere.

3. THE CONCLUSION

Innovation of music teaching mode in vocational colleges under the information environment considering the Internet trend is the main focus of this research. The innovation of vocal music teaching mode in higher vocational colleges must be based on clear teaching objectives. The setting of the course content is to conduct horizontal and vertical analysis on the knowledge, skills, and quality of the teaching materials, and then analyze the teaching function of the course, select the specific content of the teaching, and determine the depth of learning according to the selected teaching content and breadth. In the future, we will give the suggestions for the applications.

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Practical Research on Compound Training in Physical Training of Teenage Tennis Players

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Abstract: Tennis requires a high level of physical fitness. Once physical fitness fails to keep up, its reaction ability and movement speed will decline, and ultimately affect professional development. Therefore, when arranging tennis ball fitness training, we should improve our understanding of the concept of physical fitness training, grasp every sensitive period of teenagers' physical quality development, develop their ability in an all-round way, and also understand the psychological characteristics of athletes Then combined with the characteristics of modern tennis and the constituent elements of the special physical fitness of young tennis players, that is, moving speed, fast strength, coordination, sensitivity, aerobic endurance and anaerobic endurance, this paper preliminarily discusses the special physical fitness training methods of young tennis players, with a view to providing some help for the physical fitness training of young tennis players.

Keywords: Practical Research; Compound Training; Physical Training; Teenage Tennis Players

1. INTRODUCTION

The safety of physical training for young athletes is the prerequisite and necessary basis for physical training. In daily training, the injuries of young tennis players are mostly caused by limited joint flexibility. Therefore, before physical training, athletes need to roll on the foam axis to activate the muscles participating in the force generation, and roll again after the training to fully relax the muscles and prevent muscle fatigue leading to injury. It is an important guarantee to reduce sports injury.

Tennis, as a sport with high competitive ability such as physical ability, technical and tactical ability and psychological ability, physical ability plays an absolutely important role. A tennis match lasts a long time. If an athlete lacks good physical ability, his psychological ability, technical and tactical ability, and will quality will be limited, and he will not be able to achieve excellent results. To explore a new type of physical training mode, we can rely on the "two types and three stages" competitive sports competition mode for training. "Two types": aiming to establish a reserve physical training mode and a mode of regulating athletes' physical training before competition. The former mainly refers to a kind of exercise mode of medium intensity, increasing the number of physical training and comprehensive training for a long time.

Now the research on the biomechanics of tennis players' ankle joints has developed to a multi-dimensional research perspective. In this paper, the biomechanical characteristics of the ankle joint under the combined motion mode are comprehensively studied from the dynamic point of view by using the camera system, the three-dimensional dynamometer and the surface electromyography synchronization test method. Safety is equally important during training. For example, when carrying out physical training, it is necessary to observe whether the players' movements are standardized from three aspects: breathing, body posture, and movement mode. First, in the aspect of breathing, it is better to inhale the air into the stomach and expand it to the side ribs as far as possible, which helps the body maintain balance; Second, in terms of body posture preparation, the feet are open, slightly wider than the shoulders, the center of gravity is on the ball of the big toe, and the knee cap is slightly buckled. Tennis is a sport with fine movements, complex and changeable techniques and tactics, and fierce competition, which requires high physical and mental abilities.

2. THE PROPOSED METHODOLOGY

2.1 Guiding concept of physical fitness training for young tennis players

After entering the global information era in the 21st century, with the popularization of advanced technical and tactical essentials, tennis has developed towards the direction of physical fitness and speed. Therefore, physical fitness has become the most important component of tennis competitive ability. The latter is to properly strengthen the amount of training and reduce the number of training before the competition, so that the athletes can adapt to the environment before each competition in advance. The "three stages" refer to the training preparation stage, the training process stage and the training end stage. Different psychological, physical and technical training can be carried out according to different training objectives. Schematic diagram of the moment of the right ankle joint changes with the movement phase during the running of the sudden stop and forward start, which are the sudden stop stage, the buffer stage and the pedal and extension stage. The emergence of the lift-off stage is because the left ankle joint is supported by one foot after the right ankle joint leaves the ground, so the time when the last ankle joint leaves the ground is taken as the cut-off point when the data is intercepted, and the moment after lift-off will appear in the moment diagram of the right ankle joint.

The rapid movement of tennis pace requires a high degree of flexibility in the hips, knees and ankles. The limited movement of any joint will affect the output of the entire leg strength. When doing foot-movement training, we should follow the principle of gradual progress, first practice straight and fast running, then practice lateral movement, and finally practice multidirectional movement. In the training process,

the coach should pay more attention to the stretching movements of the team members' hips, knees and ankles, and focus on the team members who should fall below the hip joint when lying on the ground at the big toe ball of the front foot. According to the analysis in Table 2, the proportion of the movement speed is the highest, with an average score of 4.950 and a weight of 0.268. The descending order of the rear is fast strength, coordination and sensitivity, and with (without) oxygen endurance.

Results obtained in the lateral movement, acceleration and reaction time tests is shown below.

2.2 The content of compound training for young tennis players

In a word, tennis players are the best time to develop the above physical elements in their adolescence, so they should pay enough attention to physical training at ordinary times and carry out targeted training. In the design of individual physical training, the wave method is used to design the physical training plan for each athlete. That is to increase the load of physical training and reduce the load intensity of physical training.

If the intensity of athletes' physical load is directly increased, then the load of athletes' physical training can be reduced. Facts have proved that athletes with strong agile response can bring sufficient time for individuals to make pre-judgment, can win more sufficient time to hit, can better grasp the initiative to hit, and lay a good foundation for winning the game.

Agile response requires long-term training to form a competitive skill. In tennis, the first step after the baseline changes direction is to cross step, and then quickly cross step or restore step back to the proper position to hit the next ball, so as to keep in the middle of the backcourt, so as to move left and right, and not to give the other side too much hit point blank. Comprehensive physical ability refers to the comprehensive application ability of athletes in physical function, physical ability, technology and psychology. When carrying out physical fitness training, not only tennis ball fitness special training, but also comprehensive physical fitness training should be carried out.

3. CONCLUSIONS

In the process of physical fitness training for young tennis players, coaches should constantly improve their understanding of the concept of physical fitness training, apply the concept of physical fitness training throughout the whole process of physical fitness training, grasp every sensitive period of the development of young tennis players' physical fitness, and develop their abilities in an all-round way. At the same time, they should also understand the psychological characteristics of young tennis players, the sensitive period of the development of various sports qualities of young tennis players and the elements of special physical fitness, This paper puts forward the special training methods of movement speed, fast strength, coordination and sensitivity, and aerobic endurance that can stimulate the training interest of the young tennis players, hoping to achieve the goal of improving the special physical fitness of young tennis players.

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Recent Development of College Students' Ideological and Political Education from the Perspective of Chinese Cultural Self-Confidence

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Abstract:Recent development of college students' ideological and political education from the perspective of Chinese cultural self-confidence is studied in this paper. Educational institutions should not unilaterally strengthen the dissemination of online ideological and political education information, but should pay attention to the two-way integration of online education and offline practice. Due to the various reasons, many civilizations in the world that were once extremely brilliant in history have been lost in the long river of history. Only the Chinese civilization has been continuous and has become the only civilization in the history of world civilization that has not been interrupted. This paper gives the new ideas regarding the ideological and political education from the perspective of Chinese cultural self-confidence.

Keywords: Cultural self-confidence; recent development; college student; ideological and political education; Chinese culture

1. INTRODUCTION

The president Xi Jinping noted that since the 18th National Congress of the Communist Party of China, my country's ideological situation has undergone overall and fundamental changes. The cultural confidence of the entire Party and the people of all ethnic groups in country has been significantly enhanced, and the cohesion and centripetal force of the whole society have been greatly enhanced, creating a new situation for the cause of the Party and the country in the new era that provides a strong ideological guarantee and strong spiritual strength. In the historical process of human development, each nation has created its own culture, which has contributed to the development of human culture and the richness of world culture. Due to the various reasons, many civilizations in the world that were once extremely brilliant in history have been lost in the long river of history. Only the Chinese civilization has been continuous and has become the only civilization in the history of world civilization that has not been interrupted.

Through the review, the following ideas are focuses.

(1) General Secretary Xi Jinping pointed out: "We say that we must strengthen our confidence in the road, theory, and system of socialism with Chinese characteristics. In the final analysis, we must strengthen cultural self-confidence. Cultural self-confidence is a more basic, deeper, and longer-lasting force. History and reality have shown that the nation that has abandoned or betrayed its own history and culture is not only impossible to develop, but is likely to stage the historical tragedy."

(2) Fundamentally speaking, the topic of the cultural self-confidence involves the two general basic dimensions of the individual and the nation-state. In terms of the individuals, cultural self-confidence refers to people of some different nationalities and nationalities showing cultural independence in front of people of other nationalities and other nationalities.

(3) Cultural confidence is not the same thing as repetitive ruts. According to the conditions of the modern times, "creative transformation and innovative development" of the existing cultural norms should be carried out with the times.

In the figure 1, the sample from the Internet is noted and in the next parts, the details will be studied.

Figure. 1 The Chinese Cultural Self-confidence Sample from the Internet

2. THE DISCUSSIONS

2.1 The Chinese Cultural Self-confidence

The position, point of view, and method of Marxism are the fundamental stand, point of view, and method for analyzing and solving problems in understanding and transforming the world, and are the core fundamental stand for the cultural self-confidence in the new era. In the new historical process of realizing the great rejuvenation of the Chinese nation and building modern socialist power, "culture" plays an extremely important role, and to a certain extent even plays a decisive role. The complexity and difficulty of the problems faced in governing the country in the new era are historic, but the achievements and changes achieved are also historic. The key lies in the party's absolute trust in the people. Such confidence in governance is deeply rooted in the people's.

In the confidence of the people, it also lies in the deep self-confidence of the people. The cultural self-confidence in the new era is the core organic unity of the party's ruling self-confidence and the people's self-confidence. Cultural self-confidence actually presupposes that the nation-state, the main

body present, must be full of the absolute confidence in the culture it creates. General Secretary Xi Jinping pointed out: "Culture is the soul of a country and a nation. Culture prospers the country, and culture strengthens the nation. Without a high degree of cultural confidence and cultural prosperity, there will be no great rejuvenation of the Chinese nation."

2.2 The Recent Development of College Students' Ideological and Political Education

The teaching of ideological and political courses in colleges and universities must improve its own effectiveness, meet the actual needs of the cause of the socialism with the Chinese characteristics and the demands of the times for the all-round development of young college students, and cultivate students who support the leadership of the Communist Party of China and the socialist system. In general, the research on the ideological and political history of the curriculum has then gradually increased, and the historical logic has also gradually become clear; the theoretical research has been carried out from multiple perspectives, and the theoretical logic of the ideological and political curriculum has initially formed.

We should conduct research from the perspectives of the curriculum and teaching theory, and ideological and political education theory and practice. It should be "explicit", and the ideological and political courses should be then designed in combination with the characteristics of professional courses and students' characteristics. Online teaching of ideological and political education in the era of media integration can fully improve the teaching efficiency of the ideological and political education in educational institutions, and strengthen the effectiveness and timeliness of ideological and political education. Hence, we have the 2 suggestions.

(1) From a formal point of view, it is necessary to thoroughly explain theories of macroscopic theory, mesoscopic theory, and microscopic theory. The so-called macro theory of the ideological and political teaching in colleges and universities is a grand and systematic theory that reveals the law of the development of nature, human society, and human thinking, as well as the basic theory, guiding ideology, and action guide that guide the construction and development of the party and the country.

(2) Educational institutions such as universities and vocational colleges should strengthen the application of emerging educational concepts in the era of media integration, strengthen the development of online education resources, and improve the ability of teachers to explore online education in the era of media integration.

3. CONCLUSION

Recent development of the college students' ideological and political education from the perspective of Chinese cultural self-confidence is studied in this paper. The ideological and political practice of the course is carried out from multiple angles, including the exploration from the perspective of the station construction (focusing on the overall situation, progress, and effect), and the research from the perspective of station course ideological and political design and also the implementation. We therefore propose the novel ideas on the modern educational ideas.

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Theoretical Thoughts on Adaptive Development (AD) of Current College Physical Education Teaching Content

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Abstract:Theoretical thoughts on adaptive development (AD) of current college physical education teaching content is the key idea of this paper. The goal of flexible management is for everyone to become a talent, and the diversified needs of students are taken as the starting point. Therefore, in flexible management, various teaching management systems and organizational forms should be flexible. In the process of teaching management reform, there is an urgent need to build a new model that has the characteristics of the times, conforms to the development of students' personality, and hence, we consider the integration of the novel perspectives.

Keywords: Current Education, Physical Education, Teaching Content, Theoretical Thoughts, Adaptive Development

1. INTRODUCTION

On the basis of the fundamental task of "cultivating morality and cultivating people", the cultivation of core literacy takes "all-round development of people" as the core, which is the main link to implement advanced educational concepts and an important part of the goal of talent training.

There is still a lot of room for development in the scientific understanding of the laws, the integration mechanism of the evaluation system, the evolution path of curriculum reform, and the development of transformational research and revision of curriculum standards. Therefore, efficient physical training and teaching play an important role in the improvement of related qualities. Our government has put forward the concept of curriculum reform in order to change the status quo through the curriculum reform of various disciplines.

The ultimate goal is to connect education with the times and continuously cultivate new talents that are in line with the pace of the social development. The construction of sports environment is the prerequisite for the smooth progress of the teaching process of university physical education and health courses. However, through the analysis of the interview results, it can be concluded that the construction of sports facilities in most colleges and universities in ethnic minority areas is not sufficient. Currently, we are facing with some challenges, in the teaching process, the teacher's activities are emphasized, and the teaching activities are then guided by the teacher's experience. The students' learning is subordinate to the teacher's teaching, and the teachers and students are in a "master-slave" relationship. The teaching content is relatively fixed, and the technical teaching of competitive events is the main one well lack of practical fitness teaching content.

The concept of education centered on students' learning and also development is an educational philosophy that guides students' active learning, stimulates their independent learning, and develops their ability to explore and then discover. The function of the curriculum is to provide each student with experiences that contribute to his or her personal development and is the main way to implement the educational philosophy. In the figure 1, the teaching scenario is defined.

Figure. 1 The Current College Physical Education Teaching Scenario (The image referred from: https://resilienteducator.com/teaching-careers/physical-education-teacher/)

2. THE PROPOSED METHODOLOGY

2.1 The Basic Features of the Current College Physical Education

In our country, the physical education courses have always existed, but they are all in a secondary position. Its status in the hearts of teachers and students is far inferior to the other cultural courses, so that the college physical education teaching mode is backward. Therefore, it is then essential and urgent to improve the physical education performance.

The current challnegs are:

(1) Although many colleges and also universities currently implement three core independent course selection teaching, students can choose sports, class time and teachers according to their own hobbies, but ignore the individual differences in students' physical functions and qualities, and some students with poor physical qualities complete the training.

(2) Due to the influence of traditional forms of the physical education teaching, some of the teachers do not pay enough attention to the study of pedagogical theories, and their learning and understanding of the curriculum theories are not comprehensive enough.

(3) Physical education takes physical exercise as the main form of activity. It is inseparable from specific sports venues and sports equipment. It requires sports hardware facilities to be in place, otherwise it will affect the normal progress of the physical education activities, and it will be futile.

The university stage is the most important time in a person's life. When they are about to enter the society, students will spare no effort to read books and strive to master professional courses so that they can find the job they want in the graduation season. We consider expanding students' horizons and thinking on the basis of consolidating the existing teaching content, providing effective concepts and paradigm support for the achievement of the goal of physical education

2.2 The Adaptive Development (AD) of Current College Physical Education Teaching Content

At present, when many colleges and universities are teaching physical education, they only teach students relevant sports skills through classroom teaching, but do not fundamentally let students understand the true meaning of the sports. When colleges and universities carry out physical education teaching, they should choose the teaching content according to the needs of social development and the physical foundation of students themselves. Only by starting from the students' own physical conditions to choose their favorite sports, and then can they learn in a pleasant mood. Teaching management is an important part of the university management; it is the fundamental guarantee for maintaining normal teaching order; implementing basic teaching operations; and realizing the goal of talent training. The teaching management model is a specific style formed by school education management under certain social conditions. It usually has a certain typicality or leading character. It has a unique personality externally. It has a relatively unified commonality internally, and hence, we consider this as the perspectives.

We consider the following suggestions.

(1) Flexible management fully respects the autonomy of organizational members, that absorbs members to actively participate in organizational management and supervision, and moves decision-making power to the lower levels of the organizational structure as much as possible, shortening the time delay between decision-making and action. The lower-level units have full autonomy and act bravely responsible for results.

(2) We consider taking the form of the optional physical education courses to guide and teach students the skills and abilities of physical exercise, and to develop students' personality.

(3) The object of talent training is flexible, that is, it is then student-oriented, respects the individual intelligence differences of the students, and creates conditions for the individual development of the students, so that students' knowledge structure, thinking mode, and professional ability can meet the diversified needs of the talent market.

As the basis of the entire physical education, the physical education has been placed in a very important position, and the reform of physical education is also being promoted by more and more physical education workers in colleges and universities. Physical education not only has social value, but also lifelong significance.

3. CONCLUSION

Theoretical thoughts on the adaptive development (AD) of current college physical education teaching content is the key idea of this paper. In the process of teaching management reform, there is an urgent need to build a new model that has the characteristics of the times, conforms to the development of students' personality, and can improve the effectiveness of teaching management. This paper gives the suggestions for the current college physical education teaching content.

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Practice Study on Integrating Flipped Classroom into Higher Vocational Physical Education Teaching Reform: A Systematic Study

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Abstract:Practice study on integrating flipped classroom into higher vocational physical education teaching reform is the focus of this manuscript. Strengthen the interaction between teaching and learning in the design of teaching materials, meet the individual needs of students to the greatest extent, construct paper teaching materials, new loose-leaf. Therefore, we consider the Flipped Classroom as the integration pattern. The demand for technical support in the flipped classroom is mainly composed of three parts, namely, "teaching video presentation" and "learning material presentation" before class, "determination of inquiry questions". We provide the novel suggestions for the analysis.

Keywords: Systematic Study; Practice Study; Flipped Classroom; Higher Vocational; Physical Education; Teaching Reform

1. INTRODUCTION

The physical education teaching in colleges and universities from the perspective of educational development should be the combination and development of theory and practice. However, in the actual teaching mode of physical education in colleges and universities, the single teaching model hinders the development of physical education in the colleges and universities. The content of physical education teaching in colleges and universities is mainly based on ball games and track and field sports in the past. They are some relatively traditional sports. Students have already been exposed to them before going to college. At present, we are in a period of rapid economic growth. With the advancement of the science and technology, many new things have sprung up in our sight.

In an era of change, the concept of physical education must adapt to the development of the times in order to meet the needs of the students' physical and mental development and stimulate students' interest in learning. Core literacy requires students to have basic connotations such as the cultural foundation, independent development, and social participation. In view of the current situation of college sports clubs, new research content is put forward on the teaching reform and practice of college sports clubs, but there are still a series of problems in the practice process, and we are facing with the listed challenges.

(1) A large part of the teaching methods of physical education in colleges and universities is to train sports movements as the main teaching content, and some physical education teachers regard this teaching method as the only teaching method, which is not only monotonous, but also has some serious atmosphere in physical education teaching.

(2) The teaching method of physical education in colleges and universities is mainly the teacher's explanation and the students' practice. When the teacher explains a sports action, he first demonstrates and explains it to the students, and the students mechanically imitate the exercises. This teaching method will inevitably cause students to be bored with the physical education learning.

(3) Existing education often ignores the main role of college students in physical education students, and does not pay attention to the differences in sports of college students, which has a negative impact on the physical and mental health of college students and is not conducive to the improvement of college students' physical fitness.

In the following sections, we will consider the novel ideas for solving the challenges.

2. THE PROPOSED METHODOLOGY

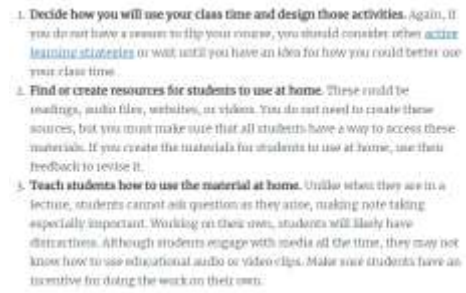
2.1 The Concept of Flipped Classroom

The demand for technical support in the flipped classroom is mainly composed of three parts, namely, "teaching video presentation" and "learning material presentation" before class, "determination of inquiry questions", "creation of teaching situation", "summarization, evaluation and feedback" in class. The core of the flipped classroom is to move a large number of the direct lectures out of the classroom by flipping the traditional classroom, thus freeing precious classroom time for meaningful in-depth learning with listed features.

(1) Integrating multiple variants of flipped classroom into a unified model is a process from special to general, which can provide directional guidance for teachers to implement flipped classroom. However, human understanding of the world often follows the law of "special-general-special", contacting some special things first.

(2) Educators can stimulate and maintain learning motivation by then managing the learning environment. Benoit et al. incorporated Keller's ARCS learning motivation theory into the university's computer teaching design and development, and achieved good teaching results.

(3) Satisfaction maintains learning motivation, activates curiosity to explore new problems, new attention and also motivation match to arouse learning motivation, guide students to make reasonable attribution, and complete learning tasks to bring a sense of achievement, in the figure 1, we refer the Harvard ideas.



1. **Decide how you will use your class time and design those activities.** Again, if you do not have a reason to flip your course, you should consider other active learning strategies or wait until you have an idea for how you could better use your class time.
2. **Find or create resources for students to use at home.** These could be readings, audio files, websites, or videos. You do not need to create these sources, but you must make sure that all students have a way to access these materials. If you create the materials for students to use at home, use their feedback to revise it.
3. **Teach students how to use the material at home.** Unlike when they are in a lecture, students cannot ask question as they arise, making note taking especially important. Working on their own, students will likely have distractions. Although students engage with media all the time, they may not know how to use educational audio or video clips. Make sure students have an incentive for doing the work on their own.

Figure. 1 The Flipped Classroom Focus from Harvard Team (https://bokcenter.harvard.edu/flipped-classrooms#:~:text=A%20flipped%20classroom%20is%20structured, that%20involve%20higher%20order%20thinking.)

2.2 The Higher Vocational Physical Education Teaching Reform

In the teaching process, the ability of the teachers and the construction of the entire teaching staff in higher vocational colleges are important factors affecting the quality of teaching and the level of running a school.

Therefore, it is necessary to adapt to the development trend of the modern physical education and cultivate comprehensive professionals suitable for the market. We consider the integration and relevance of the sports development, form an open and also interactive three-dimensional teaching material system, break through the limitations of the traditional sports paper teaching materials, and better and more intuitively display the technical essentials of sports. As the guide and practitioner of the reform of the talent cultivation mode of physical education in modern higher vocational colleges and universities, the teaching team of physical education in higher vocational colleges and also universities directly affects the success of the reform. Then, we give the following suggestions.

(1) The "three education" reform of the teachers, teaching, and teaching materials is the main content of modern education supply-side reform. Through the "three education" reform, it responds to the needs of my country's rapidly developing industrial talents, thereby promoting the deep integration and mutual support of the vocational education and industrial development.

(2) The focus of the construction of high-quality textbooks for higher vocational education is professionalism and practicality. It is the requirement of the times to form a "closely connected, distinctive, and dynamically adjusted vocational education curriculum system".

(3) In terms of education and teaching ability, teachers are also required to be able to use multimedia teaching equipment for teaching, use Internet live broadcast and video to enrich teaching content, and also strengthen students' learning of the theoretical foundation and practical skills.

3. CONCLUSION

Practice study on integrating flipped classroom into higher vocational physical education teaching reform is the focus of this manuscript. The construction of high-quality sports teaching materials in higher vocational education should be based on "understanding and applying the basic knowledge of sports, learning self-health management, mastering and consolidating at least two sports skills". Hence, this paper gives the novel suggestions for the referring.

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Construction of Legalized Information System and Feedback Algorithm for Management of Higher Vocational Students from the Perspective of School Management by Law

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Abstract:This article studies the law-based information system and feedback algorithm of higher vocational student management under the background of governing the school by law, and briefly analyzes and expounds the significance of the law-based management of students under the law-based school management and the current problems. Then it discusses the path and measures of legalized management of college student management by using feedback algorithm. Based on this, it proposes ways to formulate and improve the existing laws and regulations, enhance the awareness of the rule of law of managers and students, change the concept of student management, establish a student-oriented concept, and improve the law-based approach to the management of students in higher vocational colleges.

Keywords: Legalized Information System, Feedback Algorithm, Higher Vocational Students, School Management by Law

1. INTRODUCTION

College education is not only related to the future development of the students themselves, but also has a huge impact on the construction of my country's socialist modernization [1]. In college education, in addition to professional and technical training, students also need to improve their interpersonal skills and form critical thinking. To achieve this [2], in addition to continuously improving the teaching ability of colleges and universities, it is also necessary to actively promote the concept of governing schools by law in the management of students [3]. Judging from the current actual situation of student management in my country's colleges and universities, there are still some problems that need to be resolved on the road to the rule of law that promotes the concept of governing schools by law [4].

With the progress of society and the development of the times, our country's education pays more and more attention to the application [5] of rule of law in student management, and strives to develop into a college campus that integrates modernization and rule of law [6]. Not only that, from the implementation of a legalized student management system in colleges and universities, students' awareness of the legal system has been significantly enhanced compared to before [7], and their attitudes and handling of everything are mostly based on whether they conform to legal standards as a prerequisite for judgment [8]. In addition, the traditional management concepts of universities have not adapted to the requirements and standards of modern universities [9]. Therefore, the management of college students must keep pace with the times, and scientific management must not only keep up with the trend of the times [10], but also conform to the characteristics of college students, govern the school by law, and build a law-based campus [11]. The rule of law contains two meanings: above the law and the rule of good law. Specific to the field of higher vocational education. The connotation of "law" in the legalization of student management in higher vocational colleges can be divided into broad and narrow sense [12]. The broad "laws" include the Education Law, the Higher Education Law, the Vocational Education Law, and the Regulations on the Management of Students in Regular Higher Education Institutions. It also includes other laws and regulations related to the participating entities of higher vocational colleges [13], such as the "Disabled Persons" The Law on the Protection of Rights and Interests, the Marriage Law, the Intellectual Property Law, etc., as well as the relevant provisions and content related to the rights and interests of college students stipulated in the Constitution, Civil Law, Criminal Law, and Administrative Law: The narrow "law" refers to under the guidance of the upper law of the country [14], The rules and regulations formulated by higher vocational colleges based on their own actual conditions. It mainly includes some internal management rules and regulations of the school, such as school regulations, student management methods, school status management methods, rewards and punishment management methods [15].

Strengthening the protection of the legitimate rights and interests of students is a major trend in the development of education legislation [16], and the 2017 version of the "Regulations" conforms to this trend. One is to further increase and improve the student's rights norms. The 2017 version of the "Regulations" has increased the number of rights for middle school students to 7 [17], and the rights of "obtaining guidance and services for employment and entrepreneurship" and "participating in school management" are added; the "social services" in Article 5, Item 2 of the 2015 version of the "Regulations" are expanded [18], Divided into two parts, "social practice" and "volunteer service", included in the second paragraph of Article 6 of the new regulations; detailed provisions on the "rights of students to participate in school management" [19], covering

"information, participation, expression and supervision" Four rights. In addition [20], the 2017 version of the "Regulations" also specifically lists the chapter "Student Appeals". Students' legal rights can be effectively relieved [21] and reliably protected through appeals, highlighting the purpose and determination to maintain and protect the student's subject status and legal rights and interests [22]. At this stage, the rule of law in our society is mainly accompanied by democratization and marketization [23], with legalization and democratic systems as the key content, and the transformation from the rule of man to the rule of law as the core state governance mode [24].

2. THE PROPOSED METHODOLOGY

2.1 The Govern the School According to Law

If you want to really promote the implementation of laws and regulations, and thus have the effect of restraining and deterring, you must strictly enforce the law. However, judging from the current student management work in colleges and universities, there are often cases of lax law enforcement, such as non-compliance with regulations, empathy, and back door. At the same time, when carrying out student management work, relevant staff often cannot distinguish the primary and secondary relationship between students and the school. Now most colleges and universities are carrying out comprehensive reforms in full swing, gradually focusing on the management of colleges and universities. Transfer to the students, and integrate the superior resources of the whole school to explore the innovation road and the road to the rule of law in the reform of colleges and universities.

On the premise of fully respecting students as the main body, further improve the management system of college students and create a law-based campus atmosphere and culture. This is not only in the new situation, but the direction of modern university reform is also to improve the quality and necessary requirements of higher education. Most of the students adopt high-profile management methods of informing or ordering, and they have not fully listened to the opinions of the students, nor have they achieved democratic management. The root cause of such frequent occurrences is that some of the staff in charge of student management have weak legal awareness and lack of democratic concepts, which will lead to the proliferation of the rule of man, the lack of the rule of law, and the lack of strict law enforcement. The connotation of "governance" in the legalization of student management in higher vocational colleges is mainly "governance". Refers to two kinds of service and management behaviors of teachers and managers of higher vocational colleges to higher vocational students. The essence of "governance" lies in democracy and scientific management. The legalization of student management in higher vocational colleges is to realize the ultimate management and education role of higher vocational colleges by regulating, guiding and coordinating the management subject, management behavior and management authority. The reality of the rule of law in student management in higher vocational colleges is the most concentrated embodiment of the idea of governing schools.

2.2 The Information System of Legalized Management of Higher Vocational Students

Improving the current student management system and laws and regulations plays an extremely important role in strengthening the legalization of college student management. To achieve this, the first step is to strengthen the construction of laws and regulations concerning student management, and to implement them effectively, so that these laws and regulations can be truly applied to the management of students and effectively improve the quality of student management in colleges and universities.

The core and main location of student management is the campuses of various universities. Therefore, students are the administrative body of the entire university management system. The relevant laws and regulations of our country also clearly indicate that in the basic requirements of student management, the situation of student rewards and punishments And the rights of student status and degree evaluation are controlled by universities, and students have no right to deal with them. However, the existence of students as natural persons has the right to education, privacy and equality, which leads to conflicts and conflicts with these basic rights of students when exercising the management rights of students, causing disharmony. Secondly, only by constantly improving and revising current laws and regulations to make them more in line with the current social development can these laws and regulations play a better role.

Finally, it is necessary to establish a sound internal management system in colleges and universities. It should be noted that the internal management system of colleges and universities must strictly follow the relevant laws and regulations promulgated by our country. At the same time, it also needs to take into account the actual situation of the colleges and universities, follow the principle of democracy, and actively listen to the opinions of students and other administrators. Such an internal management system Only by gaining public recognition, can we ensure that the internal management system can play a good role, so that students can actively and actively abide by relevant rules and regulations, and at the same time protect the rights and interests of students, establish a better university environment. Higher vocational colleges should take their own school's university charter as an opportunity. Establish and improve various rules and regulations in the school. Make the school charter detailed management regulations while not violating the upper law (national law). Use more advocacy clauses, less prohibitive clauses, and punitive clauses with caution. Realize the regulation, operability and humanization of the management system.

2.3 The Feedback Algorithm of Legal Management System in Higher Vocational Schools

Comply with the general principles of governing the school by law, start with legislation, fill up the legal gaps in the management of college students in our country, increase attention to the laws and regulations of student management, and provide adequate legal basis and means for college student management. The second is to improve and add to the existing laws and regulations in our country, and to improve the lack of Chinese law in the management of college students. The administrators of higher vocational colleges must get rid of the shackles of traditional concepts when conducting student management, and establish two ways with students. Equal relationship. Establish a student-oriented philosophy when dealing with student affairs. In fact, it is the essential requirement of the legalization of student management in higher vocational colleges. It is also in the same line with the strategy of ruling the country by law. Specifically, first, the exercise of the educational management power of colleges and universities must be based on respect

for the development of students' personality and protection of their rights and interests.

When dealing with student matters, everything is centered on students' rights and interests, and strive to create a relaxed, democratic, and rule of law environment for student development, which is ultimately conducive to the growth of students. Student-oriented is the basic value requirement of school education activities. Identify legal loopholes. It is reported that my country's existing laws concerning the management of colleges and universities have been formulated for a very long time. Many of these laws and regulations have fallen behind and are not in line with the development trend of the current society. It is necessary to formulate college laws and regulations that meet the current situation and the characteristics of modern college students as soon as possible. Make up for shortcomings, establish judicial and legislative interpretations, and ensure the legitimacy and fairness of the revision process. The rules and regulations of higher vocational colleges are the concrete embodiment of laws and regulations in higher vocational colleges, and they are also the most direct basis for the management of students in higher vocational colleges. The legal management of students in higher vocational colleges can start from the following aspects.

First, the formulation of rules and regulations adheres to humanism, with equal emphasis on rights and obligations. Promoting the all-round development of students is the original intention of the school rules and regulations. The school rules should not be based on a large number of restrictive clauses such as "should" and "not allowed." uthorization specification.

3. CONCLUSIONS

Strengthening the rule of law in the management of college students is the only way for the development of higher education and even modern education in my country. Judging from the actual situation of student management in colleges and universities in our country, to strengthen the legalization of student management in colleges and universities, we must change the current management concept of college student management, improve the current management system and laws and regulations, and improve the rights relief mechanism. Only in this way can we promote the process of rule of law more effectively and provide greater help for the cultivation of talents in our country.

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Campus Sports Culture BBS Data Monitoring Algorithm with National Sports Characteristics Based on Intranet IP Interconnection Data Mining

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Abstract:This paper introduces the IP address translation technology (ie NAT technology) between the internal network and the external network, discusses the technical characteristics of using Cisco's PIX (Private Internet Exchange) firewall to realize the isolation of the internal network and the external network (Internet), and proposes an IP address with the same name The new concept of conversion technology (that is, the NAT technology of the same name). Taking campus sports culture, Yunnan sports culture, minority sports culture and the combination of the three as the research object, the importance and necessity of constructing regional campus sports culture, in order to Provide theoretical help for further research in this area. National traditional sports are part of our culture. The BBS data are classified into three categories and collected in different ways. The article mainly introduces the part that uses incremental methods to obtain updated data.

Keywords: Campus Sports Culture, BBS Data Monitoring, National Sports Characteristics, Intranet IP Interconnection Data Mining

1. INTRODUCTION

With the increasingly fierce competition in the telecommunications market, telecommunications companies continue to provide new services to further develop new markets, and continuously improve service quality to attract users [1]. Now, the external environment of enterprises is more severe, which is reflected in: customer demand F1 tends to be individualized, diversified and popular, and production tends to be multi-variety and small batch; not only consumes a lot of manpower and material resources, but also its analysis accuracy is also Very debatable [2].

Therefore, it is urgent to introduce an intelligent technology and an effective knowledge-based information processing technology to improve the efficiency and quality of the network management system, and data mining (12) is such an intelligent information processing technology [3]. The market competition is becoming increasingly fierce, and price, quality, time, service, etc. have become the hot spots of competition; the technology that separates the internal network and the external network (Internet) is called a firewall [4]. It is actually a network isolation technology. When the two networks exchange information Firewalls implement an access control measure that allows approved packets to and from the internal network and the external network [5].

Using the method of literature materials, expert interviews and logic and analysis, this paper takes campus sports culture, Yunnan sports culture, minority sports culture and the combination of the three as the research objects, and interprets the national characteristic sports culture and campus sports culture [6]. In the context of the continuous development of society, national characteristic sports culture is a material sports culture phenomenon formed in a specific area and environment, along with the whole process of human production and practice [7]. Campus sports culture is the core element of campus culture. Campus sports culture plays an irreplaceable role in cultivating competitive high-quality talents that meet the requirements of the new era [8].

Campus sports culture is an extension of physical education in colleges and universities. There are many ethnic minorities in our country and the diversity of cultural forms is strong [9]. Vigorously developing ethnic sports and promoting the culture of ethnic minorities are the humanities and science and technology projects that the Chinese government attaches great importance to [10]. The traditional sport of the Chinese nation is an important part of the traditional culture of the Chinese nation. As a valuable resource in the field of history and culture, my country's national traditional sports has a strong and profound cultural accumulation and distinctive individual characteristics [11].

Internet public opinion is the sum of the political beliefs, attitudes, opinions and emotions expressed by the public on the government management and various phenomena and issues in the society through the Internet [12]. Features For a long time, telecommunication services have been monopolized by the state. Now, due to the introduction of competition mechanism in the telecommunication market, many telecommunication service companies have launched fierce competition for the market [13]. The traditional management information system (/diS) is mainly aimed at the structural problems of R, with the main goal of improving the operational efficiency of enterprises, and strengthening management by converting a large amount of data into valuable information [14]. With the progress of society and the development of technology, in a broad sense, data mining is the process of finding laws and patterns in a collection of facts or observation data [15].

It mines information and discovers knowledge without explicit assumptions, and the discovered knowledge is implicit and previously unknown potentially useful information that is expressed in the form of concepts [16], laws, and patterns. In the Internet, the intranet and the extranet use their own IP addresses. Each IP address corresponds to a

host. The intranet hosts are restricted to the intranet and the extranet hosts are restricted to the extranet [17]. They are difficult to access each other. The importance and necessity of campus sports culture, the combination of Yunnan sports minority sports culture and the existing campus sports culture is studied, in order to build a campus sports culture with the characteristics of Yunnan minority sports culture [18].

In the education policy of all-round development of morality, intelligence, physique, beauty and labor, it has a positive effect on cultivating talents with physical and mental health, practical ability and innovative spirit. In essence, both national characteristic sports culture and campus sports culture are of the times and education, and their extensions intersect with each other and are unique [19].

2. THE PROPOSED METHODOLOGY

2.1 The Intranet IP Interconnection Data Mining

There may be a lot of important information hidden behind these large amounts of data, which is the description of the overall characteristics of these data and the prediction of its development trend. If this internal information can be extracted

Data mining is the process of extracting potential and valuable knowledge (models or rules) from a large amount of data. To be precise, Date Mining (abbreviated as DM) is a decision support process, which is mainly based on AI, machine learning, statistics and other technologies. Switches, hosts, etc.) for unified monitoring and management, and a network management system to ensure the quality of IP network operation.

It can detect abnormal operation status in IP network in time, generate alarm log according to alarm situation and notify users in time. PIX firewall usually has two Ethernet interfaces, one internal interface is used to connect to the internal network and the other external interface is used to connect to the external network (generally connected to an external router). Data mining technology involves database, artificial intelligence, statistical analysis, visualization, parallel computing, machine learning and other technologies. Data is the foundation of the entire system, and the processing of raw data plays a decisive role in the success or failure of the entire system. Due to the general wide variety of telecommunication services and frequent changes, and the low degree of internal systemization of telecommunication, the historical data structure of the dog volume is inconsistent.

The purpose of numerical data analysis is also the purpose of data summarization, and it is required to condense the data and give it compact description. It abstracts the relevant data in the database from the low level to the high level, so that people can process or browse the data from the higher level view.

2.2 The Campus Sports Culture with National Sports Characteristics

Campus sports culture as a social culture. It is gradually formed in the long-term teaching practice process of the school, and it is developed under the direct participation and careful cultivation of teachers and students. Path analysis of the development of campus sports culture with national characteristics in the new era. Create a characteristic campus sports culture hard and soft environment. Improve the basic hardware facilities and venues, strengthen the policies and ideas for the construction of sports culture with campus characteristics, and enhance students' national awareness.

Deeply excavate and sort out the existing ethnic traditional sports culture and resources in the region, analyze their characteristics, functions, applicability and actual development, screen out the competitive, content continuity and ethnic characteristics sports projects carried out by the school, and build a national sports program with ethnic characteristics. Advanced sports culture on campus with regional characteristics. Scientism and humanism are integrated to form a diversified curriculum target system, better implement the concept of lifelong sports, and strive for the comprehensive and free development of human beings. Therefore, the goal of physical education curriculum should not only emphasize the scientific nature, but also the humanism of the students. In addition, the campus networks of many universities are connected to Chinanet and Cernet at the same time, that is, the intranet is connected to multiple external networks. One of the external networks provides sufficient IP addresses (for example, the IP address of Cernet is sufficient). After data sampling and data exploration are implemented, You will have a better understanding of the status and trends of the data, and you will be more clear about the problems to be solved. At this time, you should further refine the problems in time.

2.3 The Campus Sports Culture BBS Data Monitoring Algorithm

The system implements the first-come, first-served strategy for connection establishment, request sending, etc., so the data structure of the queue is used in the implementation. Special posture proofreading in ethnic sports teaching the visual monitoring module in the visual monitoring platform needs to provide accurate data for the special posture proofreading module, and the filtering process is very important. There are few studies in this area, and the more representative literatures are: Jiang Xia published the article "Based on Shaanxi National Traditional Sports Resources to Build College Campus Sports Culture". The article starts from the importance of national traditional sports and the current lack of national traditional culture in colleges and universities.

3. CONCLUSION

The campus sports culture has not explored the minority sports culture deeply enough. An urgent problem before us is how to combine the modern sports culture with the national traditional sports culture and develop modern sports while inheriting the traditional sports. Sports, the monitoring of BBS public opinion information on campus network has naturally become the focus of research. To monitor BBS public opinion information, it is necessary to first collect BBS site pages, and extract relevant information of all posts as the data basis for further public opinion analysis.

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Binary Game Framework of Sports Culture Communication Channels and Health Data Based on Quantum Decentralized Data Integration

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Abstract:Based on the two core applications of quantum information, this paper analyzes the current consensus channels and health data patterns of sports culture dissemination. First, it expounds the dual structure of the dissemination of sports culture, builds a quantum decentralized data integration center based on blockchain, provides financial support for the construction of college students' sports culture, and provides platform support for health data. Then, a sports culture dissemination and promotion system was constructed, from perfecting and standardizing the sports system, shaping and maintaining a good image, establishing brand awareness, innovating dissemination content and dissemination methods, adhering to people-oriented, and striving for government support. The experimental results proved that based on quantum decentralization The binary game method can effectively increase the scope of sports culture dissemination and improve the analysis of health data.

Keywords: Binary Game Framework, Sports Culture Communication Channels, Health Data, Quantum Decentralized Data

1. INTRODUCTION

Binary game framework is different from the previous system-centric personal data storage usage, it is a people-centric personal data storage usage. Our personal data is stored in hospitals, governments, e-commerce websites, etc. PDS collects and stores data on an individual basis [1]. Blockchain technology is considered to have a more convenient and effective data management model, with better security and privacy Protection mechanism and have lower maintenance cost and good system stability. If digital identity is scattered, each digital contact will issue a digital identity to identify individuals. To this end, we have to repeatedly enter similar information into the ID/PW every day, just like we have various registration cards, loyalty cards, credit cards, driver's licenses, etc. in our wallets. To make matters worse, our data is gradually being created around these disjointed digital identities [2].

It is of great significance to deeply understand the unique role of sports in the process of building a socialist cultural power and building a socialist harmonious society, and consciously integrating the goals and tasks of sports culture construction into sports practice [3]. It reflects strong comprehensive functions and social value. It is of great significance to deeply understand the unique role of sports in the process of building a socialist cultural power and building a socialist harmonious society, and consciously integrating the goals and tasks of sports culture construction into sports practice [4].

Algorithms are the greatest common divisor of global civilization and the basis for the most consensus among all mankind. [5] Today, algorithms, data and computing power, as the three cornerstones of artificial intelligence, are quietly changing people's production and lifestyle through continuous upgrading, especially the "computing power" exhibited by quantum computing. It is difficult to judge the origin and reliability of the data. This is indeed the case, and the derived data may have flaws or be illegally tampered with for profit. Data traceability is one of the effective measures to solve these problems [6].

The definition of regional culture is the sum of all the material and spiritual wealth created by regional members through practical activities [7], which is a multi-level and multi-structure complex with unique characteristics. Regional culture can reflect the values and way of life of the group in the region, including geography, history, food, folklore, economy and so on [8]. The transmission of information is easy to be fragmented and superficial, while indiscriminate and out-of-context reports will spread misinformation and make students misinterpret. It can be said that new media is a "double-edged sword". If used properly, it will deliver positive energy to the society, otherwise it will cause some relatively negative social impacts [9].

In the 1990s, Western Europe and the United States began to focus on the cultural nature of sports in the field of sports research [10]. At the end of the last century, the United States established a cross-cultural communication study focusing on media research, which greatly promoted the global spread of American sports culture [11], making the United States become an example of the dissemination of sports culture. Generally [12], the blockchain architecture can be divided into four layers according to functions, which are: user layer, service layer, core layer and base layer [13]. Among them, the base layer and the core layer provide the basic operating environment and consensus services for the blockchain system. Blockchain is a distributed ledger technology based on the principles of cryptography [14]. Digital signatures protect the integrity and unforgeability of blockchain data. Hash pointers connect blocks end-to-end in sequence [15].

2. THE PROPOSED METHODOLOGY

2.1 The Quantum Decentralized Data Integration

The core of the blockchain is a chained distributed database guaranteed by cryptography, so it can be said that cryptography is the most fundamental guarantee of blockchain security. The two-way encryption algorithm used in communication between nodes can usually be divided into symmetric encryption algorithm and asymmetric encryption

algorithm. Through investigation, it can be found that by using the "asymmetric encryption" and "hash" algorithm characteristics of blockchain technology, archives management agencies can achieve impressive results in many aspects, such as the secure transmission of archive information data and the protection of user information privacy.

Data traceability, as the name suggests, is a technology that traces the origin and origin of data, and traces the source and production process of data according to the recorded traceability data. Through data traceability, people can find the source of the object to be traced, judge its authenticity in order to safeguard their rights, or gain a deeper understanding of the comprehensive information of the traced object. When the input value length is the same, the calculation speed of the multilinear hash function is about 7.5 times that of the Toeplitz hash function, and the key length is about 11.5 times.

2.2 The Sports Culture Communication Channels and Health Data

From the definition of communication science, we can understand the communication of sports culture as: through the study of sports culture, increase public interest and recognition, and make the whole world run more happily. Use GO language to simulate the MH-USS signature scheme and test the parameters of the platform. Due to the limited experimental environment and no QKD-related hardware equipment, the method of generating pseudo-random numbers is used to simulate QKD. From the comparison of the two tables, the difference in the degree of attention between traditional media and new media is obvious, and the students' attention to traditional media is significantly different. Generally low, especially for paper reading materials such as newspapers and periodicals, showing a very low degree of attention. On the other hand, new media are on the contrary. Except for individual forms of communication in the past, most new media have received a very high degree of attention to the process of sharing keys to avoid the situation of transmitting keys in plaintext.

Different from traditional distributed storage, the blockchain network has the following characteristics: First, each participating node has a complete data storage process, and each node is independent. The awareness of physical activity is that students recognize the meaning and role of sports in physical activities on the basis of the active psychological activities generated, this survey takes the number of students consciously participating in physical activities per week as the basis for analyzing the awareness of physical activities. It is not conducive for Chinese learners to understand the regional culture of Liaoning, and cannot help Chinese learners in Liaoning to improve their intercultural communication skills, eliminate cultural shock and anxiety. Therefore, as the dissemination path of Liaoning regional culture, studying in China should be adjusted in a targeted manner. The traditional sports culture of ethnic minorities is the worthiest of dissemination and promotion of cultural information resources in Dehong Prefecture. Although this resource is abundant, its inheritance and protection are still insufficient at present, and many projects are almost dying out. It needs to be introduced into public life by means of mass media and even sports development. There are four forms of communication: interpersonal communication, group communication, organizational communication and mass media.

2.3 The Binary Game Framework for Dissemination Channels and Health Data

Corresponding to the basic unit of conventional computers, the basic unit of quantum computing is the quantum bit. E-mail is the main way for foreigners to communicate with our province before coming to Liaoning. Taking college admissions as an example, when sending emails, schools' package and send promotional videos, pictures, articles, etc., containing the introduction of Liaoning regional culture, which can be passed on to students and play an active role in spreading Liaoning regional culture. The analysis believes that although the entry of foreign media has brought new understanding and possibility to the dissemination of sports culture in Dehong Prefecture to a certain extent and has also broken the monopoly of local media to a certain extent, the development of mass media in Hongzhou still follows the same trend. Not on the development of local sports and cultural resources. After all nodes receive feedback messages from nodes and clients, they enter the next round.

Further research is the nonlinear structure proposed by Loewenberg, where the blocks are ordered in a DAG, each block allowing multiple predecessors. That is, the pointer field of the block header of each block may contain multiple pointers to the previous block.

3. CONCLUSION

All activities and even hardware facilities for the dissemination and promotion of sports culture contain elements of educating people. The creators and disseminators of culture should establish the concept of "people-oriented", so that the masses can feel the humanistic care of sports culture through the activities themselves. The dual structure of health data and sports culture plays a subtle role in educating people. On the track of quantum computing, archival information technology researchers must catch up, especially paying close attention to the development trend of new technology innovations such as blockchain, quantum computing, and artificial intelligence.

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Research on the Psychological Motivation of Juvenile Criminal Law Crime in the Background of Big Data

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Abstract: Juvenile robbery is mainly in the form of joint crime and accomplished crime, and the elements of criminal motive and criminal instrument have special value. Its judicial countermeasures at the trial level are as follows: alternative conviction, unconverted conditions of robbery, negation of aggravated crime, elimination or mitigation of the wrong understanding of criminal illegality This paper adopts case analysis, experience summary and literature analysis in research methods. It is expected to reveal juvenile delinquency, enrich and improve the existing criminal psychology system, and correctly educate minors for families and schools, and cultivate a sound personality through the study of juvenile delinquency psychological characteristics, causes of criminal psychology and prevention of criminal psychology.

Keywords: Psychological Motivation ; Juvenile Criminal; Law Crime; Big Data

1. INTRODUCTION

Robbery, as a natural crime that infringes on the two basic legal interests of human rights and property rights at the same time, is also known as robbery in the history of Chinese criminal law and some foreign legislations. In this sense, the psychology of robbery crime, commonly known as the logic of robbers, is an abnormal way of thinking and psychological process that affects and dominates the criminals to forcibly rob others' property. The negative influence of social family and school is the external factor of juvenile delinquency, but it will inevitably work through internal psychological factors. If there is no good psychological quality, it is difficult to resist various external negative influences. Once accepted, the external negative influence is easily transformed into internal negative psychological quality. Juveniles have the following characteristics

Since 2012, due to the development of network technology and the influence of various new media, the diversified environment of information has gradually formed, and the means of juvenile delinquency have become more and more intelligent. For example, virtual property theft and fraud cases on the network often occur, and sexual assault cases caused by online social interaction also often occur. Sexual assault cases are becoming the main threat of juvenile sexual assault crimes. 54% of the victims are sexually assaulted because they make friends and meet online friends. The age of such victims is concentrated between 15 and 18 years old. Low and vulgar emotional experience.

Whether the low-level and vulgar needs of criminal minors are met directly affects the changes of their emotions and emotions, and then affects the way they behave. Once the needs are not met, they will have bad emotional experience, and then obtain the satisfaction of needs through illegal means. (Instability of emotional experience. The emotions of juvenile delinquents are changeable and moody. Their moods often fluctuate from high to low, from good to bad, which is hard for Sun to understand. They can be lost in the moment of satisfaction and full of passion, or they can be depressed and depressed because of a little frustration.

Criminal Motivation	# of Episodes	# of Offenders
Financial Gain	3	7
Rational Choice	6	14
Emotional Turmoil	5[12]	6
Medical/Psych. Deficiencies	4	4
Total	18	31[13]

Table. 1 Criminal Motivation by Episode and Offenders

2. THE PROPOSED METHODOLOGY

2.1 The connotation of juvenile delinquency psychology

Many people who kill relatives have a certain degree of personality disorder. For example, some actors have personality disorders and conflicts. They can't communicate well with their parents and elders in the family, but can talk and laugh with others outside; At home, I am lonely, cold, warm and generous, and outgoing. For example, on January 17, 2000, the case of killing the mother occurred in Jinhua, Zhejiang Province, and the case of Gao Weisheng employed to kill the father in Zhoukou, Henan Province. Distorted interests and demands. At present, the economic, political and cultural pattern of our society is in the transition period, and its outstanding characteristics lie in the imbalance: on the one hand, the imbalance of the regional economic development level has led to the urban economic development level generally higher than that of the rural area, and the "urban people" and "rural people" are differentiated in education, medical care, registered residence and other fields, which has led to mutual exclusion of the public's psychological positioning.

Juvenile delinquency is directly related to their weak moral awareness of the legal system. Therefore, parents and teachers should pay attention to their legal education, strengthen their legal system awareness and improve their awareness of law abiding. This is not only a work to ensure the healthy growth of teenagers, but also a radical measure to prevent juvenile

delinquency The Law of the People's Republic of China on the Protection of Minors describes the "principle of the best interests of the child" of the United Nations Convention on the Rights of the Child as "special and priority protection". However, a large part of the law enforcement officers and public affairs managers of the Department of Public Security and Law of China and the organs with the function of protecting minors only understand this concept orally, and still adhere to a very traditional and rigid concept in the heart, That is, "raising and managing children are parents' business". Jianghu culture is the most typical.

2.2 Construction of operation mechanism of psychological prevention model of juvenile delinquency driven by big data

Due to lack of life support, foreign minors are in groups and are vulnerable to the influence of Jianghu culture. They take cynicism, robbing the rich and helping the poor as their group character, loyalty to the liver and sacrifice their lives and forget their lives as their personality model, and take "milk is mother", "parents at home, friends outside" as their value orientation. Because the physical and psychological of minors are in a period of rapid development and change, and their self-consciousness is also developing rapidly. Therefore, we should respect the dominant position of minors in education and give play to their independence and initiative on the basis of democracy and equality in education and teaching. We should inspire and guide minors to consciously transform education requirements into their own aspirations through their own thinking and experience. The era of big data, Data dominates the ecology of minors.

The criminal psychological prevention process of minors protection and crime prevention and control driven by big data is actually represented by the integration process of data storage, extraction, analysis and solution of minors in the jurisdiction of social organizations and education institutions of the Department of Public Security and Law, which are responsible for the protection of minors. The data runs through the whole process of minors protection and crime prevention and control. There are many deviations in the individual psychological control ability of foreign minors: first, the transformation from inferiority to violent crime. According to the research results of psychologist Adler, adolescents often have certain inferiority complex. In order to overcome this kind of mentality, they often take self-esteem, arrogance, resistance and other aggressive behaviors to compensate, and some even commit violent crimes for it. The occurrence of crime is the result of the interaction of many factors.

People commit crimes for both social reasons and individual psychological reasons; It is not only the product of the social environment, but also the result of the subjective initiative of the actors, and the external social reasons are affected by the internal psychological reasons. People live in society and are always under the influence of various external factors. Criminal psychology is the result of the conflicts and struggles that have not been properly resolved in the process of interaction between various external factors and human psychological factors.

3. CONCLUSION

There are deep-seated reasons for the emergence of juvenile delinquency psychology, which is not only the result of the negative impact of the external adverse environment such as family, school and society, but also subject to the constraints of juvenile's own adverse psychological factors. The healthy growth of minors is not only related to their personal affairs, but also to the well-being of each family and the progress and development of the whole society. Targeted and correct education and psychological counseling for minors and actively creating a good social environment for the healthy development of minors' physical and mental health can effectively prevent and correct minors' criminal psychology.

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Research and Practice on the Training of Accounting Talents Based on Information Technology and Internet

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Abstract: At present, education reform is in the stage of deepening development, and the development of education informatization is the key factor to support education reform. In the process of the development of information technology and the profound reform of accounting education, college teachers must actively respond to these challenges and make a difference in the educational reform. Based on this, the practice of financial accounting teaching reform and talent cultivation based on information technology and the Internet in the financial accounting specialty is carried out, and the reform approach of financial accounting teaching mode integrating information technology and the Internet is mainly discussed. Under the influence of "Internet plus", the financial accounting specialty must clarify the goal of talent cultivation, combine the advantages of the Internet, provide rich resources for teachers and students, and achieve interaction and exchange between teachers and students.

Keywords: Accounting Talents ; Information Technology; Technology and Internet; Research and Practice

1. INTRODUCTION

The main problem of the reform of talent training mode is to realize the transformation from knowledge teaching to the emphasis on ability and quality training, with ability training as the core. It is particularly important to achieve changes in training objectives, training specifications and training process. In the three aspects of knowledge, ability and quality of talent training quality, the reform of talent training mode should change from paying attention to knowledge transfer to paying more attention to ability and quality training. The training objectives of higher education determine the construction of teaching content and curriculum system, which is the soul of talent training program.

Therefore, based on the above objectives, we should strengthen the training of financial and accounting talents. Manual knowledge should be combined with information knowledge to carry out reasonable teaching together and comprehensively improve students' practical skills of accounting knowledge. Now the application of accounting knowledge is combined with information technology. It is necessary to fully understand information technology, master the basic operation of information technology, and let students comprehensively improve their comprehensive knowledge application ability, cultivate their independent thinking ability, and independently complete the experimental operation ability through large-scale comprehensive experiments of accounting and computer management. Students can further consolidate the basic knowledge and improve the learning efficiency through micro-course learning before class.

The teacher recorded the micro-course in advance, released it to the group, learned about the students' learning situation online in time, and explained the key points. At the same time, teachers create more discussion time for students in the classroom. Through discussion, students can understand their own problems. The rapid development of Internet technology, the wider and wider application of technology, the application of Internet technology in the reform of teaching mode, and the continuous change of Internet technology have brought certain challenges to the reform of teaching mode of accounting major.

2. THE PROPOSED METHODOLOGY

2.1 Training Objectives of Applied Talents

In recent years, China's rapid economic development has provided opportunities for the development of the accounting profession, but it is also faced with certain competition, especially the changes in the employment standards of enterprises. Now enterprises need high-level applied talents, especially compound talents with certain practical experience. There are abundant resources in the Internet. If students can be trained to master the ability to search and find resources, teaching and learning efficiency can be greatly improved. The Internet gives students full learning opportunities, and also gives them the basic ability to surf the Internet. It is not difficult for students to find information and use network resources.

Teachers can recommend various excellent and professional websites in the teaching process to guide students to collect resources. The first level is to carry out information-based accounting basic experimental teaching for students. Experimental teaching is the key factor to improve students' practical skills. At the primary learning stage, students generally need to do some basic experiments, cultivate their experimental literacy, and lay the foundation for future comprehensive experimental operations. Students are required to have a solid foundation, and use knowledge to complete some basic experiments independently. Professional courses can use UMU interactive app to make effective use of students' mobile phones. This software can help teachers and students interact with each other in a timely manner in the course of mobile phone platform applications. The software is mainly designed to drive the atmosphere of the classroom and teaching, realize the on-site interaction of everyone, and drive everyone to participate.

2.2 The New Idea of Accounting Teaching in Colleges and Universities

The interactive process data can be stored in the cloud and stored permanently, making the course more vivid and effective. The construction of the integrated teaching network platform needs the application of computer network technology in the campus of colleges and universities. In the process of the gradual improvement of the digital campus of colleges and universities, it provides a guarantee for the integrated teaching network platform. After the construction of the integrated teaching network platform is completed, teachers and students can learn through the network teaching platform, which facilitates students' learning and increases the diversity of teachers' teaching methods. A perfect teaching platform will help to improve the application of information technology in accounting majors.

This platform should first include various management data of students and teachers. Secondly, it should include comprehensive management data such as school basic data. Finally, it should include various applications, such as maps, weather, safety, online classroom and other teaching resources. Enrich these basic elements and data and improve the functions of the teaching platform. The second level is to use it after students master the basic accounting, give students a certain space appropriately, and let students carry out independent experimental design. In the teaching process, teachers build a platform to let students become the protagonists in the class, design their own experiments, experience the fun of experiments, and cultivate students' ability to practice.

Autonomous experiments stimulate students' interest in learning, make them become the protagonist of the experiment, improve students' practical ability, and help cultivate the application-oriented senior talents needed by enterprises. With the rapid development and popularization of Internet technology, students have basic Internet access tools and have access to network resources. In the process of teaching, teachers carry out data application practice and provide students with professional websites, such as Guoyan.com, http//www.cninfo.com.cn, Dong'ao Accounting Online School, China Accounting Online School, Chongqing Accounting Home, etc., to fully cultivate students' ability to use the advantages of the big data era to explore network resources.

3. CONCLUSION

Social development needs high-quality talents, and economic development needs the participation of accounting talents with high professional quality, using information technology and the Internet. Teachers use the Internet to teach, students use the Internet to learn, information flows on the Internet, knowledge forms on the Internet, and offline and online activities complement and expand each other. At the same time, we will build a three-dimensional network teaching resource library that matches the finance and accounting majors and combines dynamic and static. According to the actual job requirements, systematic knowledge explanation should be carried out, and attention should be paid to the cultivation of students' practical skills. Teachers can use advanced teaching methods to improve students' practical skills and cultivate the complex advanced application talents required by enterprises. This is the development needs of modern enterprises and conforms to the regional requirements of modern social development.

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Research on the Innovative Development of College Students' Ideological and Political Education from the Perspective of Cultural Self-Confidence

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Abstract: From the perspective of cultural self-confidence, this paper discusses the necessity of integrating excellent traditional culture into the ideological and political education of college students, and uses traditional culture to create a new path for the effectiveness of ideological and political education, reflecting the characteristics of ideological and political education in colleges and universities with Chinese characteristics. Establishing the basic path of ideological and political education for college students around cultural self-confidence is bound to cultivate more new socialist youth with ideals, morality, quality, self-confidence and firm faith. Based on the analysis of the internal relationship between cultural self-confidence and ideological and political education of college students, this paper establishes the basic path of ideological and political education of college students from the perspective of cultural self-confidence.

Keywords: MOOC Resource; Teaching Application; Tourism Management Education

1. INTRODUCTION

University is an important period for the formation of young people's outlook on life, morality and values. A survey shows that compared with college students born before the 1980s, the values of college students born after the 1980s and 1990s tend to be more civilian and utilitarian. 58.5% of college students think that "ideal becomes more and more realistic"; "Never before" and "game life" accounted for 19.1%; 59.1% of the general public believe that "college students' ideals are becoming more and more realistic". There is a relationship between cultural self-confidence and college students' ideological and political education that is interdependent and mutually reinforcing.

Only by building cultural self-confidence can college students establish correct values, ideas and moral concepts. The ideological and political education of college students is the main carrier to guide college students' thoughts, concepts, beliefs and consciousness, and is an important guarantee for college students to establish cultural self-confidence. Therefore, in order to improve the cultural confidence of college students in an all-round way, we must carry out ideological and political education of college students in a targeted way, and build a basic path to adapt to it. To promote Chinese college students to establish more positive and healthy ideas, and improve their understanding and recognition of traditional culture.

The excellent traditional culture of our country has accumulated from different dynasties and generations. It is the accumulation of ideology and culture and the inheritance of national spirit. It is of great significance to the sustainable development of the country and the nation, and is the root of cultural self-confidence. Integrating the concept of cultural self-confidence with ideological and political education can enable contemporary college students to better understand the fine culture of the Chinese nation, promote the construction of modern advanced culture, and enable college students to have a deeper understanding of contemporary socialist advanced culture under the background of the fine traditional culture of the Chinese nation with a long history and the revolutionary culture derived from the construction stage of the new China, thus forming a correct attitude towards each culture, So as to select the right choice and strengthen the sense of trust in the national culture.

2. THE PROPOSED METHODOLOGY

2.1 The path of integrating traditional culture into college students' ideological and political education

The ideological and political education in colleges and universities undertakes the important mission of guiding college students to establish correct world outlook, outlook on life and values, and cultivating qualified socialist builders and reliable successors. Its effectiveness is directly related to the quality of college students' growth. Under the background of "Internet+" and the influence of multiculturalism, the mainstream ideology of contemporary college students is positive, but to varying degrees there are problems such as vague ideals and beliefs, distorted value orientation and weak sense of integrity, which have brought many challenges to ideological and political education in colleges and universities. The thinking mode, behavior mode and personality psychology of post-90s college students are facing the impact of multiculturalism and the invasion of non-mainstream ideology, which is a huge difference from the past. The openness, interactivity and sharing of information under the Internet environment also challenges the effectiveness of ideological and political education.

This requires ideological and political workers to adapt to the laws and requirements of network communication, and build a new mechanism of ideological and political education to adapt to it, so that college students can have a clear ability to distinguish and criticize in the complex environment of multiculturalism, and maintain the necessary cultural self-confidence to establish self-correct value orientation. For

college students, guided by the advanced culture of socialism with Chinese characteristics, making them realize the connotation of the advanced culture of socialism with Chinese characteristics, and feeling the progressiveness of political culture, social culture, and campus culture construction can guide them to firm their ideals and beliefs, and achieve the goal of improving their cultural self-confidence. At the same time, we should also consider how to integrate the advanced culture of socialism with Chinese characteristics into the ideological and political education of college students.

2.2 The implementation path of the integration of cultural self-confidence and ideological and political education in colleges and universities

It shows the essence of cultural self-confidence in an all-round way, analyzes the development process of China's cultural self-confidence and the breakthroughs and achievements at different stages of development from multiple perspectives, clarifies the relationship between traditional culture and college students' cultural self-confidence through collecting and sorting out a large number of survey data, and believes that the inheritance of traditional culture and college students' cultural self-confidence are relevant, innovative and contemporary, It has important practical guiding significance for the active guidance and efficient development of contemporary college students' ideological and political education. The ideological and political education in colleges and universities should adhere to the principle of orientation, that is, the core leadership direction is the socialist core value system. It should be based on Marxism, establish a scientific view of Chinese socialism and communism, cultivate the socialist core value system, strengthen the leadership of ideology, promote the inheritance and development of Chinese traditional fine culture, innovate the inheritance mode of traditional culture, and promote the development of new socialist culture.

Use new media to promote the innovative presentation of excellent traditional cultural content and improve the interest and effectiveness of learning. New media has the characteristics of timeliness, convenience and interest in the process of information dissemination, but there are also problems of low information access threshold and mixed information quality. Colleges and universities should learn from each other's strengths and make full use of the advantages of new media to make it a new platform for the dissemination of excellent traditional culture. Cultural self-confidence fundamentally reflects the cultural nature of ideological and political education and is the realization form of the cultural function of ideological and political education. At the same time, the cultural nature and cultural function of ideological and political education ensure the realization of cultural self-confidence.

3. CONCLUSION

As ideological and political teachers in colleges and universities, they should have the courage to explore and study, deepen the understanding and understanding of the combination of contemporary Marxist theory and excellent traditional Chinese culture, enhance the timeliness and appeal of excellent traditional culture, and tell the Chinese story in Youxiu traditional culture in the language that college students can understand and love to listen to. Constructing the basic path of ideological and political education for college students is a systematic project, and it is also an arduous task. To this end, the majority of experts, scholars and ideological and political educators in colleges and universities must continue to carry out comprehensive research, and test and adjust in practice.

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The Construction of Evaluation Index System of University Teachers' Education Subject Group

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Abstract: To evaluate the teaching quality of college teachers, we should consider the contribution of teaching to students' future adaptation to social development. Therefore, the evaluation of college teachers' teaching quality should not only consider the teaching quality of a class and the stability of long-term teaching, but also pay attention to the evaluation of teachers' teaching ideas. Based on this, suggestions are put forward to improve the evaluation of classroom teaching quality. The study found that how to scientifically design the evaluation indicators of classroom teaching quality, reduce the incompleteness and subjectivity of the evaluation, and improve the incentive mechanism of teachers' teaching are the key to the fair and objective evaluation of teachers' classroom teaching quality.

Keywords: Evaluation index system; teachers' education; subject group

1. INTRODUCTION

One of the outstanding characteristics of teaching quality is its uncertainty and difficulty in quantification, so it is difficult to operate in teaching practice, especially in the practice of modern teaching evaluation. Therefore, teaching management and teaching research workers have many disputes about the evaluation of teaching quality of university teachers, but this cannot be the reason for not paying attention to how to evaluate. Obviously, to scientifically and objectively evaluate teachers' teaching quality, we need to have an appropriate evaluation index system, which is based on the understanding of the meaning of teaching quality. Therefore, before discussing the evaluation index of teaching quality, we should first analyze the meaning of teaching quality.

As a place for economic development, social progress, and the provision of talent guarantee and intellectual support, colleges and universities should speed up the reform of talent work system and mechanism, and cultivate a high-quality, innovative, and creative talent team with international competitiveness. So, as an important part of teaching quality in colleges and universities, the quality of classroom teaching has a subtle impact on the construction of colleges and universities, the improvement of teachers' teaching level, and the development of talent training. Factor analysis is a technology of data simplification. It explores the basic structure of the observed data by studying the internal dependence among many variables and uses a few hypothetical variables to represent its basic data structure.

These hypothetical variables can reflect the main information of many original variables. The original variable is an observable explicit variable, while the hypothetical variable is an unobservable potential variable, which is called the main factor. Teaching evaluation is an activity that judges the value of the teaching process and results according to the teaching objectives and serves the teaching decision-making. It is also a process of studying the value of teachers' teaching and students' learning. The evaluation of classroom teaching quality refers to the evaluation of the object objects that appear in the implementation of classroom teaching. Its value lies in that classroom teaching evaluation is an important means to promote students' growth, teachers' professional development and improve the quality of classroom teaching.

Evaluation index system of university teachers' education subject group is shown below (figure from the Internet).

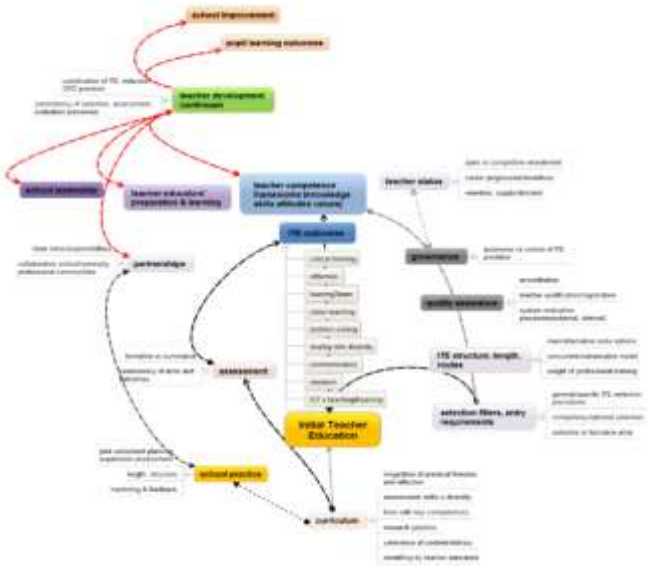

Figure. 1. Evaluation index system of university teachers' education subject group

2. THE PROPOSED METHODOLOGY

2.1 Research on Evaluation Index System

Through the table, we can clearly see the contents of the evaluation index system of teaching quality of college physical education teachers. However, in the specific operation and implementation process, we should focus on which item and which item is the main reference index, and its weight value is a good proof.

What are the teaching quality evaluation indicators that experts attach importance to? We believe that the larger the weight index, the higher the degree of attention of experts, scholars, and teachers; On the contrary, the smaller the weight index, the lower the attention of experts, scholars and teachers. We believe that the goal of teaching quality in ordinary colleges and universities is to cultivate high-quality, high-quality, and innovative application-oriented talents with high sense of social responsibility, strong social competitiveness and creativity, and sound development of personality and personality.

(1) Therefore, the goal of teaching quality in colleges and universities is to train college students to better adapt to the society in the future and constantly realize their self-worth in a highly competitive society.

(2) Teachers often give lectures to students from different colleges and different professional classes. Even the same teaching content may produce mixed evaluation results in the evaluation of students from different colleges and different professional classes.

(3) Students' evaluation of teachers' classroom performance is inevitably affected by their own professional background, even the interference of subjective factors, which makes students' evaluation standards of teachers different. After establishing the hierarchical structure model of teachers' teaching quality evaluation, the next step is how to determine the weight of secondary and tertiary indicators in the overall goal.

2.2 The Concrete Construction of the Evaluation Index System of College Teachers' Classroom Teaching Quality

The secondary indicators are the main factors obtained by factor analysis on the indicator layer, so the weight of the secondary indicators on the target layer can be determined by the contribution rate ai of each main factor to the total target. The contribution rate ai is the contribution degree of the main factor to the total target, and indicates the percentage of the total target information. Therefore, it is reasonable to use the contribution rate as the weight of the secondary indicator on the total target. In the weight design of each index in the index system, the more advanced analytic hierarchy process (AHP) is used to decompose the weight.

The weight coefficient determined by AHP is a stable and reasonable weight coefficient, which can organically combine qualitative and quantitative data to conduct comprehensive and systematic analysis and evaluation of indicators. It is more scientific than the expert consultation method that determines the weight of evaluation factors solely based on experience; We can make full use of the results of expert consultation, comprehensively analyze the results of the evaluation of indicators at all levels by experts and use fuzzy mathematics to establish a mathematical model. Clear teaching objectives are the first step of teaching design. Only when the objectives are clear can teaching proceed in the expected direction. In addition, the design of the teaching process is reasonable and cannot be ignored. It is not enough to have the objectives, but also to have specific plans to achieve the objectives, Reasonable design of teaching process is the specific plan to achieve teaching objectives.

At present, characteristic teaching has been put on the agenda. How to stand out from the stereotyped traditional physical education teaching needs to be featured, which can be seen from the questionnaires of experts, scholars, and college physical education teachers; Most people advocate bilingual teaching. Each teacher has his or her own understanding of his or her major, curriculum, and even other aspects of social life. Then, in the process of imparting knowledge or skills to students, teachers will inevitably reveal their own ideas, impart teachers' views on everything to students, and directly affect students' behavior and ideas. Each evaluation subject performs its own duties, implements the evaluation task according to the school regulations and timely feedback. The results of students' evaluation of teaching will be fed back by the Academic Affairs Office to the college before the end of each semester; Peer evaluation is carried out by the college itself, so the college only needs to give feedback directly to the teachers; The school supervision evaluation is conducted once every two weeks, and the Academic Affairs Office reports back to the college. The college supervision evaluation allows the college to directly report back to the teachers.

3. CONCLUSION

Paying attention to teaching ideas is an important embodiment in the process of quality education. However, there is no unified understanding of the concept and evaluation of teaching ideas at present. Therefore, this paper emphasizes the importance of teaching ideas in the evaluation of teaching quality, and only plays a role of "throwing bricks to attract jade". Paying attention to teaching ideas is an important embodiment in the process of quality education. However, there is no unified understanding of the concept and evaluation of teaching ideas at present. Therefore, this paper emphasizes the importance of teaching ideas in the evaluation of teaching quality, and only plays a role of "throwing bricks to attract jade". The determination of indicator weight also comes from the statistical analysis of the questionnaire data. The values of each indicator are derived from mathematical transformation rather than subjective determination. Therefore, the evaluation results are also more objective and accurate, and can more truly reflect the teaching quality of teachers.

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Research on the Curriculum System of English Education Major in the Information Age: A Systematic Study

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Abstract: The core of college English multi-ecological curriculum reform is to explore a college English curriculum system that meets the personalized needs of students at different levels based on reality to improve the quality of teaching and learning This paper discusses the opportunities and challenges faced by college English teaching in the "Internet plus" era, the construction of hybrid teaching mode, the integration of college English classroom teaching and mobile teaching mode, and the higher requirements for teachers in the information environment of the "Internet plus" era, aiming to propose a new way to college English teaching in the new era.

Keywords: Curriculum System; English Education Major; Information Age

1. INTRODUCTION

It is an inevitable choice to carry out the multi-ecological curriculum reform of college English to conform to the trend of the times. The rapid development of educational informatization represented by network teaching such as MOOC, as well as the single and rigid teaching methods of college English, which are not practical and difficult to change, all reveal that the reform of college English curriculum is imperative. "Internet+" education has made educational ideas, means and methods more advanced, and realized the reform of personalized, mobile, socialized and data-based college English classroom teaching, which is the strategic choice of college English classroom reform. The ultimate goal of college English teaching is to cultivate students' comprehensive ability of listening, speaking, reading, writing, translating and other languages and improve their international vision.

Therefore, under the positive influence of information technology in the era of big data, college students can receive the latest information and knowledge points on the Internet. The diverse information on the Internet can flow into students' minds and spread in the form of video, animation, music and pictures, which brings many convenient conditions for students to learn English knowledge. The training objectives should be clear and clear, able to predict the development of the graduates in the social and professional fields in the next five years, reflect the professional characteristics and gain the understanding and recognition of normal students, teachers, teaching managers and other stakeholders. In the context of the national examination of teacher qualifications, the talent training objectives of English education majors in teachers' colleges and universities also need to be evaluated regularly, and necessary revisions should be made according to the evaluation results.

No matter what is the trend, the situation or the policy, how should we reform the multi-ecological curriculum of college English? What is the basis of reform? First of all, we must follow three starting points. First, we should reflect the student-centered teaching concept, fully consider students' learning basis, interests, etc., and carry out curriculum and teaching arrangements according to their personalized learning needs. The theoretical support in this regard is mainly the subject education theory. Teachers in the context of information are no longer the only carrier of knowledge. Online courses can reduce the cost of education and provide efficient Quality education opportunities. Through continuous improvement of personalized and personalized learning programs, we can truly teach students according to their aptitude.

2. THE PROPOSED METHODOLOGY

2.1 Opportunities and challenges for college English teaching in the era of "Internet plus"

The reconstructed learning model and learning concept have stimulated the innovative consciousness and creative ability of learners. Generally, the offline English content is complicated. It is difficult for English teachers to screen English knowledge suitable for classroom teaching, and sometimes they will choose content that is not suitable for the current development of students, which gives students incorrect instruction in the actual teaching process. For college students, finding the information they want in the massive online knowledge is an extremely complex process, which requires them to master the relevant methods.

As college teachers, they should better understand the contents of the written examination of the primary school English teacher qualification examination, the way and content of the interview skills assessment, and combine the changes of the talent training program and the curriculum system, change the previous teaching mode and the content and method of the traditional teaching course, more effectively integrate the corresponding teaching content of the teacher qualification certificate, so that students can better understand and learn the relevant content, and exercise the relevant ability, In this way, students can better understand the reform and changes of the teacher qualification examination,

and lay a solid foundation for students to better pass the teaching capital examination in the future.

According to the subject education theory, both teachers and students should be the "subjects" in the process of teaching and learning, but they play different roles. The teacher is the organizer and guide of teaching activities, the leading subject, focusing on "guidance", giving full play to the teacher's leading role in teaching content, and guiding and enlightening students; Students are the active subjects of learning in teaching activities, focusing on "learning", and can independently recognize and process the learned knowledge. The traditional teaching design concept regards the process of education and teaching as a closed process that is non-dynamic, unchangeable, formulaic and predictable, ignoring its stage, dynamic and openness; The teaching process only attaches importance to the teaching of knowledge and skills, and ignores the cultivation of learners' thinking, morality, emotion and values; It ignores the two-way interaction between teachers and students and thus fails to achieve the teaching goal of teaching and learning.

2.2 Higher requirements for teachers in the information environment of the "Internet plus" era

With the active use of information technology, the knowledge dissemination of college English teachers to students has gone out of the classroom and extended to online extracurricular activities. The information-based English class breaks through the constraints of time and space imposed by the old teaching model. The online interpretation method can help teachers and students adjust their learning time flexibly, and help professional teachers integrate online classroom resources efficiently. According to the survey of 2020 graduates, their biggest problem in the teacher qualification examination is the low passing rate of interview, which is directly related to their poor teaching practice ability in school.

Because students majoring in English education need to speak English in the interview process, which is a great challenge for students, so students need a lot of practical training to improve their teaching skills. Normal colleges and universities attach great importance to educational practice and teaching practice training. However, due to the small proportion of educational practice and practice links in the talent training program, the setting time is not long enough and other factors, the practical ability of English education graduates is relatively weak and can not meet the needs of students to pass the teaching interview.

3. CONCLUSION

The information-based English teaching in the development process of the big data era has directly impacted the traditional college English classroom, providing college students with a more advanced and scientific information-based network teaching platform. In this online platform, professional teachers can flexibly use various teaching resources and materials, and efficiently integrate English textbook content, explore students' online learning status, and bring relatively high-quality online teaching to students. And college students can learn English knowledge anytime and anywhere with the help of intelligent online teaching platform, increase the proportion of educational practice and practice, change teaching methods, so that students can really benefit from and get exercise in the courses related to examinations, and finally successfully pass the examination of teacher qualification certificate, and become a qualified primary school English teacher.

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Theoretical Research on the Construction of PE Teaching Evaluation System Under the Background of Information Technology

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Abstract: Under the background of the era of big data, the physical education teaching evaluation system of colleges and universities has more characteristics and manifestations of the new era. At the same time, big data also brings more requirements for the improvement of the physical education teaching evaluation system of colleges and universities. Under such an environment and trend, colleges and universities need to make certain reform measures to meet the challenges calmly according to the requirements of the new era. This paper makes a systematic study on the construction of the evaluation system of physical education teaching in colleges and universities, expounds the theoretical basis of building an efficient evaluation system of physical education teaching, analyzes the components of the evaluation system, and gives the construction path of the evaluation system of physical education teaching in colleges and universities. The purpose of this paper is to provide some reference information for physical education in higher education and the cultivation of talents' comprehensive quality.

Keywords: PE; teaching evaluation system; information technology

1. INTRODUCTION

Physical education teaching evaluation is an important part of physical education teaching. It has a summary function for the results of physical education teaching in a semester, and also has a guiding role for the next physical education teaching. However, at present, most colleges and universities regard the evaluation of college physical education teaching as a process, and serious formalism leads to a series of problems in the evaluation system of physical education teaching. For this reason, in addition to the need to increase support in the investment of physical education teaching funds, the construction of talent team and other aspects, it is also necessary to evaluate the process and results of teaching work, find out the existing problems and find the direction for improvement.

In the context of "Internet plus", cloud theory is often used in the current evaluation system. In fact, cloud theory is to use normal cloud to represent fuzzy concepts. It can use a language value to represent the transformation between qualitative and quantitative concepts. In traditional physical education, the final examination result is the only standard to measure and evaluate students, which is not conducive to the overall development of students. The application of big data has made schools have assessment criteria for every aspect of students and teachers, not just for one aspect of students or teachers. From the perspective of psychology, this theory regards respect and self-realization as the most basic and lasting driving force in human behavior.

Only when the individual's psychological tendency is respected and valued can it stimulate its subjectivity and promote its active participation in social activities. In the existing evaluation system of college physical education teaching, teachers have the same important status as students. Generally speaking, teachers should not only evaluate themselves reasonably, but also take into account the feelings of college students in sports. Therefore, the evaluation of teachers often includes three aspects: the level of classroom organization, the level of teaching skills and the degree of students' satisfaction with them. According to the concept advocated by "Internet plus Sports" in teaching evaluation, the teaching evaluation is based on "Internet plus", and the evaluation of students is based on "Internet plus", and the students' individual differences and imbalance of individual development are actively concerned.

Figure. 1 Outline of moral education model of instruction based on information technology. (Searched from Google)

2. THE PROPOSED METHODOLOGY

2.1 Characteristics of College Physical Education Evaluation System Under the Background of Big Data

Therefore, before the establishment of the curriculum, we should fully understand and master the students' basic understanding level, interest level and learning ability level of sports, and constantly enrich the evaluation methods and evaluation subjects of sports teaching evaluation, which is conducive to ensuring the fairness and justice of sports evaluation, and also conducive to promoting the healthy development of the teaching system, so as to improve the teaching level of college sports teaching. Therefore, in the

context of big data, we should take advantage of this advantage to ensure the comprehensiveness of evaluation methods and subject:

(1) The evaluation system of physical education needs to be dynamically adjusted according to the requirements of the times./The theory of multiple intelligences 0 is an important basis for reconstructing the system. Gardner's theory of multiple intelligences believes that any individual can have multiple (multiple) relatively independent intelligences at the same time, and their combinations and manifestations are different due to individual differences, so the intelligence of different individuals has different characteristics.

(2) Middle school students and teachers in the evaluation system are conventional indicators, but under the "Internet plus" perspective, integrating the indicator of teaching management can make the evaluation system more comprehensive. The index of teaching management can reflect the degree of attention and investment of colleges and universities on the existing teaching of physical education. It can be seen that this indicator is related to the overall physical education teaching. The practical significance of setting up a growth portfolio in the process of students' learning is to enable students and teachers to intuitively understand students' progress from the growth track recorded in the portfolio, help students personally understand themselves subjectively, and build students' confidence in learning activities. Scientific evaluation indicators and comprehensive evaluation content are an important basis for promoting the healthy development of college physical education.

2.2 The Construction Path of College Physical Education Teaching Evaluation System

The subjective evaluation method and evaluation content are the main content of the whole physical education teaching evaluation. With the subjective assumption and the lack of data support, the physical education teaching evaluation has become a procedural formal process. Therefore, many teachers will not care about these evaluations, and most schools will not take any measures because of these evaluations. Only when teachers have a certain level of language expression ability, language infection ability and knowledge reserve can they engage in teaching activities. It can be seen that this indicator is the fundamental and most critical link; In addition, the teaching organization level of teachers will directly affect the teaching effect. The organization ability includes the design level of the teaching plan, the reasonable arrangement of the teaching schedule, the creation of the teaching situation, the grasp of the teaching rhythm and the handling of unexpected situations in the teaching process

One of the goals of building an evaluation system for sports in universities is to help college students improve their physique and health so that they can meet social needs. Therefore, it is necessary to update the methods and concepts in the existing evaluation system and regard evaluation as a complex and comprehensive process of judging value. The feedback of evaluation results is mainly to find the problems of students in teaching activities in a timely manner during the evaluation process, and to feed back the problems of students in the teaching process to students themselves and the leader of teaching activities - teachers in a timely manner.

3. CONCLUSION

To sum up, a scientific and comprehensive evaluation system of college physical education teaching is very conducive to the good development of college physical education teaching. The era of big data also provides a better opportunity to update the evaluation system of college physical education teaching. Therefore, colleges and universities should pay more attention to it. A fair and objective evaluation can help people understand and understand the existing forms of physical education and find out some existing problems and internal links in teaching. In addition, correct evaluation can also mobilize the enthusiasm of teachers and college students. Then it can improve the existing teaching effect and promote the teaching reform.

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Intelligent Optimization Algorithm for Teacher Teaching Quality Evaluation Under the Environment of Intelligent Eye Feedback Information Collection

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Abstract:The three-dimensional eye feedback technology is used to digitize the teaching information of teachers, and the digitized information is subjected to in-depth processing such as denoising and threshold segmentation; then the state space reconstruction of the subway passenger flow information is carried out in a time series, and the developmental classroom teaching quality evaluation is based on each The development of professional quality of famous teachers and the improvement of teaching ability are the main focus and foothold, which can fully mobilize the enthusiasm and initiative of teachers to participate in teaching quality evaluation. The intelligent information collection system is not only for the information collection of traditional information collection system The process is simplified and realized, absorbing enterprises and industries to participate in the evaluation, expanding the evaluation connotation, and gradually establishing a teaching quality evaluation system that is conducive to the growth of "dual teachers and dual abilities" teachers and improving the school's ability to cultivate applied talents.

Keywords: Intelligent Optimization, Teacher Teaching Quality Evaluation, Eye Feedback, Information Collection

1. INTRODUCTION

Colleges and universities are the main body of education. Among the major topics of sustainable development of colleges and universities [1], the training of teachers has always been the top priority. The quality of teacher training directly affects the future development of a school. Improving the teaching quality of teachers is the key [2] and difficult problem in the current teaching in colleges and universities, and it is also the key problem in the construction of teaching staff. Combined with the practical work of our college, this research studies the intelligent reform of the teaching quality evaluation system in higher vocational colleges from multiple perspectives and levels [3], and provides a useful reference for the intelligent reform of the quality evaluation in higher vocational colleges. The application of traditional computer sensing technology is severely limited [4].

Due to the high accuracy requirements, small scope, strong timeliness and fast speed of subway passenger flow information collection [5], it is necessary to perform in-depth processing of subway passenger flow image information to improve the query and utilization of user information. The intelligent web information collection system combines the classification method of webpage content with the method based on hyper-connection analysis [6], which achieves real complementary advantages, realizes the improvement of webpage searcher, improves the collection efficiency of webpage resources, and saves costs [7]. However, in the process of collecting network information resources through computer systems, on the one hand [8], due to the limitations and constraints of traditional information collection systems in the process of collecting information resources, a seminar with representatives of experts in the fields of education [9], culture, health and sports held in September 2020 At the meeting, General Secretary [10] Xi Jinping emphasized that it is necessary to do a good job in the introduction and implementation of the overall plan for deepening the reform of education evaluation in the new era [11], and build a world-class evaluation system that is in line with China's actual situation [12].

On the other hand, due to the continuous increase and enrichment of the content and quantity of network resources, people [13] not only need to spend a lot of time in the process of information resource collection, but also the work efficiency of information collection is relatively low, which is very unfavorable [14]. In order to improve the quality of higher education, we must first improve the teaching quality of colleges and universities, and the evaluation of the teaching quality of college teachers is one of the important means to improve the quality of college education [15]. As early as the beginning of the founding of New China, the evaluation of teachers in my country began to sprout. It was not until the mid-1980s that there was a more formal teacher evaluation. Since the 1990s [16], the overall environment of higher education in my country has also undergone tremendous changes. For a long time, teaching evaluation has always been the key content of teaching work in colleges and universities, running through the whole teaching work [17], and the evaluation of classroom teaching quality is an important component. Scientifically carrying out classroom teaching evaluation activities is an important guarantee for improving teaching quality [18].

The literature proposes an intelligent collection algorithm of subway passenger flow information based on video, and uses the background method to extract subway passenger flow target information [19]. The algorithm has the problems of complex content of subway passenger flow information collection and inaccurate information. The development of information technology has made the network the main way to obtain information [20]. The function of the search engine based on network resources to be discussed in this paper can realize the intelligent information collection system that collects and extracts the required expert information resources through keyword search [21]. The workflow of information collection and processing is the process of collecting and processing information resources [22], but the expansion of

network information seriously affects the efficiency of network work. Although Google and Baidu fixed engines have solved the problem of people's access to information [23] to a certain extent, due to the large amount of information in the results, it takes a lot of time for users to search for information manually. In December 2020, Beihua Institute of Aerospace Engineering, Eight pilot schools [24] including Shijiazhuang University, Hebei Normal University for Nationalities.

2. THE PROPOSED METHODOLOGY

2.1 The Intelligent Eye Feedback Information Collection

The 3D vision technology is used to reconstruct the state space of the time series of the fixed position information in the subway passenger flow information, and the time series analysis method of the subway passenger flow information is used to carry out the statistics and preprocessing analysis of the subway passenger flow information. The specific description process is as follows. According to the collection workflow of the intelligent expert information collection system, the information collection process of the intelligent information collection system is mainly divided into the extraction of the main text of the information to be collected, the determination of the characteristics and weights of the collected information, and the selection of the information text. At present, when colleges and universities evaluate teachers' teaching quality, the highest evaluation weight is student evaluation, which is to reflect the concept of "student-centered".

The teaching quality evaluation conducted before the final exam, for teachers, the lag in the feedback of the evaluation results is not conducive to timely improvement of teaching, and the extraction of the main text of the information needs to be collected. At present, most of the web pages on the Internet are written in HTML language, which provides various tags to control the display format of web page content. Classroom teaching quality evaluation can be divided into two categories according to the classification of achievement goals, one is reward and punishment teaching evaluation, and the other is developmental teaching evaluation. The purpose of reward and punishment evaluation is to reward and punish teachers. Through the evaluation of teachers' work performance, the annual teaching quality is determined and corresponding material and spiritual rewards are given. At the same time, it is used as reference information for teachers' professional titles.

2.2 The Intelligent Optimization Algorithm for Teacher Teaching Quality Evaluation

As an important tool for information retrieval, the network information collection system has the following characteristics: First, it has strong versatility and the complexity of collection rules. Since users can manually set information collection rules, this improves the user's understanding of Requirements, the user must go through certain training or learning, in order to have the skills to use the information collection system. The web pages searched by the search engine come from many different websites and have the following characteristics: First, HTML documents are semi-structured data, this data has a certain structure, and these structures are mixed with the content of the data, or not clearly described.

"Full participation" means that in the process of teaching quality evaluation, participants should be from school leaders to administrative staff, including ordinary teachers and ordinary students. Teachers are not only the objects of teaching quality monitoring and evaluation, but also the It is the main body of teaching quality monitoring and evaluation. The operation of the classroom teaching quality evaluation mechanism, through the analysis of the traditional higher vocational college teaching quality evaluation system, we learned that the traditional higher vocational college teaching quality evaluation system has a certain one-sidedness and subjectivity.

In order to reduce the possibility of mistakes made by teaching managers in higher vocational colleges in the decision-making process and better serve the teaching work, cloud computing technology should be fully used to effectively extract teaching evaluation data. Based on the calculation results of the subway passenger flow information autocorrelation function, the collected subway passenger flow information is uploaded to the subway information center by using GPS, wireless communication system, subway card charging system, etc. to complete the collection of subway passenger flow information. The specific process is described as follows. Second, web pages often contain a lot of other "noise". Compared with ordinary text, the design of web pages is more casual, and usually contains various kinds of advertisements, designer's notes and copyright notices and other information unrelated to the content.

Sometimes the same web page even contains multiple different themes. Again, there are many problems in web page coding, such as some opening tags without closing tags. The automatic station announcement system can automatically identify the name and code of the subway passengers arriving at the station, and the subway on-board toll collection system can identify the validity of the subway card held by the passengers, and upload the information to the information center through three-dimensional vision technology. The information collection algorithm of the subway vehicle terminal is as follows. In order to give full play to the maximum utility of data and do a good job in data collection, it is necessary to organize the collected data accordingly, and data warehouse technology can be used to store data.

2.3 The Teacher Teaching Quality Evaluation System Based on Intelligent Eye Feedback Information Collection Environment

Assume the feature mining dataset of subway passenger flow information under D three-dimensional vision; dist()q, o is the Euclidean distance between the subway passenger flow information space feature vector value o and the subway passenger flow information adjacent space vector value p. Then the Euclidean distance expression between the spatial vector values of the two data cluster centers in the subway passenger flow information sample set can be calculated.

The acquisition of information is mainly completed through the following four steps: downloading the source file of the web page, extracting the main text of the web page, determining the correlation calculation rule and selecting the text. This requires firstly extracting the link address from the search result page, and downloading the content of the web page, and secondly, extracting the title and body text of the web page through the HTML structure tree.

General Secretary Xi Jinping pointed out that "ideological work is an extremely important work of the party". Colleges and universities must clearly recognize that "our colleges and universities are colleges and universities under the leadership of the party and socialist colleges with Chinese characteristics", and implement the mission of educating talents for the party and the country. Summative evaluation mainly refers to making a summary conclusion on the educational activities after the educational activities come to an end, in order to understand the teaching quality of teachers, identify the pros and cons, identify and classify the grades, and help decision-makers in seeking a reasonable distribution of educational resources. provide a basis for reference in decision-making. First of all, according to the actual design requirements, when organizing the subject data, it can be set to three subject domains of teachers, courses, and units. Teachers include supervisory evaluation, expert evaluation, peer evaluation, student evaluation and self-evaluation. The data fields of the first-level unit include the actual number, name, title, department and school. In the transmission of subway passenger flow information, when the subway starts and runs smoothly for a period of time, the information recorded in the subway on-board system is sent to the subway information center.

3. CONCLUSIONS

Classroom teaching quality evaluation is a more scientific evaluation method. It is a process of motivating teachers to continue learning, improving and improving in a targeted manner based on the evaluation of teachers' classroom teaching quality. The intelligent information collection system has played an important role. It improves the efficiency and accuracy of users' search for information, and provides powerful technical support and guarantee for the convenience of users' query of information. It can improve the quality of teacher training and the quality of school teaching. Do a good job in systematic design and research in order to better reform the teaching mode of higher vocational colleges and better serve the education and teaching work of higher vocational colleges.

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English-Chinese Corpus Collection and Artificial Intelligence Translation Based on Dynamic Clustering Model

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Abstract:This paper studies the English-Chinese corpus collection system and artificial intelligence translation function based on the dynamic clustering model. This paper attempts to introduce the semantic analysis of English-Chinese parallel corpora into the semantic recognition system. By labeling different levels of the corpus, including grammatical labeling, shallow semantic labeling and deep semantic labeling, the corresponding English-Chinese translation teaching system is designed, and the teaching system is improved by using the comparatively systematic teaching effects in actual teaching. On the basis of self-built Chinese-English parallel corpus, this paper extracts the Chinese high-frequency verb "to improve" to discover and summarize its English translation rules in different texts.

Keywords: English-Chinese Corpus, Artificial Intelligence Translation, Dynamic, Clustering Model

1. INTRODUCTION

The list of commonly used words in modern Chinese (draft) ranks "you" in the sixth place in common Chinese words; in the "Chinese Word Frequency Dictionary" by Xiao (2009), "you" is ranked as "character" in the ninth place. "Words" ranked tenth. This dictionary is based on statistical analysis of Chinese corpus of 73 million Chinese characters or 50 million words, and these corpora include four major registers: spoken language, news, fiction, and non-fiction. Therefore, we can conclude that the verb "you" is indeed a common verb in Chinese. As a commonly used verb in Chinese, it appears so frequently in Chinese, how to translate "Yes" according to the context in the translation process? Is it translated into "have", "has" or "there be" whenever you see "you"? [1-6]

With the rapid development, popularization and globalization of the Internet, on the one hand, the proportion of non-English texts in online text resources has increased rapidly. In the field of news media, more and more news portals provide multilingual news. Intuitively, the collocation between words has a certain rule, which is manifested as a relatively fixed collocation relationship between some words and other words. With the development of big data technology, machine translation has entered the stage of intelligent translation of neural network, with the breakthrough and development of corresponding artificial intelligence technology (Artificial Intelligence, AI). The BBC, the UK's largest news broadcaster, provides broadcasts in 43 languages and reports from 27 news networks. China Daily, Xinhuanet, China News, Tencent News International Channel, etc. [7-14].

Of course, this method of authentic language materials has obvious advantages, that is, it excludes the inauthenticity of man-made languages. Hunston (2002) even said: The application of language research has undergone a revolution". In terms of bilingual parallel corpus research, the history of European research is relatively long. It is generally believed that the article published by MonaBaker (1993) is the first chapter in driving the translation of corpus research; Wang Kefei of Beijing University of Foreign Studies has conducted large-scale research in China. 2003), carried out relevant research on the English-Chinese and Chinese-English parallel corpus of 30 million words that he established. all provide news in English and Chinese. For example, by observing the collocation of the words "obvious", "further", "improved", and "improved", it is not difficult to find that either "significantly improved" or "significantly improved" can be said. Machine translation based on artificial intelligence has become a hot topic in recent years. Using artificial intelligence technology, machine translation errors can be reduced by about 60%, improving the accuracy of translation. "Hunan Bilingual Network", a subsidiary of China Daily, began to provide bilingual news reading. Some major international companies and well-known institutions have gradually begun to provide multilingual versions of their website information. [15-21].

Either "further improvement" or "further improvement". In addition, "obvious" and "further" are both adverbs that characterize the degree, while "improvement" and "improvement" are both verbs that characterize the tendency to change. There is a relatively fixed collocation relationship between these two types of words. Companies such as Microsoft, Google, Baidu, and iFLYTEK have launched artificial intelligence-based online translation systems. Driven by information technology, many language service companies have also proposed development ideas based on big data and artificial intelligence. These changes have resulted in the rapid accumulation of multilingual text resources. On the other hand, countries around the world have a more urgent need for multilingual text organization and mining. Under the trend of globalization, a single language cannot meet the needs of a country or institution on the international stage. It can be considered that the relationship between words can be roughly divided into two types: semantic similarity and semantic correlation. For example, "obvious" and "further" are semantically similar, while "obvious" and "improvement" are semantically related. Given any two words, find their respective sets of semantically related words. [22-24].

2. THE PROPOSED METHODOLOGY

2.1 The Dynamic Clustering Model

Although machine translation based on neural network has made great progress, machine translation still lacks a lot in terms of deep semantic structure, different stylistic styles, language styles and discourse levels. Multilingual information organization and processing is an unavoidable problem. For non-English-speaking countries, it is not only necessary to deal with national language resources, but also a large number of resources in English. , according to the intersection of these two sets, it can be concluded whether the two words are semantically similar. This algorithm is based on the above ideas, and the large-scale annotated corpus [3] just provides resources for finding semantically related word sets. This means that the construction of corpus is still a very important foundation for the development of the artificial intelligence translation. By treating the corpus as a knowledge base, let the computer learn various knowledge from it, or treat the corpus as infinite. In recent years, related researches have proposed many text clustering techniques and their improved algorithms, but most of the researches are aimed at monolingual texts.

Donald Hindle of Bell Labs proposed a method for English noun clustering in his paper. In English, the verb-object or subject-verb collocation of verbs and nouns has certain rules. After years of development, my country has formed a number of corpora such as the "China-English-Chinese Parallel Corpus" and the China Language Resources Alliance, which have been widely used in translation teaching

2.2 The English And Chinese Corpus Collection

English and Chinese news texts, and then merged the clusters. When calculating the similarity between clusters, they used the method of translating the nouns, named entities and verbs in Chinese news into English. . The specific method is that, for any given noun, a set of a series of matching verbs can be obtained in the corpus. Each verb in the set will have a co-occurrence probability with the noun, so it has a certain amount of interactive information. , the calculation of the amount of interactive information is based on the formula.

The corpus integrates structure, semantics, contextual variables, and language typology attributes based on linked data models by fully recording language structure and functional characteristics. The method of first clustering and then merging cannot consider the whole text, and does not consider the importance of feature words from the perspective of all texts. Wen Yang et al. from the Intelligent Technology and System Laboratory of the Department of Computer Science, Tsinghua University proposed a Chinese adjective-noun clustering method based on collocation pairs. In Chinese, nouns and adjectives have a relatively fixed collocation relationship. We have entered the era of 3.0, but what are the characteristics of the constituent elements of the corpus under big data, and what are the characteristics of the relationship between the corpus and artificial intelligence translation? Lawrence did a Russian-English multilingual text clustering study using machine translation systems and dictionary word-by-word translation in 2003.

Taking nouns as entities and adjectives as features, the clustering of nouns can be obtained. Similarly, taking adjectives as entities and nouns as features, the clusters of adjectives can also be obtained, but the clusters of different parts of speech are related to a certain extent. This paper aims to start with the analysis of the characteristics of big data corpus under artificial intelligence translation, put forward the construction ideas of big data corpus, and provide suggestions on how to integrate the reform of translation teaching into the era of big data artificial intelligence. This study selects English and Chinese bilingual news texts as the experimental corpus, based on the following considerations: compared with other types of texts, news texts contain a large number of information features, which can highlight the theme of the article; bilingual texts are compared with monolingual texts.

2.3 The Artificial Intelligence Translation

They cannot be separated. The clustering process of the two is interactive. Based on the above ideas, they proposed a bidirectional hierarchical clustering algorithm. By continuously alternating classification and clustering, the number of classes is reduced and the number of words in the class is increased. , and cluster the two types of words at the same time. In the Internet age, user-generated content is an important feature, and many valuable corpus data often come from community discussions, customer blogs, WeChat groups, etc. The source of corpus data can be formed by extracting and refining user-generated data. The development of modern technology has made the system more and more complex, and the corresponding simulation system has also greatly increased the complexity, which naturally has a greater impact on the M&S confidence, so the M&S confidence assessment will become more important.

The problem of confidence assessment still lacks effective means, among which the model verification method needs to be further studied. Bilingual dictionaries in general fields have inherent deficiencies in a specific field, and bilingual dictionaries in specialized fields are not updated in a timely manner. The use of experimental data and prior knowledge to test complex hypotheses with the help of Bayesian theory proposed in this paper is a method of making full use of experimental information, closely combined with simulation technology, and can carry out statistical inferences under very small samples. Notably, with the advent of machine translation and artificial intelligence, machine-generated data has emerged as a potentially viable data source. For example, Google Translate uses machine-generated data when testing its artificial intelligence system. Therefore, this study attempts to conduct clustering research on English-Chinese bilingual mixed texts without the need for professional dictionaries.

In addition, in Chinese paragraphs, English acronyms are often included. This algorithm requires some people's work, that is, people need to choose a few words that can better represent the class, but if there are better results, such work is worthwhile. The stock of data assets of core customers is actually huge. If only narrowly defined complete bilingual corresponding parallel corpus data may be less. This study selects English and Chinese bilingual news texts as the experimental corpus, based on the following considerations: Compared with other types of texts, news texts contain a large number of information features, which can highlight the theme of the article. In the word selection stage, we manually selected the verbs of 15 parts of speech. Obviously, this choice will have a certain impact on the results. If the selected words cannot represent the class well, the results obtained are unsatisfactory. , we can use other clustering methods. In the era of big data, pure machine translation is inseparable from the cooperation of experts, and the mode of human-machine collaboration will be an important part of the construction of big data corpus.

3. CONCLUSIONS

Based on the standard KMeans algorithm, this paper conducts a comparative experimental study of text clustering on English-Chinese bilingual corpus. Among the large number of English-Chinese control corpora, comparative experiments were conducted based on Chinese single language, English single language and English-Chinese mixed language. The close integration of simulation technology can make statistical inferences under very small samples, test complex hypotheses, complete model verification, and an effective way to improve simulation confidence.

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Research on Robustness of Financial Accounting Intelligent System Based on Offline Network Data Protection Algorithm

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Abstract:In cloud computing, user data storage and computing process are all carried out in the cloud, and the homomorphic encryption technology is used to realize end-to-end aggregation encryption. The objective requirements and development trends of the construction of financial and accounting information systems of banks in my country are discussed. Transaction and accounting Separated Yinqiao financial accounting information system. The primary task of BPM is to ensure that the business process of the enterprise should be oriented to customers and market demands, and then it studies the robustness of financial information systems, saving energy and bandwidth. At the same time, the track graph topology is constructed so that each node has multiple parent nodes, and when the link between the node and the main parent node fails, other parent nodes can repair the aggregated value.

Keywords: Financial Accounting, Intelligent System, Offline Network Data Protection, Robustness

1. INTRODUCTION

In essence, the so-called cloud computing big data privacy security is actually the security of data in the entire life cycle. In the cloud computing platform [1], the user's data storage and data computing all take place in the cloud, which leads to a more serious problem of user data privacy protection based on cloud computing [2] than that of previous Web applications, and higher requirements for data security protection. Due to the commercial value of user data, many criminals attack cloud platforms through illegal means. As an important part of the Internet of Things [3], wireless sensor networks (wireless sensor networks, WSNs) have been widely used in field monitoring, medical treatment, military reconnaissance and other civilian and military field [4].

WSNs are composed of a large number of sensor nodes, which have the characteristics of resource-limited [5], distributed, self-organized, multi-hop and wireless communication. In particular, the energy of sensor nodes is powered by batteries and is not replaceable [6], so how to save energy consumption and prolong the service life of WSNs is a key issue in WSNs research. At the same time, WSNs transmit information through multi-hop and wireless communication, making it easy for adversaries to capture [7] and listen to the transmitted information. Smart accounting has started and developed rapidly in the practice field of my country's accounting industry [8]. The most outstanding performance is that the development of "financial robots" has entered its initial stage, and its workflow can be described as "original document reader + accounting information processing system" [9], and the resulting accounting products are financial accounting statements. The financial accounting work will be gradually handed over to the "financial robot" (accounting information system platform) to complete [10], and the focus of accountants' work will be transferred to the field of management accounting [11]. You can purchase different types of virtual machines from Amazon according to your own needs. By configuring the CPU, memory, hard disk, and operating system of the virtual machine [12], you can obtain different computing power, and store the data that needs to be permanently saved through S3 [13]. The API interface is stored in the cloud storage provided by the S3 service. Microsoft's main business in cloud computing is its cloud computing operating system, an operating system called Windows Azure [14].

The server running this operating system exists as a PaaS[15] cloud computing platform, and developers can run their own applications on this platform. The 21st century is the age of information [16]. The society's demand for information drives the development of the information industry. With the optical fiberization of the core network, the access network connecting the core network and the user's premises is also developing towards the direction of broadband, interaction and comprehensive access [17]. Because the residents and small enterprises account for a large proportion of the users facing the access network, and for these users, the cost question is particularly important [18]. If the cost of a certain access network or access technology is too high, even if it can provide a variety of new services. It is also not acceptable for this part of the user [19].

On the other hand, due to the emergence of new services are developing towards the direction of broadband, digitization and interaction [20]. Therefore, it is required that access bute can be flexible and transparent in technology to transmit from low speed to high speed. Businesses with various quality requirements ranging from fixed bandwidth to variable bandwidth. However [21], the accounting information is not centralized, and different accounting entities such as each branch still generate their own report information, and then report it to the provincial branch layer by layer [22]. The stage of information system business integration began at the beginning of this century. In the process of completing big data centralization [23], my country's banking industry began to focus on promoting business concentration and application concentration. With the evolution of financial innovation, the level of integration between the banking industry and the Internet has been greatly improved [24], and the corresponding banking information systems have become more integrated, integrated, and intelligent, to adapt to the

diversity of market demand levels, business varieties, and banks. requirements of the future business landscape of the industry.

At the current time when new technologies such as "Big Intelligence Shifts to the Cloud and Things Area" are surging, the construction and operation of intelligent finance is an innovative.

2. THE PROPOSED METHODOLOGY

2.1 The Offline Network Data Protection Algorithm

Stealing user data and then reselling it for profit; some despicable cloud computing service providers conduct statistical analysis on user data without the user's permission, and illegally obtain user behavior data; in addition, some cloud computing service providers' employees will also guard themselves against theft, stealing user data in the cloud. Compared with traditional computer networks, cloud computing has the characteristics of versatility and sharing, and traditional user data privacy protection technologies are often not applicable. Data aggregation can greatly reduce communication bandwidth and energy consumption. Efficient data aggregation, especially the need to achieve end-to-end data privacy, is very difficult in WSNs.

At the same time, the data packet loss occurs in the process of sensor network transmission, which causes a large deviation in the data aggregation results. It is necessary to design an aggregation algorithm with a fault-tolerant mechanism to eliminate or reduce this deviation. Access control is a main measure to ensure that information is not illegally accessed and can be used correctly, and data confidentiality, data integrity, identity authentication and non-repudiation are called the five major functions of security services. Through a system access control policy, the information in the system that can be accessed by different subjects is specified, and the operations that the subject can do to the information are specified, so as to prevent the subject from illegally accessing the object. Aiming at the above situation, this chapter proposes a privacy-preserving data aggregation algorithm with fault-tolerant function. The main idea of the algorithm is: a) using the additive homomorphic encryption scheme to aggregate the data, and the data privacy has reached the end-to-end level; b) through the The multipath-like approach makes data aggregation highly fault-tolerant. Use the form of access control matrix to represent the access control method between the subject and the object.

In the access control matrix, the first row represents the object being accessed, and the first column represents the subject as the visitor. Therefore, the content of the column where the object is located and the row where the subject is located is the access control authority of the subject to the object. For example, use the lowercase letter r to indicate that the subject has the right to read the object.

2.2 The Financial Accounting Intelligent System

In the context of smart accounting, the informatization of accounting has also transformed some of the basic accounting skills that accountants must master to be replaced by informatization equipment or systems. Therefore, in the "Basic Accounting Skills" course of accounting vocational education, some basic accounting skills will be transformed from the teaching category of professional skills training to the category of accounting culture education. With the transformation of accounting culture and education, the content of the "Basic Accounting Skills" course project was adjusted accordingly, and the "Chinese Accounting Culture Education" course was set up. Through the definition of accounting information system, it can be seen that the main function of accounting information system is to complete daily accounting processing, solve accounting and management problems, and reflect relevant accounting and management information.

From the point of view of information processing, the accounting information system has the main functions of input, processing and output. Among them, the input function refers to recording the accounting information in the daily operation and transaction activities according to various pre-set accounting rules and methods, and confirming the relevant information that can be input into the accounting information system for processing. The processing function refers to the processing of accounting data from various business activities of the enterprise, including measurement, classification, summarization, adjustment and settlement. The purpose of sorting out the information system is to understand the current situation and needs of the information system, and lay the foundation for the overall design of the intelligent financial accounting sharing platform.

In order to do a good job in the design of the CTYB intelligent financial platform itself, as well as the integrated design with the surrounding systems, the research group started from the business categories of CTYB, considered the information system functions required by each type of business, and sorted out the information systems related to intelligent financial construction. , including 8 information system categories such as tobacco production and operation management related systems, and 44 specific information systems such as tobacco basic software. Adjust the "Basic Accounting Skills" course item, and change "Abacus", "Digital Writing", "Correction of Wrong Accounts", "Voucher Filling", etc. were adjusted from the basic accounting skills course content to the "Chinese Accounting Culture Education" course. The separation of transactions and accounting refers to the separation of business transactions and accounting in the construction of bank information systems. Make the bank's core business system more professional, in line with the business philosophy of "customer first".

2.3 The Robustness of Financial Accounting Intelligent System

Overloading is divided into segment overloading and frame overloading. In a certain section of the information about supporting the team recorded in Naan Shiyu. When the number of requests is larger than the amount allowed by the corresponding time of the period, the cells are scattered. The weak request should be granted priority before the next segment. In this case, the q segment is overloaded. When this happens on the last segment, the remaining requests are reserved until the first segment of the next frame is granted priority, which is called frame overloading. When a segment is overloaded, the band allocation algorithm used in the protocol will automatically adjust between segments. If the segment exceeds the root seriously, it will lead to the overload of the frame. The following description is for the frame Chaomin. At this stage, the bank-level data center, the head office-level general ledger system and the financial reporting system have not yet been built. The accounting information is reported by the internal information of each accounting subject. It is then aggregated into general ledger and financial reports at the head office level.

Accounting processing is performed by each separate business system when the business occurs, and the accounting of each business is completed. within each accounting entity. It can be seen from Table 5 that the construction of the intelligent financial sharing platform needs to complete the integration of 11 systems in 7 categories. All 11 systems need to complete the automatic docking of accounting, and the logistics management platform, procurement management system, infrastructure construction management system, and billing management system need to complete the automatic docking of budget preparation, the feedback docking of budget approvals, and the automatic docking of business-end budget control. While sorting out the integration requirements of the intelligent financial sharing platform and 11 business systems, the research group sorted out the optimization needs of these 11 business systems in terms of performance and application of new technologies. Curriculum system.

The management accounting course consists of two course modules, one is the basic course of management accounting, the main content of which is the basic theory, basic knowledge and basic technology of management accounting; The characteristic course of education is the most basic professional course for cultivating high-quality technical and skilled accounting talents for front-line work in small, medium, and micro enterprises and institutions.

3. CONCLUSION

This paper is based on the theory of business process management (BPM), the historical background, current situation analysis and future construction direction of my country's bank financial accounting information system as the main line, and the separation of transaction and accounting as the core. The form of the problem is discussed. A multi-keyword secure sorting search algorithm supporting dynamic data is proposed. The algorithm effectively solves the problem that the TF-IDF framework used by the common retrieval algorithm cannot calculate the dynamic data index.

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Design of College Online Resource Sharing and Practice Platform Assisted by Opensource Public Cloud Big Data

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Abstract:The educational resource sharing platform is designed and developed with open source tools such as Spark computing engine, Hive data warehouse, MySQL database, InfluxDB timing library and Akka toolkit. Combined with the characteristics of private cloud computing technology, it gives full play to the advantages of cloud computing, which can save investment costs, provide secure storage and improve the level of resource sharing in the construction of information platforms. Design and implement an educational resource sharing scheme; implement a resource search algorithm based on a complex network-based resource search model; design and implement the platform's resource processing module, blog module, circle module, user management module, etc.

Keywords: College Online, Resource Sharing, Practice Platform, Opensource Public Cloud

1. INTRODUCTION

The rapid development of Internet technology has brought impetus to the innovation of teaching modes and learning methods [1]. Shared learning has become a development trend. How to do a good job in the co-construction and sharing of learning resources has become a topic of widespread concern from all walks of life. In order to maintain the extension performance of learning [2], learners select the learning resources they need from any resource storage medium at any time period and position, which makes the resource formation non-static under certain conditions [3], which can meet the dynamic formation and optimization process. Learning is an individual behavior generated in a specific environment, and a huge number of learning resources serve as the basic guarantee for different groups of people to learn [4].

On February 25, 2015, Premier Li Keqiang chaired an executive meeting of the State Council and proposed the "dual engine" idea of "mass entrepreneurship and innovation" [5]. And the space for self-employment, so that the spirit of innovation, creation and independent development can be carried forward in the whole society [6]. At the third session of the 12th National People's Congress on March 5, 2015, Premier Li Keqiang first proposed the "Internet +" action plan in the government work report. Its core is [7]: vigorously promote the combination of mobile Internet + cloud computing, big data, Internet of Things, etc. with modern manufacturing, industry 4.0, etc. [8]

It can be clearly understood that the overall architecture of the cloud computing platform is composed of multiple resource management platforms and an operation control platform [9]. In the process of designing the cloud computing resource sharing platform, it mainly includes three parts: network resource module, storage resource module [10], and computing resource module. In the process of designing the computing resource module, we mainly focus on the virtual machine access process and application process [11], which fully demonstrates that through the effective application of the cloud computing resource sharing platform, the stability and utilization of the corresponding computing resources can be obtained. further improvement [12]. Big data external services include commercial data service provision and government public service provision. In terms of commercial data service provision, such as providing RTB [13] data application services for mobile Internet advertising owners, providing credit reporting services for banks, and providing tourist source cluster analysis data for scenic spots. service etc. [14]

In terms of government public service provision, it provides the government with location-based big data service applications [15] including real-time road condition analysis, urban planning and emergency response support, public safety and management, etc. At the same time, the rapid development of agricultural big data is also regarded by many enterprises as a [16] Broaden market opportunities. Solum, founded in 2009, is a company in the United States dedicated to providing farmers with precision agricultural services through agricultural [17] big data. Solum mainly provides farmers with software and hardware services for soil analysis, helping farmers to easily obtain soil sample data and conduct real-time analysis [18]. The company achieves the goal of increasing output and reducing production costs by providing farmers with precision fertilization solutions [19].

Combined with the development direction of educational informatization, this paper conducts a detailed study on the current popular cloud computing technology, and on the basis of the existing learning platform in colleges and universities, makes the design and implementation of a learning resource sharing platform based on cloud computing in colleges and universities [20]. Based on this research, the user unit can effectively reduce the investment in hardware server and software resources and only need to focus on the development and production of learning resources, which will greatly improve the work efficiency of the user unit [21]. If universities can share the learning resources of other schools, so that digital resources can be shared to the greatest extent and fully reused, the purpose of saving software and hardware costs and maintenance costs can be achieved. FREE is the abbreviation of Federal RegistryforEducationalExcellence , Federal Quality [22] Educational Resources, is an organization created and maintained by the U.S. federal government, public and private groups to facilitate the search for digital education and learning resources. Orange Business Services of France Telecom's communication solutions department, on the one hand [23].

2. THE PROPOSED METHODOLOGY

2.1 The Open Source Public Cloud Big Data Assistance

This platform mainly includes public information module, learning resource module, group class module and user information module. The main functions of each module are as follows: The public information module can send out the events or notices that have occurred on the website in the recent period, and can upload the photos of the group or collective learning or activities, so that users can know it at the first time; learning resources The module can realize resource sharing operation, and at the same time add text descriptions to the shared resources, shorten the time for teachers and students to query information, and improve the learning effect.

The group class module realizes the flexibility of establishing a group and adding study groups, and can participate in the group study and discussion; the user information module realizes the establishment, control and maintenance of basic data of group members, support information improvement and photo addition functions. Another design concept of the public innovation and entrepreneurship information service platform for college students is to penetrate from the depth of education, and to pay attention to depth, that is, "theoretical teaching→experimental teaching→innovative training→enterprise practice→employment→entrepreneurship". In order to effectively connect theory and practice teaching, the curriculum system should meet the requirements of college students' innovation and entrepreneurship. Courses can be developed based on work process and enterprise projects, courses are set with work tasks as reference points, and teaching content is organized with projects as reference points. . Google's search engine currently has the most users, and there are many other applications, such as: mail processing, document processing and enterprise-level products GAE, etc. The services they provide are timely and need to provide massive databases. The company proposed a scheme of using cheap computers to work together, which effectively solved and dealt with the problems of timeliness and massive data storage, and later gradually developed into Google cloud computing technology.

Another design concept of the public innovation and entrepreneurship information service platform for college students is to penetrate from the depth of education, and to pay attention to depth, that is, "theoretical teaching→experimental teaching→innovative training→enterprise practice→employment→entrepreneurship".

2.2 The Online Resource Sharing Platform for Colleges And Universities

Bootstrap is one of the front-end organizational structures, Html, CSS and JavaScript are more flexible than the traditional front-end organizational structure, which makes the development of Web terminals faster. JQuery, as one of the non-heavyweight JavaScrip libraries with good compatibility, and Volley, as one of the open-source organizational frameworks for network operations in the Android environment, greatly simplifies network operations.

The XUtils framework is similar to the Hibernate framework in the Java environment. It is the ORM CObject Relation Mapping temporal relationship mapping framework in the Android development environment, which can further simplify database operations. When responding to larger information, the time required is longer, and the response time corresponding to the amount of information is also longer. Compared with the distributed resource sharing platform, the cloud computing shared resource platform has a shorter response and feedback time to information. This is because in the distributed resource sharing platform, all modules are concentrated in the same server. The request for calling related data is mainly based on the transformation time. The design and implementation of the system is to facilitate the learning of teachers and students in colleges and universities, and to provide a platform for the two to facilitate learning and communication.

Therefore, as long as they can access the Internet when they use it, there is no need to install any software to operate it anytime, anywhere. The registrant performs a series of operations such as browsing and accessing on the browser as the client. The login of users of the learning resource sharing platform has the function of authentication. Each login (except tourists) needs to register and log in according to the corresponding method, and send the required request through the web terminal to enter the login interface. Down to the load balancer to manage and allocate all available resources. Proxy server: responsible for connecting other components of Swift together. For each request, it will locate the account, container or object information associated with the request on the ring, and forward according to this information; the proxy server provides a public API structure, which can be extended horizontally. Object server: It is a simple binary storage server that can store, download, and delete objects stored on the local device.

2.3 The Online Resource Sharing and Practice Platform for Colleges and Universities

The crowdfunding process of the college student innovation and entrepreneurship information service platform requires the participation of three parties: fundraisers (college students who have creative projects and need innovation and entrepreneurship funds), investors (the vast number of Internet users who have participated in the crowdfunding, and they are based on their own interests. Provide investment in the fundraiser's innovative and entrepreneurial projects, and get a certain return after meeting the agreed conditions) and crowdfunding platform (a platform for matching innovative and entrepreneurial college students and investors, in the cloud computing shared resource platform, the location of each module It mainly focuses on the corresponding virtual machine, so that the time consumed by each module calling each other can be greatly reduced. At the same time, the problem of mutual interference of each module can be effectively solved in the separately deployed virtual machine mode, so that the utilization rate of related resources has been further improved.

From the results of the time consumed by the distributed resource sharing platform and the cloud computing resource sharing platform for OA document access, it can be seen that the distributed resource sharing platform takes a long time to access OA documents. Each school stores learning resources separately, and resource sharing is difficult to achieve, so educational resources cannot be reused. The unbalanced development of resource sharing technology makes it impossible for colleges and universities to form a unified resource construction standard and resource exchange platform, and resources cannot be allocated centrally. Because

the database interface standards between universities cannot be unified, it is difficult to realize data exchange with each other. In general, the learning platforms of traditional colleges and universities carry out a lot of repetitive work, and there is a lot of unnecessary waste of resources and investment. The emergence of cloud computing will break the limitations of traditional university learning platforms. It can integrate effective resources and build a public resource information database that can be used by teachers and students. Users can access the system and obtain resources.

3. CONCLUSIONS

As a new form of resource utilization, cloud computing has been widely used in many fields and achieved good results. In this paper, a private cloud storage space is created, and the open source architecture is used to achieve the goal of calling and using the OpenStack API. Build a development environment, realize the communication module between the platform and the cloud storage system, and implement a resource sharing scheme in the resource processing module: users can search If you do not have permission, you need to apply to the resource owner, and you can download it only after the application is allowed; users can also share resources with circles or people in circles.

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Intellectual Property Information Intelligent System Based on Content Data Mining and ID4 Algorithm

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Abstract:This paper studies the intellectual property information system based on content data mining and ID4 algorithm. First, data mining technology is applied to patent information analysis, such as using clustering algorithm to mine patent text, and using association rules to mine patent inventors. The system can analyze the structure of DOCDB patent data files, extract relevant patent information, and store the processed data in the database. The experimental results show that the system can efficiently process patent data and effectively improve the automation level of patent preprocessing. Use support vector machines, naive Bayes, and radial basis neural networks to classify and test patent samples.

Keywords: Intellectual Property, Information Intelligent System, Content Data Mining, ID4 Algorithm

1. INTRODUCTION

In recent decades, the amount of patent information has increased dramatically, and its multiplication cycle has been shortening. At present, there are more than 50 million patent documents [1] in the world, and the total number of patent documents published by various countries exceeds 1.5 million each year [2]. Patent information has also become an inexhaustible treasure trove of technical literature and knowledge. As we all know, patent information is the crystallization of human wisdom, records the achievements and trajectories of human society's inventions and creations [3], contains the most important It has strong fault tolerance, divides large files into many small files, and automatically copies and saves each small file as a copy. The user can customize the value, and the default is. [4], and is the most comprehensive and latest technology in the world. Source of intelligence. In today's technological revolution, the original text analysis method and simple statistical analysis method in the patent information analysis method have also become the past [5]. It is replaced by advanced computer technology. In-depth analysis of hidden laws in patent data provides reliable decision-making basis and intelligence guarantee for technological innovation and enterprise development [6].

In this case, a patent analysis technology based on data mining came into being. Data mining is a multi-disciplinary field that integrates artificial intelligence, machine learning, statistics, knowledge engineering [7], database technology, information retrieval and other new technological research results. Its application range is very wide. In addition to the above external environmental factors, my country's internal environment also prompts [8] companies to This method enhances the fault tolerance of the system and ensures the integrity of the data. Users can also access the target data nearby, reducing the data access delay to a certain extent. of economic structure and building an innovative country [9]. It has been vigorously promoting the progress of intellectual property work from the level of national policies and systems [10]. For enterprises, it is necessary not only to protect their own intellectual property rights, but also to master key technologies and develop products with independent intellectual property rights. For governments at all levels, it is not only necessary to provide enterprises [12] with a good innovation environment, but also to guide enterprises to conduct independent research and development. path of. Based on the above comprehensive factors of the domestic and foreign environment [13], the importance of intellectual property rights is self-evident, and the analysis and research of patent information has become an important aspect of the implementation of intellectual property rights [14]. In recent years, the number of domestic patent applications has increased year by year, and the demand for patent research has also continued to be strong. In order to meet the needs of enterprises and governments for patent information analysis [15], many domestic research institutes are engaged in research in this area, and have achieved some theoretical results [16]. At the same time, many domestic software companies have also launched their own patent analysis software to analyze actual cases for users. Provide tool support [17]. Data mining is a multi-field and multi-disciplinary interdisciplinary, and its development is affected by multiple disciplines [18].

These include database systems, machine learning, statistical technology, and information science, and even biology, neural networks, etc. In addition, it is also affected by the data mining method used [19]. Due to the multi-field and multi-intersection of data mining, data mining technology can use related technologies of other disciplines, such as knowledge representation [20], neural networks, high-performance computing, inductive logic programming, and fuzzy or rough set theory. In addition, The number of physical machines will also have different effects on the amount of computation. With the increase of physical machines, cloud nodes and edge nodes have different costs, as shown in Figure 5-15. recognition technology, spatial data analysis technology [21], information collection and retrieval technology, pattern recognition analysis technology, image processing technology, signal analysis technology, visualization [22] technology, and technology. Bioinformatics technology and other fields. Traditional patent analysis methods mainly use original text analysis methods and simple data statistics. Faced with a large amount of patent document data, not only the workload is heavy, but the application of patent documents only stays on the surface [23].

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With the development of computer technology, the ability of computers to process massive amounts of data has become stronger and stronger, and their applications in information processing have become more and more extensive. At the 1st International Joint Artificial Intelligence Academic Conference [24] held in January 2009, the term data mining, also known as knowledge discovery, was proposed for the first time, and its research focus is slowly changing from the research of discovery methods to the research of system application technology. Moreover, in the recent development, more and more attention has been paid to the combined application of multiple discovery methods and technologies, and the trend of mutual penetration between multiple disciplines has become more and more obvious.

2. THE PROPOSED METHODOLOGY

2.1 The Content Data Mining

Data mining technology appeared in the late 1980s, mainly for business applications. After more than 20 years of development, the research focus has gradually shifted from discovery methods to system applications, focusing on the integration of multiple technologies and the interpenetration of multiple disciplines to tap the intelligence value of information. This feature makes it have a wide range of application prospects in deep-level patent information analysis, but because of its short research time, there is no mature theory at present. The preprocessing process of patent text information is basically the same as the preprocessing process of the text collection in the general Chinese text mining process. It has to go through the five steps of data cleaning, Chinese automatic word segmentation, feature item extraction, feature item weight calculation, and vector space model representation.

Since the cleaning of patent text data is mainly based on the user's analysis topic, the patent text information retrieved from the patent data source is filtered, and the patent data that is not related to the analysis topic is removed. This process is generally manual operation and involves a lot of subjectivity. Factors and specific circumstances. Here, a vector space model is used to represent the patent text after data cleaning. To represent the text as a vector, the text must be segmented first, and then the feature items that can represent the text content are extracted from the segmentation result, and finally a certain method is used to the text feature items are weighted so that a text is expressed as a vector. The following will introduce these five steps. These five steps are the core steps for the content mining of patent information, and they are also steps that require automatic computer processing. The processing effect will directly affect the accuracy of the patent information content mining results.

The main function of data mining refers to the process of using data mining related technologies to find specific valuable data patterns. Generally speaking, data mining tasks can be divided into description tasks and prediction tasks. Descriptive tasks find general characteristics of data in existing databases. The predictive task is to infer, discover and predict the development trend of the data based on the current data analysis. Association rule mining can find out the association or correlation between itemsets and itemsets in the original data set. With the collection and storage of more and more data, more and more researchers related to data mining technology are showing interest in discovering the correlation between data sets from existing databases. The main reason for the low cost of edge computing is that the multi-container technology in the software has more image files, so even if the number of physical machines increases, the cost will not change or even decrease.

2.2 The ID4 Algorithm

There is no doubt that time information is an essential component of video signals when performing various video processing. Time information also plays an irreplaceable role in the perception of external things by the HVS system. Therefore, this paper proposes a method for solving the JND value in the temporal domain based on video motion, by solving the difference of the internal frames of the reconstructed video sequence as the characteristic parameter in the temporal domain of the video signal.

The original LUCENE was developed with the java scripting language as the development language. Due to the wide application of the .NET platform, a ported version of LUCENE, LUCENE.NET, came into being. It is not a complete full-text search engine, but the architecture of a full-text search engine, providing a complete query engine and indexing engine. Developers can implement full-text search functions based on LUCENE.NET.

In addition, achievements and methods in other fields are also introduced, such as expert systems [8], artificial intelligence, web data mining and other advanced technologies, which have improved the efficiency of the question answering system and expanded the research direction of the question answering system. View the interactive messages in the gateway through the Docker in the gateway and the energy management platform in the cloud.

2.3 The Intellectual Property Information Intelligent System

The so-called patent information analysis is collecting patent information from patent documents, processing, sorting and analyzing the patent information through scientific methods, and finally forming a collection of scientific labor of patent information and strategies. The essence of patent information analysis is to conduct directional selection and scientific abstract research on the text content of patent information, patent citations, patent quantity, etc., to study their interrelationships, and to dig out the truth hidden in them, so as to make specific technologies. Trend forecast, follow-up research on competitors, etc. Automatic creation of DOCDB patent database. The database structure for recording DOCDB patent data is very large, with a total of 294 fields. Manually creating this database will be very cumbersome. Therefore, it is necessary to implement flexible automatic creation of database tables.

DOCDB patent data analysis and import. Analyze the input patent data in XML format, extract valid information from the data, and perform data preprocessing on it. ③Types of DOCDB patents are screened and entered. The user can specify the patent data to be stored in the database according to the type code of the patent (Kind-Code). ④Import data in batches. The system can not only process a single patent document, but also process a batch of data in a centralized manner. ⑤Data storage. Store the preprocessed data information into the existing database. In the text clustering method, because neural networks have the advantages of high tolerance to noisy data and low error rate, the application in data mining classification is getting more and more attention. Especially in text clustering, most use SOM (Self-Organizing Feature Map) neural network clustering algorithm, that is, self-organizing feature map neural network, which is also called Kohonen network. The network is a self-organizing,

self-learning, and clustering neural network composed of fully connected neuron arrays.

3. CONCLUSION

On the basis of drawing lessons from data mining technology and ideas, this article carried out related work on the important preprocessing links. Using patent data in the European Patent Office document management database as the data source, the content and structural characteristics were analyzed and compared with the related database structure was designed, and the preprocessing method of this kind of patent data was proposed. Finally, the patent data preprocessing system of the European Patent Office document management database was designed and realized. Through experimental verification, the system can effectively process this type of patent data, resulting in a unified, easy-to-analyze historical database of Germany and Japan.

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Key Data Extraction and Scene Data Mining of PE Guiding Videos

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Abstract:This article is based on data mining research scene data mining in the key data extraction of physical education videos. Combined with the current status of physical education, the application value of scene data mining technology to sports events and physical education is analyzed. The results show that data mining enhances the probability of victory in football matches, basketball matches, and track and field matches, and data mining improves effective frame extraction in sports teaching videos. Data mining is a technology that quickly processes data and information, which improves the effective rate of teaching videos by 7.6%. It is widely used in 98.6% of physical education. The use of data mining in physical education can promote the development of physical education in colleges and universities.

Keywords: Key Data, Data Extraction, Scene Data Mining, PE Teaching Videos

1. INTRODUCTION

Traditionally, the field of science has always had a scope. But the scope of research in scientific fields also changes over time, and may even mix with each other to form new fields of study. In order to adapt to the increasingly fierce market competition environment, comprehensively enhance the support level of network management operation and maintenance and network service capabilities, comprehensively improve customer satisfaction, and thereby enhance the core competitiveness of enterprises, under the guidance of the strategy of "leading quality, also plays an irreplaceable role in education management . In the past, data information was only used for routine data recording and statistical classification, but now data mining technology is used for daily student information statistics, teaching task records and data storage, etc., but also for managing data, processing these massive amounts of information, and Analyze, find out the connections between data, and provide powerful teaching strategies for teaching management. Data mining includes data preprocessing, data mining, analysis and application of results. Combining the school's teaching data and information, the introduction of advanced network information technology is used in school education management, teaching evaluation, paperless examinations, teaching records, student inductive learning and teacher teaching technology analysis [1-6].

efficient operation, and strong support", through Network optimization big data helps network optimization work. Exploring methods that can comprehensively train students to discover, analyze and solve problems is the fundamental goal of current higher education activities, o Current research on educational theory and educational practice is increasingly returning to real educational scenarios. It is now more and more easy for people to acquire and store various videos. How to automatically extract the information people need from video or image data by processing one or more images? This paper provides a new idea for optimizing the expressway private network combined with big data; According to multiple conditions such as chain, driving speed, etc., the real high-speed users are screened to achieve a balance between the recognition rate and the full recognition rate; combined with the identified high-speed users, the big data fusion correlation analysis is carried out. . The so-called constructivist learning theory puts more emphasis on student participation and student centrality, and hopes to allow students to actively complete the construction of knowledge through the use of "scenario", "collaboration", "conversation" and "meaning construction" links. It has aroused the strong interest of many researchers and businessmen. This not only requires a computer to visually observe video images like a human, and perceive the shape, [7-14].

In addition, the teaching videos of the students in this class can also greatly promote the teaching process. The development of primary school physical education videos is conducive to the teaching and research of physical education teachers, is conducive to the filling of the teaching content of indoor physical education theory courses on rainy days, is conducive to the immediate effect of student learning, is conducive to the long-term impact of resource preservation, and is conducive to inspiration and guidance. The author will talk about the application of sports skills teaching videos, position, and attitude of objects in the environment. The method provided in this paper uses IT methods to discover and solve network problems by mining a large amount of data, avoiding community problems. The KPI indicators are very good, but the user experience in the scene is very poor. .Knowledge point planning..teaching videos of the students in this class can also greatly promote the teaching process [15-21].

The development of primary school physical education videos is conducive to the teaching and research of physical education teachers, is conducive to the filling of the teaching content of indoor physical education theory courses on rainy days, is conducive to the immediate effect of student learning, is conducive to the long-term impact of resource preservation, and is conducive to inspiration and guidance. The author will talk about the application of sports skills teaching videos, peer classroom videos and student self-mirroring videos in physical education. he content of this course includes understanding data, data warehouse, [22-24].

2. THE PROPOSED METHODOLOGY

2.1 The Physical Education Video

In the environment of the multimedia network age, teachers have the responsibility to make full use of new technologies to change the weak points of teaching. Sports application system

architecture of the Internet of Things technology: The application system of the Internet of Things technology in the sports field should be based on the main body with the attribute of "things" in the sports system, and the existing digital and information system that has gradually matured. With the application of the core technology of the Internet of Things, and following the principle of demand orientation, it will ultimately serve the various services and management of the sports industry. Physical and virtual "things" in sports, sports digitization and informatization are the basis of the application system; information perception, information transmission, and information processing technology are the technology environment of the application system of the Internet of Things; body area network, intelligent management of stadium facilities , Virtual training base, sports information service center and knowledge innovation base are the foreseeable vision of the application system. For example, in the process of basketball teaching, students can watch basketball basic teaching videos, combined with the teacher's personal demonstration and explanation. There are a wealth of excellent basketball teaching videos on the Internet, including wonderful basketball game scenes.

On the one hand, these video materials can arouse the enthusiasm of students in learning, on the other hand, they can also expose students to the style of top players, which can invigorate the classroom atmosphere while regulating the basketball teaching process. The same method can be applied to other teaching processes, especially skill items that are not familiar to physical education teachers themselves.

2.2 The Key Data Extraction of PE Teaching Videos

Research of video mining has just started, and its concepts, system structure, and technical methods are still in the background. Not clear enough. This paper is based on literature verification and tracking and analysis of research progress at home and abroad. How to improve the real user experience, analyze and solve problems through real scene users. this is a topic that all operators should pay attention to in the future. The establishment of the scene user system is urgent. The data mining technology module focuses on enabling students to understand various typical data mining methods and master representative mining algorithms.

The development and application of PE teaching videos is not only an opportunity, but also a responsibility. If the majority of PE teaching workers can effectively use PE teaching videos, they can make the teaching process more effective, students more active, and better teaching results. Such as: motion video panoramic image synthesis technology: panoramic image synthesis refers to a series of partial images describing a continuous scene to obtain a single image that shows the entire scene. In traditional applications, the panoramic image captures the static and non-moving background in the scene. In recent years, centering on assisting and guiding sports training, new requirements have been put forward for panoramic image synthesis. Sports video panoramas must not only fully construct the global background of the sports scene, but also require a series of foregrounds, namely athlete images, to be displayed on the background, so as to fully show the movement trajectory and the details of the action.

Clustering, classification, prediction, outlier analysis and machine learning are typical methods that are mainly explained. After the concepts and methods of data mining are integrated into the multimedia field, researches on multimedia data mining have emerged one after another, such as medical image mining. The data includes soft mining data, hard mining data MR data, and asset management data. At present, there are big data platforms in various places.In China, the research on video mining technology has not been paid much attention. Reference [32] believes that video mining is to find hidden, valuable and understandable video patterns by comprehensively analyzing the audio-visual characteristics, temporal structure, event relationship and semantic information of video data, and then to obtain the trends and associations of video events, and to improve the performance of video events. How smart the video management is. At present, data mining tools basically include classification algorithms. Among them, the classification algorithms include Naive Bayes, decision trees, etc., which can process big data. This high-speed scenario user mining adopts a classification algorithm. This course will select the vending machine scene operating on campus to allow students to personally participate in the whole process of data mining.

2.3 The Scene Data Mining

In order to realize the optimized mining and integrated processing of big data in dense IoT scenes in the context of cloud computing, radio frequency identification and sensor fusion sensing methods are used to optimize the sampling and feature classification design of big data in dense IoT scenes to build dense IoT scenes. Scenario big data sampling model, using wireless sensor network technology to construct RFID data collection tags, under the ZigBee networking protocol, perform big data statistical analysis and fuzzy sampling in dense IoT scenarios, and adopt big data fusion scheduling methods to implement dense IoT scenarios Feature extraction and data analysis of big data.

The book "The Coming Era of Scenes" by Robert Scober and Sher Israel points out five elements related to the era of scenes: big data, mobile devices, social media, sensors, and positioning systems. They call these five elements "the five forces of the scene." They believe: "The five forces are changing your experience as a consumer, patient, audience, or online traveler. They are also changing businesses large and small." According to research firm IDC, there will be 3.5 billion in the world by 2015 Taiwan's networked products, coupled with 1.7 billion networked computers, it is obvious that the era of the "Internet of Things" has arrived. The most notable feature of this era is that technology has become more intuitive. It starts to understand where you are, where you might go, and helps you along the way. Take our most commonly used taxi-hailing software-Yidao or Didi as an example. These softwares are based on the scenes built by passengers in the ride area.

The scene here has become a way of thinking. This way of thinking advocates that the Internet and mobile Internet should be regarded as tools for connecting different individual manufacturing scenarios; the scene has also become a manifestation of ability, which is the use of the Internet and mobile Internet to complete the connection. The efficiency method, such as the wearable device detects that you have a travel plan today, it will tell you the weather conditions and the preferential information of staying in the hotel in advance, and when you arrive at the hotel, the hotel website will prepare it for you based on the analysis of your previous data Appropriate room and favorite food, and even prepare you the most used daily necessities and various things for tomorrow's disparity. According to the fusion result of related knowledge, design the relevance forwarding control protocol of IoT data,

and adopt deep learning strategies for big data mining and information fusion processing in dense IoT scenarios.

3. CONCLUSIONS

The above data can be transmitted to the system through the big data platform. The focus of the course is to explain its successful application cases in business, sports, media and other industries, so that students can master the general process of data mining implementation, and provide reference for subsequent practical links.

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Cost-Benefit Analysis of Advanced Metering Infrastructure of Smartgrid: A Case Study of Dhaka City

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Abstract: The aim of this research is to present a methodological approach to obtain the cost-benefit impact at environmental and socioeconomic level, related to the integration of advanced metering infrastructure (AMI) into utilities and their residential customers. The methodology used to quantify the costs and benefits of implementing such technology in smargrid domain at Dhaka city. The socioeconomic benefits estimated in this research were related to job creation, energy consumption decrease, reduction of non-technical losses, and the reduction of CO_2 emissions. An economic analysis using the net present value is presented here for assessing the impact caused by smart metering implementation. Also, sensitivity is analyzed for energy price, AMI cost and duration of the project. The result shows that AMI system implantation has advantages over current situation.

Keywords: Advanced metering infrastructure, smart meters, smartgrids, cost-benefit analysis, net present value.

1. INTRODUCTION

The issue in Dhaka, Bangladesh, is not a shortage of energy access. Instead, the problem is the amount and quality of energy that is currently accessible compared to the rising demand in an urban region where there will be 20 million people by 2021. When energy supply and demand are out of balance, power outages can occur, which prompts the usage of dirty diesel generators as a backup in residential areas or on industrial locations.

One of the top power distribution companies in Bangladesh, Dhaka Power Distribution Company (DPDC), was the first to begin efforts to implement the SG system in Dhaka and Narayanganj. At the end of December 2022, the DPDC's first pilot project, dubbed the introduction of the smart grid, will begin its implementation phase. The pollution produced by diesel generators used as a backup during grid failures will be eliminated when the smart grid enhances grid performance. The quality of the electrical service will significantly increase, benefiting 1141000 people in total. The project also mitigates climate change by avoiding an annual accumulation of 104,000 tons of CO_2 emissions [1].

Overall, and not just including the project with the DPDC, the smart grid solution is of great operational value. It makes it possible to carry out maintenance upstream of failures and to optimize the use of equipment like power transformers, circuit breakers, etc. This is made possible by real-time algorithms that continuously analyze the hardware connected to the grid and thus extend its life. The digital presence at all levels of the network allow for better knowledge of the network and anticipation of outage-related events. The smart grid gives us a more reliable, accessible grid.

Compatibility and interoperability issues should be low because DPDC operates in accordance with international standards and employs cutting-edge technical principles. This implies that various equipment types from various manufacturers will be able to connect with one another and carry out sophisticated automation tasks. The worldwide standard IEC 61850 is based on this fundamental tenet. This strategy is not unique to Bangladesh. Even if it requires modifying a few communication units to make the entire system remotely interoperable, existing equipment can be incorporated into creative and technologically advanced solutions.

It goes without saying that any electric company that wants to achieve its primary objective of supplying reliable and adequate electricity must incorporate digitization and digital technology into the solutions it provides. This transition takes shape thanks to the smart grid, which boosts the grid's effectiveness and efficiency. Additionally, by incorporating digital technology into our projects, we hasten the uptake of renewable energy sources and so help the nation achieve its Sustainable Development Goals (SDGs).

Installing a Smart Metering (SM) system is one of the key prerequisites for converting to an SG system. [2]. As a first step to implementing the SG system in Bangladesh, the government of Bangladesh has been planned to phase-in the installation of 8.8 million smart prepaid meters across the entire nation, according to the ministry of power, energy, and natural resources. The installation of 2226600 meters by power distribution companies for the fiscal year 2020–2021 has been set as a goal for carrying out this plan. By FY 2020–21, companies like Bangladesh Power Development Board (BPDB), Bangladesh Rural Electrification Board (BREB), Dhaka Power Distribution Company Limited (DPDC), Dhaka Electric Supply Company Limited (DESCO), West Zone Power Distribution Company Limited (WZPDCL), and Northern Electric Supply Company Limited (NESCO) will install these meters, totaling 1100000, 250000, 200000, and 400000 respectively [3].

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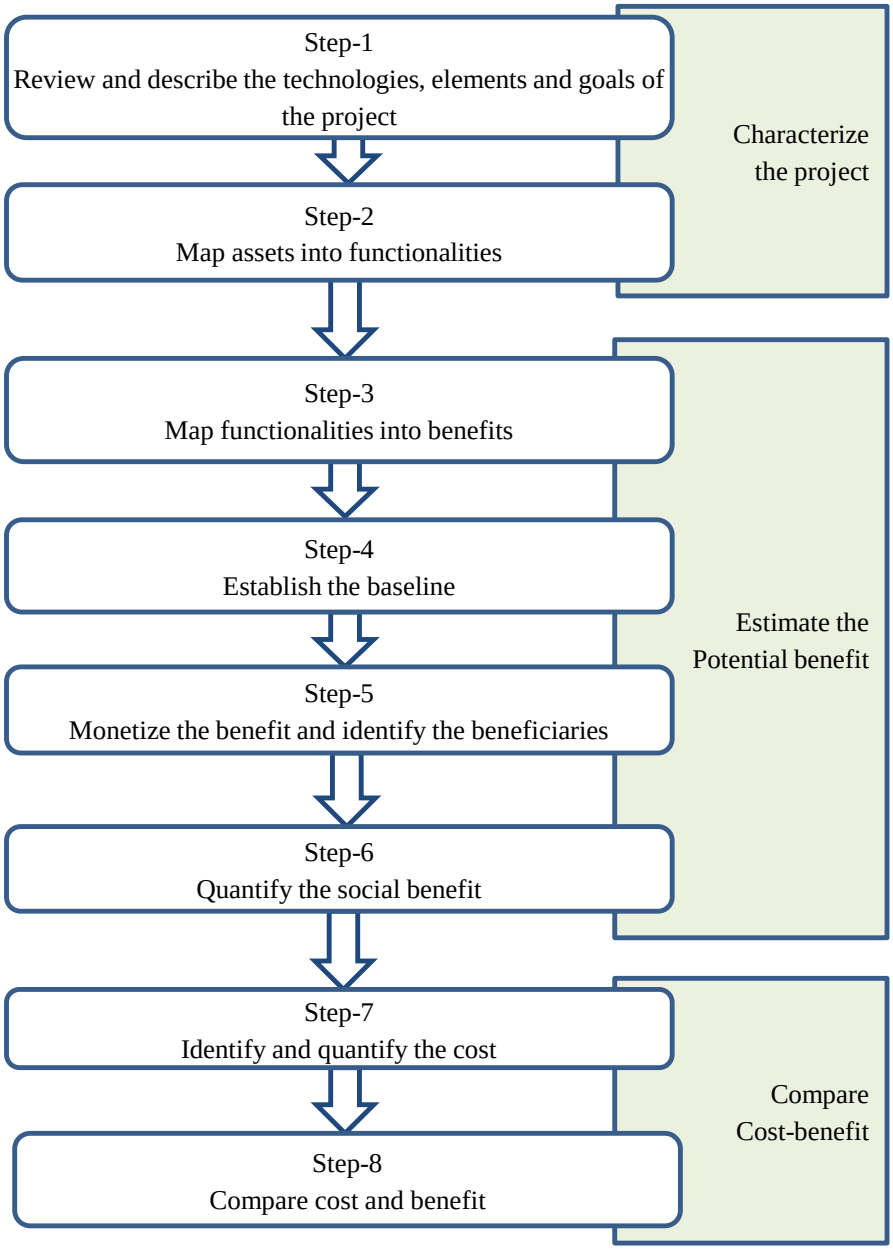

Figure 1. Cost-benefits methodology for implementing advanced metering infrastructure

2. DHAKA POWER DISTRIBUTION COMPANY LIMITED (DPDC)

The Dhaka Power Distribution Company Limited (DPDC) is a public limited company that falls under the authority of the Power Division of the Ministry of Power, Energy, and Mineral Resources of the Government of Bangladesh. It is responsible for overseeing the distribution of electricity to the residents of the Dhaka City Corporation region. The firm was registered on October 25, 2005, in accordance with the Companies Act of 1994, as a result of the Power Sector Reform Program. The corporation is entirely owned by the government. On July 1, 2008, DPDC began doing business, replacing the Dhaka Electricity Supply Authority (DESA). A contract agreed in September 2008 saw the transfer of all of DESA's assets and liabilities to DPDC [4].

3. DHAKA ELECTRIC SUPPLY COMPANY LIMITED (DESCO)

The public limited company Dhaka Electric Supply Company Limited, also known as DESCO, provides energy to Tongi Town in the Gazipur District and the northern areas of Dhaka City. As a Public Limited Company, the business was established in November 1996 in accordance with the Companies Act of 1994. As of December 31, 2013, the corporation served 604,304 users overall and was now a part of the Power Division of the Bangladesh Ministry of Power, Energy, and Mineral Resources [5].

4. METHODOLOGY

This study's technique was adapted from a reference [6-7]. This methodology offers a simple, step-by-step process for analyzing the costs and benefits of a smart grid project. The proposed methodology was then implemented in stages to a local smart metering project in the city of Dhaka.

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The study's approach is depicted in Figure 1 in order to determine the economic and environmental effects of integrating smart meters into the city of Dhaka's electrical network. The analysis was separated into the three sections below: Descriptions of the projects, a cost-benefit analysis, and an estimate of the possible advantages.

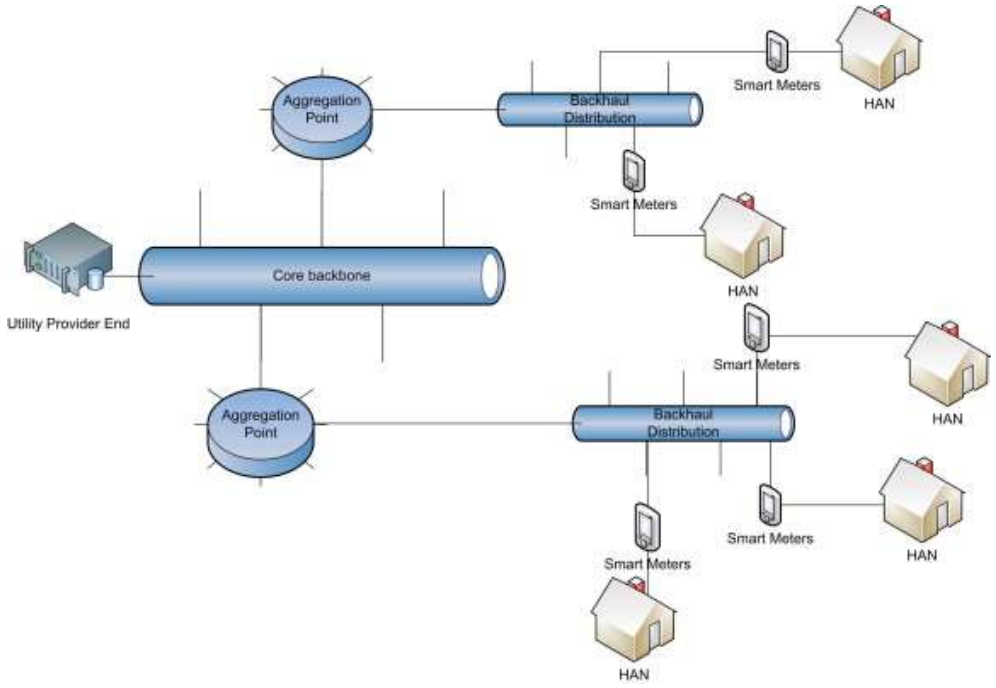

Figure. 2 Advance metering infrastructure

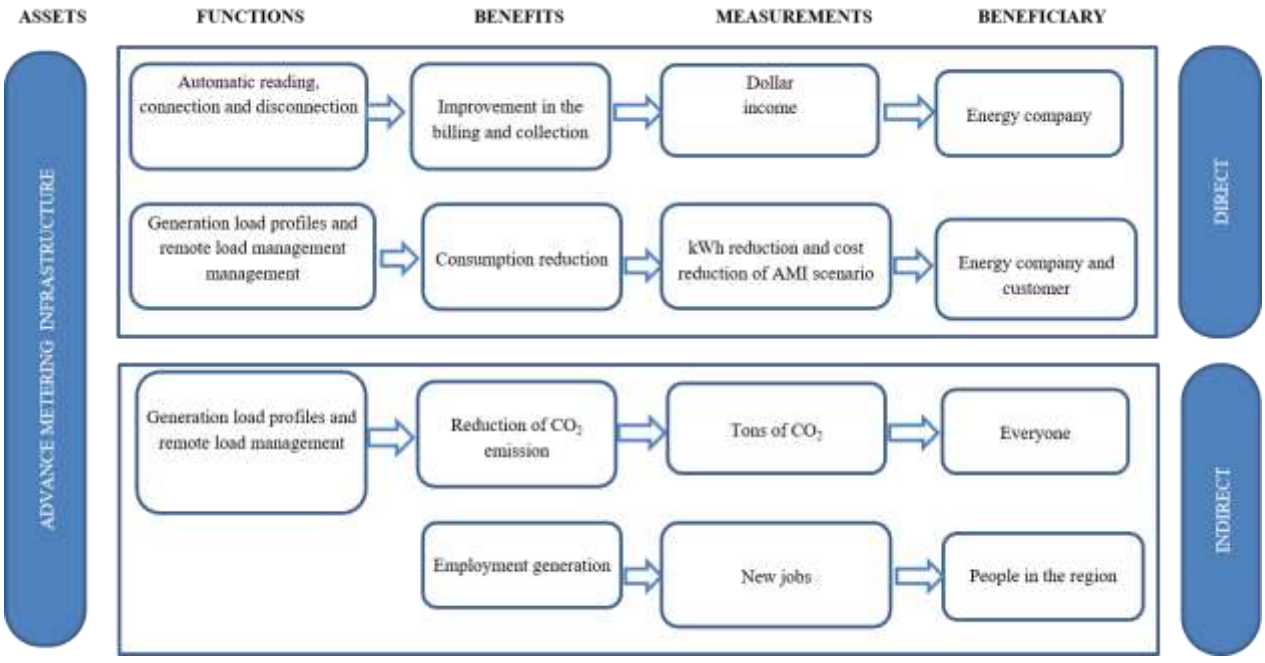

Figure 3. Map features and benefits attributed to smart metering.

5. PROJECT CHARACTERISTICS

For local utility household users, this project entails the installation and subsequent operation of 3585277 smart meters. The apparatus would have to function under the two-way automatic communication system-based AMI communication architecture. Data from the meters is transmitted by electrical distribution lines to equipment at the substation, where it is then transferred to the control centers using different communication technologies. The AMI infrastructure is composed by two levels shown in Fig.2 [8].

Level 1: Equipment's of Substation communications

Level 2: Equipment Remote communications

6. MAP FUNCTIONALITIES TO BENEFITS

The process of turning smart metering's functions into advantages is defined in this research as beginning with general features that include energy price, load management, demand curve management, energy losses, annual employment, and CO_2 emission reduction.

The functionality to benefits map created in this work is shown in Figure 3 [6]. Each benefit identifies a metric that measures achievement and the recipients.

7. ESTABLISHING THE BASELINE

To compare the new scenarios—the AMI scenario—with the current situation and determine the difference between the generated costs and benefits, the project baseline must be established. The baseline scenario in this work is the conventional measurement method based on electromechanical meters. There are two scenarios included in this work. Each of them is described as follows:

- Current Situation: As of present now, electromechanical meters are being used to measure energy use.
- AMI Scenario: Smart meter implementation, remote load connection and termination, and detection of unwanted tampering are all included in the AMI Scenario

8. MONETIZE BENEFITS

A numerical simulation program was used to monetise and interpret the advantages shown in Figure 3 for the specific location. The calculation creates new energy measuring scenarios by taking into account a hybrid communication infrastructure made up of a meter and GSM connection from a data concentrator to a utility. The tool was changed to take into account the local utility's adoption of the AMI system's infrastructure.

The main pertinent variables, equations, and presumptions that were used to quantify the costs and monetize the advantages of deploying the new energy measurement system in the city of Dhaka are shown in Tables 1 and 2. An rise in both the number of consumers and the inflation rate were taken into account when estimating the annual costs and benefits.

Table 1. Input parameters

Parameter	Value
1. Smart meter cost	200 USD
2. Cost of electromechanical meter	80 USD
3. Annual increase in number of electricity customers	2%
4. Cost per day of hiring a human meter reader	20 USD
5. Average percentage of electricity lost as a result of local utility fraud	12%
6. Using smart meters has resulted in an average decrease in the amount of electricity fraud.	7%
7. Average drop in power use under the AMI Scenario	2%
8. Discount rate	5%
9. Energy fee per kWh	0.025USD /kWh
10. Average monthly consumption of customers	300 kWh

Table 2. General Equations considered in the model

Variable	Equation
1. Remote meter reading cost (USD)	Number of meters × Annual reading frequency × Payment for each manual reading
2. Non-Technical losses cost (USD)	Total number of consumers × Energy fee (USD/kWh) × Total average annual consumption (kWh) × Estimated average percentage of non-technical losses
3. CO_2 emissions cost (USD)	Total consumer × Unit consumption yearly (kWh) × Emission (g/kWh) × Value of emission (USD/g)
4. O/M maintenance costs (USD)	Total number of meters × O/M cost/meter (USD)
5. Employee cost (USD)	Total employer × employer salary per year (USD)
6. Revenue calculation	Total consumer × consumption per consumer (kWh)× price per unit (USD/kWh)

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9. REMOTE METER READING COSTS

When compared to the current scenario, new sophisticated metering technology considerably reduces the costs associated with meter reading, as demonstrated below in Figure 4. The primary explanation is because these gadgets allow for remote task execution through long-distance connection. The technology's capacity to remotely detach and reconnect individuals when necessary is an additional intriguing feature. In the sixth year, when the whole system is deployed, the graph demonstrates that implementation costs reach their lowest point. It is important to note that in a market where prices are competitive, cost savings may be passed on to the customer.

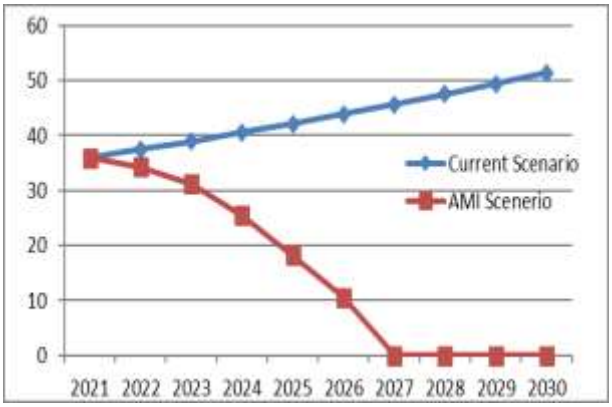

Figure 4. Remote meter reading costs in USD (millions)

10. NON-TECHNICAL LOSSES REDUCTION

The substantial non-technical losses in the local utility's network are one of the primary drivers for the adoption of the new smart metering infrastructure. According to the findings of the investigation, the first model year's economic losses were in the range of 40.0 million USD annually.

When compared to the current scenario, Figure 5 illustrates a significant decrease in annual operating costs as a result of the elimination of non-technical losses. Consequently, putting in place smart meters has a direct impact on increasing revenue. Savings from recovered losses are predicted to occur seven years after such adoption, when smart meters are fully implemented. As a result of three crucial elements, including market expansion, yearly inflation, and rising energy prices, Fig. 5 also depicts a minor increase in expenses towards the conclusion of the implementation period while maintaining a consistent percentage of non-technical losses.

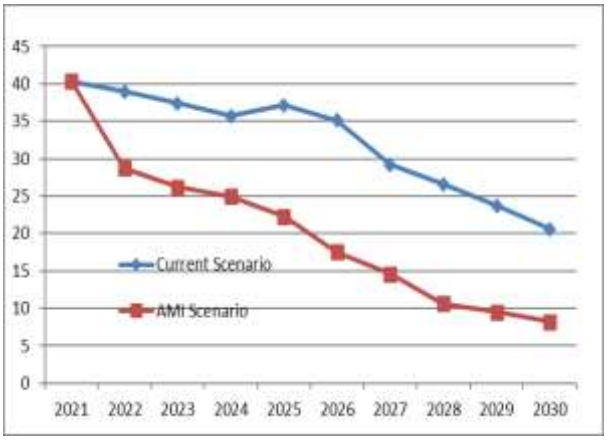

Figure 5. Non-technical losses costs in USD (millions)

11. REDUCTION OF CO_2 EMISSIONS

A methodology for estimating emissions that is given in Table 2 is used to assess the reduction in CO_2 emissions caused by the use of smart meter technology in the city of Dhaka. Such a methodology took into account the average CO_2 emission rate of 10g/kWh related to energy generation in Dhaka as well as annual customer electricity use. The anticipated annual reduction in CO_2 emissions for the AMI scenario is shown in Figure 6. The country as a whole, especially those areas where power is generated by thermo-plants, will benefit from the consumption information that is reducing CO_2 emissions, not just the metropolis. It is critical to emphasize that Dhaka's CO_2 emissions are quite high when compared to those of other nations.

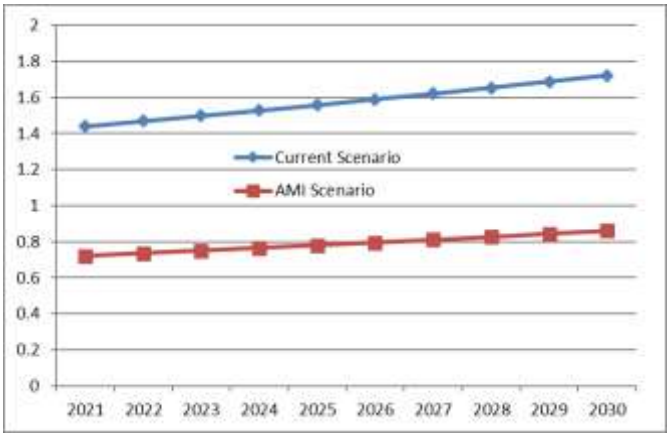

Figure 6. Cost of CO_2 in USD (millions)

12. METER INSTALLATION COST

The results for annual installation costs are displayed in Figure 7 below in order to predict installation costs for new smart meter technology.

Due to the enormous expense of integrating smart meters, a steady increase in costs can be seen during the first seven years of deployment (2021–2027). Since electronic equipment are frequently negatively impacted as time goes on, a 5% reduction in the cost of smart meters is estimated in this scenario.

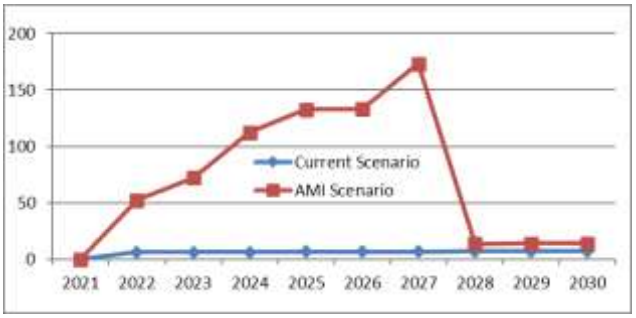

Figure 7 Installation costs of equipment in USD (millions)

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13. EQUIPMENT OPERATION AND MAINTENANCE COST

This study used the 1.5% failure rate for smart meters available in the literature to calculate maintenance costs. It is presumed that 1%, as reported by the local utility, applies to the current situation. The first is the cost of adopting AMI during the first seven years of the program, which accounts for the majority of the cost difference between the current situation and the AMI scenario. The second factor is brought on by the cost distinction between electromechanical and smart meters, as well as the latter's higher failure rate.

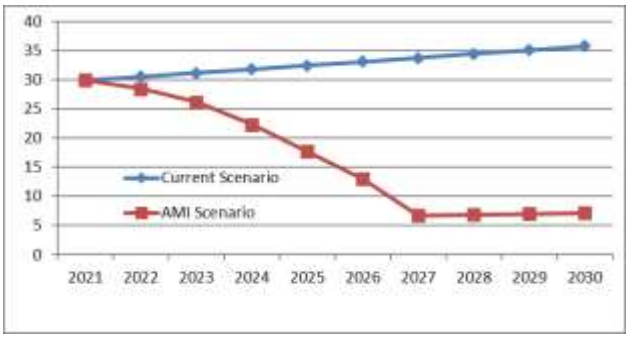

Figure 8. Equipment operation and maintenance cost in USD (millions)

14. EMPLOYEE COST

Social aspects of the implementation of smart meters include job creation or personnel costs. Evaluating the project's impact on employment is one activity that poses significant hurdles. When comparing the AMI to the current situation, Figure 9 demonstrates a detrimental effect on job development. The primary reason is that AMI does away with manual readings and the requirement for staff to perform local connection and reconnection, which can be accomplished remotely with smart meter technology. Utility companies can lower their labor needs while lowering operating expenses thanks to such initiatives.

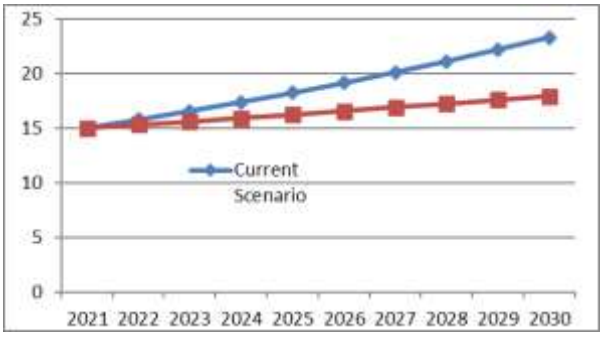

Figure 9. Employee salary cost in USD (millions)

Figure 9 demonstrates that only in the first seven years of the model, as compared to the present, more jobs are created under the AMI Scenarios. The graph's incremental peaks are caused by the potential need for several installations in order to roll out the new technology. Although the creation or destruction of jobs has a detrimental influence on society, process automation benefits utilities financially.

15. COST BENEFIT COMPARISON

The approach proposes three ways to compare costs and benefits once they have been assessed in order to assess the project's cost-benefit ratio. The three techniques are as follows: Net present value, annual comparison, and cumulative comparison (NPV). The net present value approach was used in this study. Due to the replacement cost of the AMI, Figure 10 depicts a higher project cost for the AMI scenario before 2028.

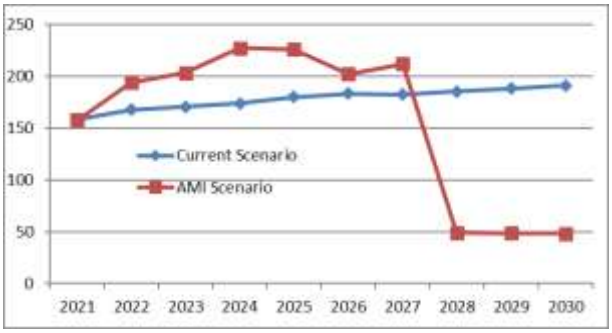

Figure 10. Total cost of project in USD (millions)

Due to savings, Table 3 displays a positive net present value for customers. Savings depend on consumers managing their spending patterns more effectively. However, it's crucial to remember that saving rates are modest and heavily influenced by a customer's sociocultural upbringing. The above is backed up by a significant decrease in non-technical losses. Both scenarios have a positive value and are successful. However, the AMI scenario has a higher NPV and benefit-cost ratio. Therefore, AMI is more profitable in comparison.

Table 3 Current and AMI scenario comparison

Particular	**Current Scenario**	**AMI Scenario**
Present value of cost (Million USD)	1665.86	1562.34
Net present value (Million USD)	156.52	197.90
Benefit-cost ratio	1.14	1.43

16. SENSITIVITY ANALYSIS

Finding the range of factors that can result in a favorable outcome in the cost-benefit analysis is the aim of the sensitivity analysis. To do this, it is important to determine the values of the critical variables that must be commutated, i.e., the value at which the NPV would be zero or, more generally, the project's outcome would not be below a predetermined minimum acceptable level. After 7 years, we gain from Table 4. This is for the price of installing a meter. As demonstrated in Table 5, the benefit is sensitive to the cost of the AMI. Energy cost sensitivity is also examined. As seen in Table 6, if energy prices decrease, this project won't be profitable.

Table 4. Sensitivity analysis according to year

Year	Benefit-cost ratio		Net present value (Million USD)	
	Current scenario	AMI Scenario	Current scenario	AMI scenario
7	1.01	0.85	11.600	-198.344
10	1.10	1.14	156.523	197.890

Table 5 Sensitivity analysis for AMI Cost

AMI Cost (USD)	Total Cost	Net present value (Million USD)	Benefit-cost ratio
300	1425.127	-79.680	0.94
270	1286.342	59.105	1.04

Table 6. Sensitivity analysis for energy cost (USD/kWh)

Energy cost (USD/kWh)	Benefit-cost ratio		Net present value (Million USD)	
	Current scenario	AMI Scenario	Current scenario	AMI scenario
0.020	0.89	0.92	-156.48	-120.77
0.022	0.98	1.01	-31.28	6.70
0.025	1.11	1.14	156.52	197.89

17. CONCLUSIONS

The engineer is able to estimate the costs and value the economic and environmental advantages that smart meters bring to the city of Dhaka thanks to the presented technique. Reduced CO_2 costs will have a favorable influence from a societal standpoint. Although the new metering infrastructure offers technology benefits like remote reading, remote connection, and remote disconnection that significantly reduce the requirement for personnel, it may have a negative effect on employment. Due to reduction of consumer electricity and non-technical loss, the monthly bill will be comparatively low under smart-grid environment. Benefit-cost ratio is very sensitive to AMI installation cost, energy price and duration of the project. So, forecasting of the value with lower error is necessary to analyze the project in smart grid domain and this may be considered for further evaluation in future study.

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Challenges and Changes Faced by Enterprise Financial Management in the Background of Big Data

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Abstract: With the progress of society and the development of the times, the level of science and technology has been significantly improved and widely used in various fields. In the context of big data, the application of information technology has provided certain convenience for various industries, which can not only improve work efficiency, but also improve work quality. Therefore, internal managers and financial personnel of enterprises should give full play to the advantages of big data, enhance the awareness of big data while reforming and innovating, and cultivate more professional and versatile talents. Enterprises should actively integrate the big data system, establish a more complete financial management model, and achieve win-win economic benefits and management efficiency. This paper analyzes the challenges faced by enterprise financial management under the background of big data, and discusses the reform strategy of enterprise financial management.

Keywords: Enterprise financial management; big data

1. INTRODUCTION

In short, the massive data information is managed and processed with the help of computer software, which is called big data. It uses new management models and methods to process various information, strengthen the big data process, and achieve the expected goal. In the current social environment, information technology has developed rapidly. Using the Internet to record massive amounts of information and integrate them, financial management has a key role and value for enterprise management.

The level of financial management directly reflects the actual management indicators and management efficiency of the enterprise, and also has an important impact on the enterprise's market competitiveness and long-term investment decisions. However, the enterprise still has the problem of using traditional financial management methods, which makes its corresponding financial management mechanism unable to meet the needs of the market economy, compresses the enterprise's production space, and uses big data technology to collate data information, It is also to further alleviate the problem of slow development of enterprises, help enterprises to explore the objective laws of market development and commodity marketing, predict the future development trend, and help enterprises to seek benefits and avoid disadvantages.

Only in this way can enterprises achieve basic healthy and sustainable development with the support of big data technology. Enterprises need to make certain changes in their own management tools. The era of big data provides us with massive data, which can contribute to the professional financial management of enterprises. Enterprises should make good use of massive financial information data, change the traditional manual management mode, and optimize the management structure of managers. Enterprises can achieve more long-term and stable development, especially in the use of big data technology in today's enterprise financial management work, which can completely subvert the traditional financial management work form, improve the depth and breadth of enterprise financial management work with the help of new management methods and management skills, and make the internal financial management work of enterprises provide necessary financial reference basis for enterprises, Reduce the financial risks faced by enterprises in the process of operation and development.

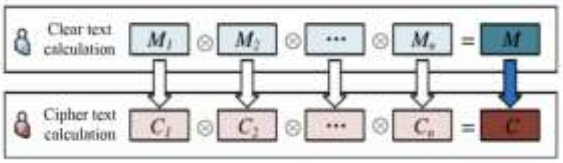

Figure. 1 Operation process of homomorphic encryption algorithm (image from the Internet)

2. THE PROPOSED METHODOLOGY

2.1 Challenges faced by enterprise financial management in the context of big data

Influenced by the era of big data, financial management has undergone great changes, taking records, measurement, determination, etc. as the basic information. However, due to the limitations of financial management technology, financial information has not been highly valued by the internal management personnel of the enterprise. Therefore, it is difficult to do a good job of data collection in a short time, the information has not been accurately classified, and the data sorting and classification are not standard. It is necessary to focus on talent training and recruitment system to provide a better development platform and growth space for corresponding managers.

Actively implement the rationalization of personnel selection and improve the comprehensive quality of management personnel. At the same time, we should hire professional personnel to guide the financial management personnel of the enterprise on data security, create a complete, scientific and reasonable supervision and maintenance system, and provide a platform for the further implementation of the enterprise's financial management work. With the development of the times, the enterprise is not only affected by the adjustment of

internal management strategy in the production and operation process, It is also affected by external factors such as the national macro adjustment and the interest rate adjustment of financial institutions. On the whole, these impacts are relatively positive.

For example, the state strongly supports the development of enterprise financial informatization and digitalization at the macro level, and the adjustment of interest rates of financial institutions also conforms to the development needs of enterprises. The financial management reform under the background of big data will have great changes. We need to understand the significance of the reform of big data for innovative financial management, which is conducive to our deeper understanding of the current financial management of traditional industries.

2.2 Effective measures for enterprise financial management reform under the background of big data

In the current environment, most enterprise leaders are still affected by traditional ideas and habitually focus on production, sales and other links. The management of financial work has not been highly valued, which directly reduces the initiative of financial staff. In the process of applying big data technology, we should actively improve the traditional thinking and financial management mechanism and use the data mining process to promote the transformation of enterprise investment methods, so as to lay a solid foundation for the further implementation and optimization of the risk control process. In the context of global economic integration, due to the need to face market change information and market economic information, enterprises have emerged the trend of analyzing market development from the obtained data information.

The traditional enterprise financial perfusion model involves many procedures, and the timeliness of data processing is low. Various uncontrollable risk factors often occur in the process of operation and management. As enterprises gradually adapt to the increasingly competitive market environment, the financial management system is not perfect, which is also an important problem in the process of enterprise financial management reform under the current big data background, Many enterprises have built their own financial management system in the traditional way. However, with the passage of time and the intensification of market competition, such financial management system has no adaptability and innovation.

3. CONCLUSION

To sum up, in the process of production, operation and development of enterprises, the importance of financial management is self-evident. It can not only ensure the normal operation of enterprises, but also improve their core competitiveness in the fierce market competition. The internal managers and relevant staff of enterprises should keep pace with the development of the times, keep pace with the times, change the traditional management concepts and methods, and promote the stable development of enterprises. In daily financial work, we will expand the advantages of big data, innovate the enterprise's financial management concept and operation mode, establish a new and efficient financial management mode with big data as the core, promote the development of the enterprise's core competitiveness with the help of scientific data analysis, and ensure the long-term and sustainable development of the enterprise.

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Research on the Export Countermeasures of Agricultural Products in the Context of Cross-Border e-Commerce

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Abstract: With the advent of the Internet era, e-commerce has gradually become an important way to export agricultural products. Based on the current situation of agricultural products export e-commerce, this paper discusses the problems existing in the export of characteristic agricultural products in Shandong Province, draws specific problems through specific case analysis, proposes in-depth e-commerce promotion, and proposes to accurately locate the target market, promote the standardization of agricultural products brand, strengthen infrastructure construction Countermeasures and suggestions for all-round and multi-level training and introduction of talents.

Keywords: Export countermeasures; agricultural products; cross-border e-commerce

1. INTRODUCTION

In recent years, with the advent of the Internet era, the cross-border e-commerce trade model has gradually emerged. In July 2021, the total output value of agricultural products exported by the province reached 68.37 billion yuan, ranking second in total exports. However, in the context of cross-border e-commerce, there are still many problems in the export of agricultural products, such as long logistics transportation time and high logistics costs, which cannot be guaranteed by product quality. Studying the export of characteristic agricultural products is of great significance to the promotion of overseas e-commerce trade of agricultural products.

The inspection and quarantine standards of the importing countries are becoming stricter, and the export volume shows a downward trend year by year. It is worth noting that the output of sugar and silkworm in Guangxi ranks among the top in the country, and the resources of traditional Chinese medicine are abundant, but the export volume of sugar, raw silk, traditional Chinese medicine and traditional Chinese patent medicine is not high, mainly because of the low degree of mechanization of agricultural production in Guangxi, the lack of intensive processing, the supply of primary raw materials, and the low added value of products. Cross-border e-commerce of agricultural products refers to the international commercial activities of agricultural products trading entities belonging to different customs areas to achieve product display, information exchange or commodity transaction through e-commerce service platform.

Cross-border e-commerce of agricultural products can greatly reduce transaction costs and improve the efficiency of agricultural products trade through the reduction of transaction links and the use of electronic payment. It not only helps to consume surplus agricultural products, reshape the international trade chain of agricultural products, but also allows the international community to further understand China's cheap and high-quality agricultural products, and improve the visibility of enterprises. Driven by the "the Belt and Road", cross-border e-commerce will help China's foreign trade industry develop at a high speed. China's cross-border e-commerce is mainly divided into three cross-border e-commerce models: B2B represented by Alibaba International, JD Global, Dunhuang, etc., and B2C and C2C represented by Amazon and Alibaba International.

The Cross-border E-commerce Trend is shown below (image collected from the search engine).

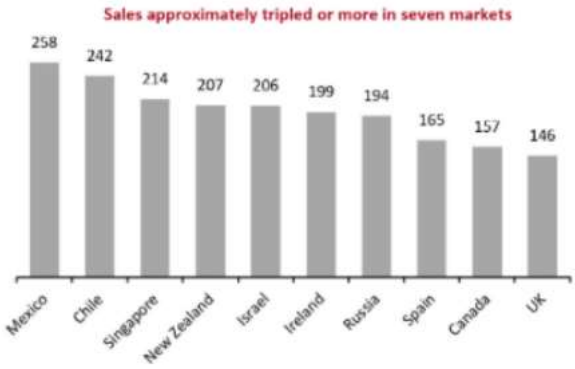

Figure. 1 The Cross-border E-commerce Trend

2. THE PROPOSED METHODOLOGY

2.1 Introduction to the Export Mode of Agricultural Products in the Context of Cross-Border E-Commerce

In 2019, the proportion of B2B was 80.5%. In 2021, the proportion decreased to 77%, and the proportion of B2C increased. Driven by the "the Belt and Road", cross-border e-commerce will help China's foreign trade industry develop at a high speed. China's cross-border e-commerce is mainly divided into three cross-border e-commerce models.

B2B represented by Alibaba International, JD Global, Dunhuang, etc., and B2C and C2C represented by Amazon and Alibaba International. In 2019, the proportion of B2B was 80.5%, and in 2021, the proportion dropped to 77%, while the

proportion of B2C increased. In the situation that cross-border e-commerce has become a new engine of foreign trade, Guangxi has given full play to its regional advantages, vigorously developed cross-border e-commerce facing ASEAN, introduced cross-border e-commerce platforms such as Alibaba OneConnect, Zhejiang Jumao, Germany SAP, and JD, Dunhuang, Google, Vipshop To Jianyuntu and other leading e-commerce enterprises

In 2018, the cross-border e-commerce transaction volume of the whole region reached 57 billion yuan, up 34.1% year on year, accounting for 13.9% of the total import and export volume.

At present, China's limited cross-border e-commerce policies for agricultural products are mainly limited to pilot economically developed areas and open port areas, while agricultural products in all provinces and regions of China have their own characteristics, but due to the lack of relevant supporting policies, it is difficult for these non-pilot areas to carry out cross-border e-commerce activities, Therefore, the country should promote the successful policy experience of the pilot areas to a wider range as soon as possible, so that China's rich and colorful agricultural products can go directly to the international market with the help of cross-border e-commerce platforms, improve the infrastructure construction of cross-border logistics of agricultural products, assist cross-border e-commerce enterprises to create overseas warehouses in countries along the "the Belt and Road", create overseas warehousing models, and reduce export costs.

2.2 Countermeasures for the Development of Cross-Border E-Commerce of Agricultural Products In China

Encourage enterprises to actively carry out business exchanges with countries and regions along the "the Belt and Road" and jointly build overseas warehouses, greatly shortening the logistics distance, which can not only improve the transportation efficiency, but also reduce the logistics cost. We should establish a standardized business model for agricultural products with Chinese characteristics, and the government should build a bridge to match the wishes of farmers and consumers. We should start from the current situation of the agricultural industry chain and deal with the special problems in different regions. First of all, the promotion of rural e-commerce platforms should be carried out in the form of point to area, and some pilot sites should be effectively selected in the villages to gradually promote the development of e-commerce platforms, while providing favorable technical support and talent support for these pilot areas. Cross-border e-commerce sales of agricultural products need talents who have international trade knowledge, understand the market of agricultural products, and are familiar with cross-border e-commerce operations.

At present, agricultural workers in Guangxi are generally not highly educated and lack e-commerce knowledge and operational skills; The professional knowledge and cultural level of most agricultural product e-commerce practitioners are uneven. They lack systematic understanding in online store management, information collection and release, market analysis and feedback, etc. The industry urgently needs e-commerce sales technical guidance talents.. First of all, China should establish and improve the quality certification and inspection and quarantine system of cross-border agricultural products as soon as possible, in line with international standards, and eliminate the entry of unqualified agricultural products into the market.

3. CONCLUSION

For the logistics and transportation system, it is necessary to open up exclusive channels and keep the fastest flow of information according to the transportation requirements of different regions. In terms of service system, we should consider the issue from the perspective of consumers, and do a good job of strengthening Shandong brand through services throughout the whole process of commodity circulation. Promote the real-name authentication and credit rating system of cross-border e-commerce transaction subjects, and promptly publicize unqualified products and dishonest buyers and sellers on the Internet. For cross-border e-commerce with malicious infringement and serious violations of laws and regulations in business activities, it can cooperate with the law enforcement department to carry out legal treatment.

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Theoretical Study on Composing Technology in National Music: A Systematic Perspective

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Abstract: The art of music has a long history since its development from a relatively long time. It can not only bring the viewers a more shocking thought, but also enrich people's spiritual and cultural world. And national music is also a kind of art with national characteristics, which originates from life and is also higher than life. The theory of composition technology is of great significance to the development of national music. This paper mainly analyzes the theory of composition technology and its application in national music, discusses and analyzes the role of composition technology theory in national music, hoping to have some enlightenment on promoting the inheritance, innovation and development of national music and stimulating the contemporary value of national music.

Keywords: Composing Technology; National Music

1. INTRODUCTION

National music is an artistic work created on the basis of national characteristics, with a certain national cultural flavor. National music is closely connected with people's social life and is a true reflection of the rich and colorful life and culture of the Chinese nation. Therefore, national music is not only a representative of the categories of music, but also a cultural force with music connotation.

The theory of composition technology is an indispensable part of music creation. Harmony is the basic content of the theory of national music composition technology. It mainly refers to the sound combination composed of more than two different sounds simultaneously according to certain rules, mainly including the two dimensions of chord and harmony. The application of harmony has a positive effect, such as helping to improve the coordination and integrity of each voice part to a certain extent; Through certain tonal layout and harmony, the structure of music can be better reflected

There is a certain relationship between orchestration method and musical instruments, but instrument method often refers to the instruments used in music, so there are certain differences between orchestration and musical instruments. In the current study of music composition, the concepts of the two are often confused, which makes it difficult for learners to distinguish the study of instrument method and orchestration method. Harmony in national music gives music rich emotion and profound connotation. Harmony is one of the most basic means of expression of national music. With harmony, music has a soul. Chinese folk music often uses pentatonic scales, usually alternating with third and non-third superimposed chords. When creating, the high-pitched part of the multi-voice folk music should be reasonably coordinated, so as to reflect the beautiful harmony of each voice and produce music with unique colors.

Mathematics, IT and music education can all be combined through the phenomenon of digital music composing is shown below.

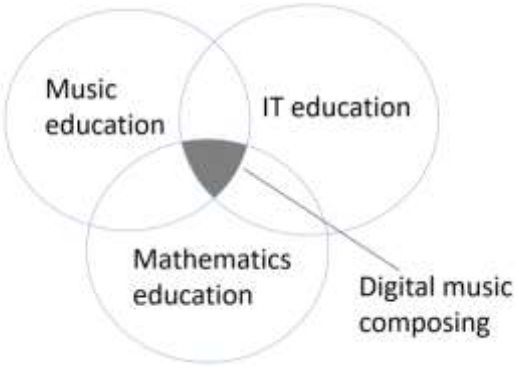

Figure. 1 Mathematics, IT and music education can all be combined through the phenomenon of digital music composing (Image fron Internet)

2. THE PROPOSED METHODOLOGY

2.1 The Technical Theory of National Music Composition

Music form is a particularly important part of music composition. In fact, it is the external form of expressing the music structure, with the dual characteristics of space and time. This is because national music is a kind of works with time and national characteristics that have been carried out through historical continuation. Therefore, the above two characteristics are the most direct representatives of the content of music works. When creating tunes, no matter which one of the above two forms is used, it needs to be promoted according to the relevant normative structural content. The application of polyphony in national music is generally mainly in the form of imitation and contrast, which is mainly used to enrich the color of music, strengthen the momentum of music, and enhance the independence of voice, so that the music shows a kind of effect in the expression and performance, which is more exciting.

In music composition, two or more simultaneous parts, which are different from each other but are related to each other, are called polyphony. It can be said to exist independently, but it is also a coordinated whole in music composition; Music creators often use polyphony to further enrich the content of

music and enhance the audience's audio-visual effect. The theory of musical form technology is applied to the creation of national music, mainly in two types of application, namely, time structure and space structure. Music is both an art of time and an art of space. According to this feature, we can use relatively fixed structure and composition to effectively improve the creative efficiency.

2.2 Relevant Application of Composing Technology Theory in National Music

In most cases, folk music works are expressed through performance forms, and orchestration is a direct factor to strengthen the performance effect. Orchestration is the leading force in the composition technology of national music works. Its scientific and reasonable application in the composition and creation of national music can promote the long-term development and artistic inheritance of national music to a certain extent. The theory of composition technology plays an important role in the creation of national music, is an important theoretical basis and support for the formation and development of national music, and serves the creation, innovation and development of national music.

The theoretical value and role of composition technology also depend on practical operation. Its application in the creation and development of national music has to some extent enhanced the charm and appeal of national music, and enriched the level and connotation of national music. For the application of composition technology theory, it is required to accurately grasp the professional knowledge, creation rules and skills of music creation, and be able to skillfully master and apply various music forms and genre composition skills. There are both time structure and space structure in music forms. Traditional music forms are usually divided into large music forms and small music forms. When composing national music works, the composer should fully consider the structure and composition of the creation, so as to effectively ensure the overall quality of the creation of national music works.

3. CONCLUSION

To sum up, in the process of in-depth research and analysis of the creation law, creation characteristics and development law of national music, and promotion of the inheritance, innovation and development of national music, it is necessary to fully recognize the importance of composition technology theory, have in-depth understanding and cognition of composition technology theory, and achieve accurate and skilled application. It can flexibly match harmony, polyphony, musical form and orchestration, and reasonably integrate them into the creation of national music, and reasonably apply the theory of composition technology to music creation, thus endowing music works with deeper thought and connotation, and demonstrating the will and aspirations of the Chinese nation through modern national music works.

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Research and Strategy Analysis of Asset Return Optimization in Internet-based Financial Engineering

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Abstract: The article introduces the application advantages of financial engineering in Internet financial risk management and control in detail, finds out the main risks in Internet financial innovation through investigation and research, and puts forward effective measures to optimize risk control, such as building a risk management and control system, enhancing the decision-making power of Internet finance, scientific application of derivatives, improving the supervision and management system and strengthening credit evaluation using the saddle method and stochastic integral theory, the optimal wealth level and the corresponding optimal asset portfolio strategy of the portfolio insurer are solved , And compare the differences and similarities between the optimal investment strategy of the optimal portfolio insurance model and the optimal investment consumption model.

Keywords: Engineering Application Talents; School-enterprise Cooperation

1. INTRODUCTION

The rapid development of Internet finance has brought a subversive impact on people's lives and work. Due to the innovative, high-yield, high-risk and other characteristics of the actual operation of Internet finance, it is necessary to effectively control the risks generated by it. Through the application of financial engineering, solve the problems of internet financial innovation and risk, and carry out efficient supervision on relevant platforms, and continuously improve the quality of service. With the continuous development of commercial banking, securities investment and corporate finance, financial engineering has emerged as a new discipline.

At present, there is no unified definition of financial engineering. It is generally believed that the definition proposed by the American scholar Fenidi is representative. Therefore, with the increase of excess return r, the risk preference factor α It increases at an increasing rate, and its law is shown in Figure 1; Conservative investors pay more attention to returns. With the increase of excess return r, risk preference factor α When the excess return increases to a very high level, the risk preference factor increases at an increasing rate and is infinitely close to h0

Middle-type investors are relatively stable, pay equal attention to income and risk, and their risk preference factors α The relationship with excess return r is shown in Figure 2. It can be clearly found that the optimal portfolio insurance model is compared with the general dynamic investment and consumption optimization problem , The former's optimal strategy set includes three parts of investment in risk-free assets, risk assets and options. The latter's optimal strategy set includes only two parts of investment in risk-free assets and risk assets. The innovation and development of Internet finance mostly stems from the progress of Internet information technology. If such information technology has risks, it will also penetrate the Internet finance industry to varying degrees.

1.1.1 Investment preference curve is shown below. (this is a sample from the Internet)

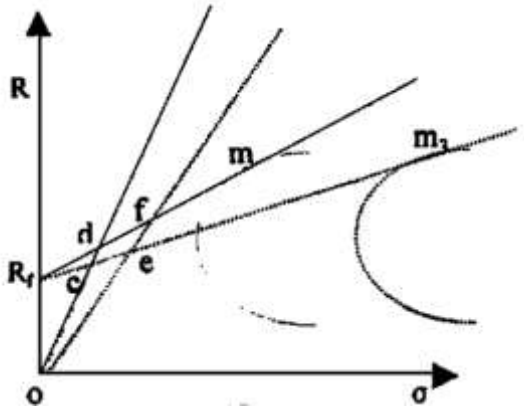

Figure. 1 Investment preference curve

2. THE PROPOSED METHODOLOGY

2.1 Study on Optimization of Portfolio Insurance Model

For example, when the security of network information technology is not well guaranteed, the lawless elements may attack the network security vulnerability and bring serious economic losses to the Internet financial-related enterprises. Third, it can be more flexible. In the process of intra-field trading, it can sell and supplement according to the needs of both parties in a timely manner, and in the process of over-the-counter trading, it is basically set according to the needs of traders. The existence of financial engineering enables investment banks and other institutions to set up and develop different financial products at any time according to the needs of the trading market.

Generally speaking, rational investors in the financial market are risk averse. This section discusses different types of risk averse investors separately, mainly including constant relative risk averse, incremental risk averse, etc. Since this preference characteristic of investors can be expressed by different utility functions, we have different utility functions such as

logarithmic utility function, negative exponential utility function The analysis is based on the portfolio insurance model with the same elastic utility function. The overall price level of securities and its changes depend on the state and changes of the whole economic, political and social factors. When all securities investors in the market unanimously expect a good year in the market, the momentum of the rise of securities prices is relatively strong, most securities returns will rise, and the demand on the securities market is relatively strong, The effective boundary of risk portfolio will move up. In the process of controlling Internet financial risks, the enterprise management should timely complete the supervision and management system according to the actual situation of its operation.

Internet finance enterprises can set up risk monitoring institutions at the right time, use financial engineering tools to accurately handle and identify various financial risks, and prevent such risks from bringing economic losses to investors and enterprises. Internet finance is based on the continuous development of information technology. If information technology itself has certain risks, it will also lead to certain risks in Internet finance.

2.2 Practical Application of Financial Engineering in Internet Financial Risk Control

If the security of information technology is not guaranteed, and it is attacked and stolen by some illegal elements, it will certainly bring incalculable losses to Internet financial enterprises. Therefore, in addition to the different estimated parameters , The optimal trading strategy is similar to the general optimal consumption and investment wealth process , It is also a part of investment in risk assets , Part of the investment is in risk-free assets. However, the specific share is due to the risk-free asset price volatility. 's participation , The proportion of portfolio insurance investment discussed in Section 1 is different. Compared with the basic financial instruments, financial derivatives have stronger timeliness and flexibility characteristics. The rational and flexible application of financial derivatives can timely transfer the market risk and structural risk of the basic financial products.

The Internet finance industry applies big data, intelligent portrait and other technologies to match the risk level of financial products with the risk acceptance ability of investors, so as to manage and control different businesses through different departments. For the current popular mobile payment, we should strengthen the legislation, gradually improve the existing legal system, establish a fair and fair mobile payment system, and ensure the security of the generated electronic evidence and comply with the law, and also combine the forces of all sectors to carry out comprehensive supervision. It rarely occurs in real life, and more of it should belong to the third situation. However, the study of the first two situations is helpful to explain the third phenomenon. The third situation is a combination of the first two situations, or can be said to be composed of the first two situations.

3. CONCLUSION

The rapid development of Internet finance has brought vitality to the financial market. When trying to improve the internal risks of Internet finance, relevant personnel need to use the methods and tools of financial engineering to effectively grasp the development characteristics of the Internet financial platform. However, due to the openness and other characteristics of Internet finance, it has certain risks, and the existence of financial engineering can reduce these risks. By applying the methods and means of financial engineering, we can effectively reduce the financial risks of the Internet and promote the healthy development of China's financial market.

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Research on the Innovative Development of College Students' Ideological and Political Education from the Perspective of Cultural Self-Confidence

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Abstract: Contemporary college students are not only the barometer of the times, but also the backbone of the country and national talents, and the fresh force to realize the two century-old dreams. To enhance their cultural self-confidence is to endow them with wisdom, morality, spirit, and ideas, so that they have strong determination and high self-confidence. Improving college students' cultural self-confidence is the theme of ideological and political education in colleges and universities, as well as the act of strengthening the foundation of colleges and universities; We should explore and develop in ideological and political education, and use ideological and political education to promote the better implementation of the cultivation of cultural self-confidence, which in turn can promote the presentation of the educational effect of ideological and political education through the cultivation of cultural self-confidence.

Keywords: Innovative development; ideological and political education; cultural self-confidence

1. INTRODUCTION

China's firm road confidence, theoretical confidence and institutional confidence are cultural confidence based on the inheritance of five thousand years of civilization. Therefore, cultural self-confidence is more fundamental, broader and deeper. Ideological and political course is a platform to promote college students' cultural self-confidence. The ideological and political course in universities tells about the history and politics of the country and establishes socialist values. College ideological and political education mainly depends on ideological and political teaching, which enables college students to fully understand the history and culture of China and can enhance cultural identity, so ideological and political teaching is a platform to promote college students' cultural self-confidence.

Believing in their own culture can promote college students to seriously study ideological and political courses and produce good learning results. College students' cultural self-confidence improves the effect of ideological and political education. From the perspective of college students, cultural self-confidence mainly includes three aspects. First, as college students, we should learn to use socialist core values to guide cultural thinking and construction. Secondly, we should learn to treat the cultures of all nationalities in the world correctly, and not blindly oppose or praise them.

In the new era, colleges and universities have made certain achievements in the cultivation of college students' culture. The attitude of college students towards Chinese culture is affirmative and affirmative, but there are also some problems that need to be improved, such as the fragmentation of college students' cultural cognition, the lack of system for the carrier of cultural cultivation, and the lack of synergy in the environment of cultural cultivation. Insufficient recognition of red culture. Red culture is a condensed history of China's new democratic revolution, struggle and heroes, and is the historical inheritance of China's revolutionary development. The red culture records the firm ideals, beliefs and fighting spirit of the ancestors. However, there are problems such as insufficient awareness, insufficient publicity and weak participation in the promotion and inheritance of the red revolutionary culture.

2. THE PROPOSED METHODOLOGY

2.1 The Foundation of Cultivating College Students' "Cultural Self-Confidence"

Some college students deny or do not care about China's history and reality, blindly advocate western values and political systems, and always think that "the moon in foreign countries is more round than that in China". The expression of this kind of cultural self-confidence is the result of no, little, and unwillingness to deeply understand China's history, culture, and governance culture. It is an inferiority complex due to the lack of research and understanding of its own culture and the influence of foreign culture. First of all, cultural self-confidence is a symbol of the cultural soft power of a country and a nation, reflecting the self-confidence and pride of a nation. From a personal point of view, cultural self-confidence is the recognition of national cultural values.

The implementation of ideological and political education will also be affected by the cultural environment. Under the influence of the cultural environment, people's feelings, knowledge and behavior will reach a balanced state. The ideological and political course is the main carrier of cultivating college students' cultural self-confidence in colleges and universities, but colleges and universities lack systematicness in the expansion of curriculum content, the renewal of teaching concepts, and the improvement of teaching methods. By setting ideological and political courses, colleges and universities disseminate Marxism and its related theories, and publicize the Party's policies and guidelines, ensure the correct direction of running schools, ensure the implementation of the fundamental task of establishing morality and cultivating people, and ensure that the Party's great cause will have successors.

2.2 The Construction of the Cultivation Mechanism of College Students' Cultural Self-Confidence from the Perspective of Ideological and Political Education

College students lack awareness of cultural protection. Contemporary college students do not realize that culture is the life of a country, and cannot raise the issue of cultural security to that of national security. These problems involve all aspects of college students, from language to behavior, from the online world to real life. The impact of advanced culture and the washing of college students' thoughts by various cultures have shaken the value orientation of college students and led to biased behavior. The scope of ideological and political education for college students should be expanded, and the content of the course should not be limited to the scope of China.

The description of foreign history, political system and values should take a certain proportion, which is also what college students need to know at their age, Don't be afraid of the invasion or subversion of Western culture, because most of China's modern and modern progress has been influenced by the West. Open cultural education can only deepen the understanding of Chinese and Western culture among college students. Believe in the intellectual level of Chinese college students, college students will make correct cultural choices and innovate in the development of national culture, thus strengthening their cultural confidence in the Chinese nation.

The cultivation of cultural self-confidence needs a long-term process. It needs to use some external stimuli to have an impact on students, thus slowly affecting students' ideas. The education of cultural self-confidence is also a teaching, so it also needs to be discussed from the perspective of teaching, so that it can better highlight its role and effect. The ideological and political education in colleges and universities mainly includes Marxism and its related theories, ideological and moral quality, situation and policy, and modern Chinese history. The "three cultures" created and developed from historical accumulation, Chinese revolution, construction and reform are the source of cultivating college students' cultural self-confidence.

3. CONCLUSION

With the continuous development of society and the development of economic globalization, college students in China have been constantly impacted by foreign cultures. In addition, under the influence of the poor effect of the cultivation of cultural self-confidence in colleges and universities, college students are more vulnerable to the impact of various foreign cultures, resulting in a serious lack of cultural self-confidence. As a part of ideological and political education activities, the cultivation of college students' cultural self-confidence needs schools, society Family and other educational factors are promoted together to strengthen students' cultural emotional experience through rich social practice and strong cultural atmosphere.

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Research on the Path of Social Work Participating in Rural Governance

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Abstract: Taking the "Double Hundred Plan" promoted and implemented by the Department of Civil Affairs of Guangdong Province as an example, this paper systematically expounds how the "Double Hundred Plan" took root, and further analyzes the multiple roles of double hundred social workers in rural social governance, specifically including six roles: policy transporter, case manager, social integrator, position activator, service integrator and participant guide. Summarized the contradiction between the village committee and the township government under the improvement of "township government and village governance"; Innovate the grass-roots governance mechanism and cultivate rural elites and rural social organizations; Excavate human potential and promote "farmers' freedom"; Four ways to reasonably position the role of social work and social workers.

Keywords: Social work; rural governance

1. INTRODUCTION

It is the requirement of socialism with Chinese characteristics in the new era to carry out effective social governance and improve the level of people's livelihood. "The report of the 19th National Congress of the Communist Party of China put forward that 'improving the level of specialization of social governance' and 'rural revitalization strategy'" governance is the sum of many ways in which various public or private individuals and institutions manage their common affairs. It is a continuous process of reconciling conflicting or different interests and taking joint action.

"Rural governance" is proposed by Chinese scholars using "governance" as an analytical framework for studying rural society and villagers' autonomy. "Rural" life is the long-term life state of most Chinese people. After entering the new China, rural governance has become a very important issue in the process of China's modernization, which is related to the life and destiny of the majority of farmers. We will improve the cooperation mechanism between the government and social work and promote pluralistic and coordinated governance. In the case management process, the staff of different institutions communicate and coordinate with each other, and provide the required services to the case owners in a team cooperation manner, with the main purpose of expanding the service effectiveness. When the services required by the case owner must be provided by many different professionals, welfare institutions, health care units or human resources, case management can play its coordination and supervision function.

At present, China's social work is still in its infancy, and the mechanism construction of social work serving rural social governance is still under exploration. Social work has the advantages of specialization and service. The government should provide a corresponding platform for social work and encourage it to provide high-quality services for rural social governance. First, the government should formulate a macro-plan for social governance based on China's specific national conditions, and provide guidance and standard system for social work to promote rural social governance. Grass-root party building is not accomplished overnight. To achieve the goal of sustainable development, we must make unremitting efforts.

2. THE PROPOSED METHODOLOGY

2.1 The Relationship Between Social Work and Social Governance

Brand building is the main core content of the grass-roots party building work at this stage. Gradually implementing the brand awareness and increasing market publicity to effectively play the brand effect is an important means to promote the stable development of the grass-roots party building work. The goal of rural governance is to establish six aspects of the ecological civilization system: happiness and human settlement; Happiness and livelihood; Music and ethics; Joy and governance; Joy and health preservation; Lehe Environmental Protection. The model of rural governance embodies five innovations: the rural community mechanism based on collective self-improvement and cooperative economy; Individual autonomy - rules of individual responsibility and rights based on the rights of shareholders and citizens. Strengthen the construction of social work institutions and improve the quality of social work. Social work institutions are the main positions of social work, and the improvement of their professional quality plays an important role in attracting professional social work talents and improving service quality.

First of all, we should improve the relevant rules and regulations of social work institutions, establish the Council, the Board of Supervisors, the Finance Department, etc., and the functional departments of the institutions should perform their respective functions. Secondly, we should cultivate and attract social work professionals. A large number of academic research and media reports are all portraying the decline of rural communities. Young people go out to work, and those who stay in the countryside are all difficult groups, commonly known as "386199 troops". There are fewer and fewer exchanges between village residents, and the cohesion of the community is declining. Under the general trend of urbanization and industrialization, the decline of the original

community community in rural communities seems to be the general trend, but this situation is not irreversible.

2.2 The practical path of social work intervention in rural governance

To establish a long-term mechanism for grass-roots party building and expand market competitiveness is an important goal of the implementation of grass-roots party building. As a party organization construction worker, in the process of building a brand, we should have a long-term vision, actively use all resources around us to build a party building brand, so as to implement a feasible and guaranteed brand building system. Rural governance is the joint participation of the country (government), rural elites and farmers. Without the initiative of any party, the development and stability of rural society cannot be discussed:

(1) To sum up the experience of Nanzhongdu village governance, social work should be involved in rural governance in many ways and effectively. Grass-root party building is not accomplished overnight. To achieve the goal of sustainable development, we must make unremitting efforts. Brand building is the main core content of the grass-roots party building work at this stage.

(2) Gradually implementing the brand awareness and increasing market publicity to effectively play the brand effect is an important means to promote the stable development of the grass-roots party building work. Under the policy background of new rural construction, targeted poverty alleviation, rural revitalization strategy, and beautiful countryside, the hardware construction and service position building of some rural communities have greatly improved, but the utilization rate of these service positions and service facilities is extremely low, resulting in a waste of resources.

3. CONCLUSION

Rural governance is a major issue in the process of China's modernization. The Lehe Home of Nanzhongdu Village provides many experiences for social work to participate in rural governance. The involvement of social work in rural governance needs to give full play to demand-oriented, human-based, technology-supported, and social organization-based efforts to continuously explore local potential resources and make good use of external resources. At the same time, we should integrate social work into the system construction of the whole rural governance, combine the top-level system design with the grass-roots rural governance experience, give full play to the professional characteristics of social work, and continue to promote the benign rural governance.

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Analysis of the way and Significance of Embedding Traditional Culture in Chinese Teaching

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Abstract: With the progress and development of the times, the value and status of traditional culture are also constantly improving. In this context, higher requirements are also put forward for the development of modern education in China, which requires that traditional culture should be reasonably integrated into Chinese teaching, strengthen the education of traditional Chinese culture for students, ensure that students can be deeply educated and influenced by traditional Chinese culture, and infiltrate excellent traditional Chinese culture into senior high school Chinese teaching, It can help students understand the breadth and profundity of Chinese traditional culture while learning Chinese knowledge, which plays an important role in improving students' core Chinese literacy.

Keywords: Way and significance ; embedding traditional culture; Chinese teaching

1. INTRODUCTION

With the continuous advancement of China's modern education process, the educational value of traditional Chinese culture has become increasingly prominent, and the scope of influence has gradually expanded. It has received extensive attention and attention. Strengthening the education of traditional Chinese culture has become an important task of China's education development.

The teaching of ancient poetry is an important part of Chinese teaching in senior high schools. At the same time, ancient poetry is also an important component and carrier of Chinese traditional culture, providing an effective way for students to learn and master Chinese traditional culture, and also an effective way to carry out Chinese traditional culture education. In traditional classroom teaching, the position of teachers and students is very fixed, and teachers always occupy an absolute leading position, leading the whole classroom, this repetitive and boring teaching method made the founder of boxing no longer interested in the subject of Peiwen, and felt that Chinese was just a boring and difficult subject.

In addition, traditional culture teaching can also help students purify their minds and improve their moral cultivation. Because traditional culture teaching not only contains a wealth of knowledge, but also contains a variety of emotions, it is the best material for moral education. Because the number of students in primary school is small, it is the best time to carry out moral education. Through traditional culture teaching, it can achieve good guidance effect, let students dig out more truth, goodness and beauty, and actively learn from ancient sages, really improve themselves, constantly improve students' values, and implement the improvement of students' moral quality and comprehensive ability.

2. THE PROPOSED METHODOLOGY

2.1 The Educational Significance of Integrating Traditional Chinese Culture into the Teaching of Ancient Chinese Poetry in Senior High School

Constructivism is a new educational theory trend abroad, and many people think it is a revolution in educational thought. Constructivism believes that learning is a process of creation (true creation or similar creation) in which learners actively choose information and gradually construct the understanding, interpretation and hypothesis of these information in the interaction with teachers and peers on the basis of previous experience under certain circumstances. This is the theory of constructivism.

Ancient poetry teaching is an important part of high school Chinese teaching. Ancient poetry originally belongs to the important carrier of Chinese traditional culture. It has great advantages in the education of Chinese traditional culture. Integrating Chinese traditional culture can not only enrich the content of ancient poetry teaching, but also enhance students' interest in learning ancient poetry. In the long run, this is of great benefit to the cultivation and improvement of students' comprehensive quality of Chinese. The compilation and typesetting of textbooks are the painstaking efforts of relevant educators. Every chapter and paragraph are carefully designed. Teachers must study the textbooks thoroughly before class, and really dig out the potential content of the textbooks, so as to effectively infiltrate traditional culture in Chinese teaching.

In addition, in addition to the content of telling historical stories, the Three-character Classic will also explain some basic common sense. Traditional teaching through the Three-character Classic can help students expand their knowledge. Moreover, this book is easy to understand and more in line with the understanding ability of primary school students. For example, the short sentence in the Three-character Sutra, "Once the mother of Mencius, choose a neighbor", tells the story of "Three Movements of the mother of Mencius". This story makes the mother pay more attention to the environment of educating children, and also makes students pay more

attention to the shaping of the learning environment. Because there are many stories in the Three-character Classic, teachers can stimulate students' interest in learning by telling stories during the process of explanation and encourage students to understand the story behind each sentence in depth, so as to improve students' cultural knowledge.

2.2 Effective Strategies and Methods of Integrating Chinese Traditional Culture into Chinese Teaching

To ensure the smooth progress of the project, we will establish a regular activity system for the project and strengthen the classroom teaching practice. According to the content of this research, organize teachers to try in various activities; Actively carry out school-based teaching and research, regularly carry out various activities related to traditional excellent culture in combination with classroom teaching practice, and discuss the achievements and problems in practice.

Now, although ancient poetry has received teachers' attention and attention, there is no clear teaching goal of ancient poetry in actual teaching, and in specific teaching, teachers still implement traditional teaching methods, that is, indoctrination teaching of ancient poetry, The situation of passive learning is serious, and there is a serious "one-sided" problem in the classroom, which often attaches importance to the interpretation of the content of ancient poetry. The expression of traditional culture is not only the text taste, but also includes the 13 14 solar terms, traditional festival H, and traditional customs and habits of our country. Therefore, teachers can effectively use these resources and effectively infiltrate traditional culture by holding traditional culture competitions.

Students can have a strong psychological ability to compete, catch up with, and surpass in the traditional culture competition. They will actively understand, study, and learn traditional culture, and gain more insights from traditional culture. Because students in primary school have less experience of life, it is easy to find some unclear points in the process of learning. In order to truly achieve the purpose of inheriting traditional culture, teachers need to shorten the distance between students and life in the process of teaching, and based on actual life to teach students, improve their learning experience, and let students feel the joy of learning.

3. CONCLUSION

The teaching of ancient Chinese poetry in senior high school is an effective way to infiltrate and develop traditional Chinese culture. Integrating into traditional Chinese culture is of great significance to students' learning of ancient Chinese poetry and the education, inheritance and promotion of traditional Chinese culture. Therefore, teachers should pay attention to the integration of traditional Chinese culture and explore various effective strategies and methods Chinese teachers themselves also need to pay attention to the inheritance of traditional culture, carry out teaching through a variety of teaching methods, truly improve the effect of teaching, let traditional culture take root and sprout, and make students become a comprehensive development of talent.

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Challenges and Countermeasures of the Automobile Marketing Model in the New Media Era

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Abstract: With the continuous development of intelligent technology, the technology of "Internet plus" is also increasingly developed. Therefore, it is necessary to innovate and reform the automobile marketing model in the new era to better adapt to the modern society and thus increase the turnover. The article analyzes the advantages of China's automobile marketing model under the new media environment, analyzes the challenges of the automobile marketing model, and discusses the relevant countermeasures to promote the smooth development of automobile marketing, hoping to make automobile marketing more orderly and create more economic benefits for the development of the automobile industry. Comprehensively analyze the current situation and trend of China's automobile development, reform and innovate China's automobile marketing model, analyze the management, marketing, news communication process and communication phenomenon of automobile sales, and propose countermeasures for automobile marketing under the new media environment, with the purpose of improving the competitiveness of China's automobile sales enterprises.

Keywords: Countermeasures; automobile marketing; new media

1. INTRODUCTION

The traditional automobile marketing model can no longer meet the requirements of the era of continuous progress of the network, so it is necessary to timely accept and adopt new marketing technologies to innovate new marketing models and coordinate the changes of traditional marketing models. While constantly pursuing new methods, it is also necessary to deepen the exploration of its connotation, so as to ensure the feasibility of the new marketing model, so that the new automobile marketing model can directly improve the marketing efficiency. WeChat marketing: including WeChat promotion, WeChat official account promotion and small programs.

WeChat promotion is mainly aimed at familiar people or those who have passed the conditional screening, and the communication target is very precise; The official account can expose brand information through high-quality content push and activate member fans through online and offline activities; Through its powerful service functions, the applet can accurately meet the needs of users and improve the willingness and satisfaction of users to participate in services. Compared with traditional marketing, new media marketing can make its marketing more targeted and marketing positioning more accurate by setting keywords of search engines in advertising.

In the process of new media marketing, big data analysis may better help enterprises improve their marketing strategies, easily meet their marketing needs, and make the marketing content closer to consumers. New media does not need the expensive physical propaganda cost of traditional communication. Once the content of its propaganda is loved by users, it will probably automatically get subjective communication from users. This way of communication is almost costless, and because it is a topic or entry point of users' concern, it will form a communication matrix between users, and the communication effect is more significant. Due to the lack of core network technology and network talents in most of the automobile industry, there is no information channel suitable for the development of enterprises as the basic support in the construction of the basic network, which makes the marketing efficiency not good.

2. THE PROPOSED METHODOLOGY

2.1 Characteristics of Automobile Marketing in the New Media Era

On the one hand, due to the lack of professional network technology and information technology personnel to maintain and innovate the platform, science and technology is only the transformation of online and offline. Through market segmentation, we can see that different products take different marketing methods according to the target market and customers and deliver the right products to consumers at the right time. This is called precision marketing. At the same time, the rich media platform also provides more possibilities for the scope, speed, and innovative marketing methods of automobile marketing, which has a good role in promoting the change of automobile marketing; The third is the distinctive sociality.

In the new media era, the social relations between people, groups and groups are more closely connected. Most automobile enterprises still lack the concept of active marketing in marketing, and do not really have a single form of customer-centered marketing. At present, with the development of network technology, when consumers have the intention to buy a car, they will first directly query the information on the Internet, understand their required information and parameters through network search, sort out and compare, and finally decide whether to buy. In particular, the auto industry needs to deepen the brand awareness process of marketing personnel in the capital and policies, require employees to be able to receive relevant training on the new online sales model in a timely manner, and help employees to systematically learn the problems and operating concepts that need attention in the online marketing process.

2.2 Challenges and Countermeasures of Automobile Marketing in the New Media Era

The number of personnel responsible for the planning, shooting, editing, publishing and operation of the unofficial new media matrix is not enough to grow; The company's unofficial members of the new media association already have basic short video editing skills, but they need to further learn and master high-level skills such as product power display and brand image building. The core of the enterprise is brand, and the soul of the brand is culture:

(1) Culture is the fundamental reason why products become brands. Therefore, in the era of new media, automobile marketing must attach importance to the promotion of enterprise brand culture. By making use of the good communication effect of new media, establish a good communication between brand and society, and build a bridge between industry and society.

(2) The application of the Internet can promote ice and snow venues more widely, improve the timeliness of publicity and promotion, and make the service more targeted and diversified. It can expand the service model from the perspective of customers, break through the limitations of traditional publicity and promotion with convenient and high-quality service experience.

(3) The promotion carrier is also from general outdoor advertising and television advertising. In the expansion of automobile marketing channels, managers can use O2O technology model, The construction of the website is based on the expansion of offline sales, so as to ensure the information circulation and industry promotion characteristics of online and offline marketing, and finally achieve the goal of diverting online consumers to offline physical visits and surveys, thus ensuring the success of marketing.

3. CONCLUSION

The car is not only a means of transportation for people, but also the embodiment of social image. The continuous competition of automobile manufacturers requires the automobile industry to constantly explore its own marketing mode, and use scientific, diversified and information-based operation mode to make the basic economic benefits of the automobile industry continue to grow, so as to provide consumers with integrated marketing services. However, from the analysis of the actual situation, there are still some deficiencies in the actual automobile marketing model. Relevant personnel need to take timely measures to solve the problem, so as to effectively improve the sales of automobiles, promote the development of the automobile industry, and provide support for the smooth development of China's automobile marketing.

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Construction of Enterprise Audit Risk Identification Platform Under the Background of Financial Management Reform

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Abstract: Internal audit is an important way for state-owned enterprises to carry out risk management. The internal audit system developed and implemented based on risk management can not only effectively evaluate and supervise the internal control of enterprises, but also help enterprises effectively manage risks and improve the value and efficiency of enterprises through the identification, judgment and disposal of contingencies encountered in the operation of enterprises. This paper analyzes the existing problems in risk management of internal audit of state-owned enterprises In this context, this paper first briefly introduces the internal audit of enterprises from a theoretical point of view, summarizes the characteristics of the audit department, and then discusses the construction scheme of the current internal audit risk management mechanism of state-owned enterprises, aiming to provide useful guidance for state-owned enterprises to build a scientific and efficient internal audit department in the next step, and finally serve the risk management mechanism.

Keywords: Enterprise audit; risk identification platform; financial management reform

1. INTRODUCTION

The development of enterprises is inevitably affected by uncertain factors such as ownership relationship, product quality, demand capacity, market competition, local protection, natural disasters, etc. State-owned enterprises will face more severe situations and challenges because of their important position in China's market economy and the complexity of their own organizational structure and management system. Practice has proved that the vast majority of uncertain factors can be perceived and effectively dealt with by reasonable management through systematic classification and evaluation.

The internal audit of an enterprise should first accept the guidance of the company's board of directors, recognize the authority of the board of directors, organize a professional team with excellent quality, set up a professional audit department, and carry out counterpart work. Generally, when the company continues to grow, the number of enterprises and the size of the company reach a certain level, the enterprise will build a separate internal audit department for the purpose of strengthening the control of the company's internal operation, reducing the risk of internal personnel's property management, and improving management efficiency. The audit department is relatively independent, "dissociated" from the daily operation and management, but can keenly observe the problems exposed by the company's operation and management for a period of time, Help the company control possible risks.

The key is to use information means to transform business information into financial information in a timely and smooth manner to improve management and operation efficiency. The business process is oriented to the whole company, and the original data information is stored in the shared database to ensure real-time sharing; All information of the business process is managed and processed in a centralized way, and integrated into the shared database to improve the processing efficiency of the financial system. The internal control of enterprise financial management includes financial management and internal control, of which financial management is the basis for internal control, and internal control is the core link to strengthen financial management, both of which play an irreplaceable role in ensuring the safety and efficiency of enterprise property, and it is the focus of enterprise management.

2. THE PROPOSED METHODOLOGY

2.1 Establish a scientific financial analysis index system

Financial management mainly includes enterprise fund raising, cost budget, fund allocation, profit distribution, etc. It is a necessary measure to ensure the correctness of financial decisions, improve the utilization of enterprise resources, and maximize the economic benefits of enterprises. Report stage: the core of this stage is to form internal audit report. The following points should be paid attention to when forming the internal audit report: First, the internal audit report should objectively record the specific process of risk identification and risk assessment, reflecting the consistency and rigor of the internal audit work. On the other hand, the top management of the company should also start from inside and outside the company. From the outside, the first step is to lead the team to actively accept the advanced courses of relevant institutions, and drive the auditors to continue to refine their own professional studies. Secondly, strengthen the cooperation, exchange and learning with the audit staff of other enterprises, and even carry out the friendly competition of the professional quality of the internal auditors of state-owned enterprises, pay attention to the possible problems and loopholes in the audit work during the repeated drills, and accumulate rich experience for the later practical combat.

Build an enterprise internal audit information system based on the integration of industry and finance, consolidate the internal power of audit, improve the internal audit information system and internal audit operation and maintenance system, to achieve "three complete and seven modernizations", that is, the whole process of leaving traces, the whole process of supervision, the whole process of visibility, the intelligence of audit judgment, the visualization of data flow, the convenience of the review process, the chain of audit process, the efficiency of auditors, and the systematization of audit supervision. The orderly construction of the internal control system of enterprise financial management and the effective implementation of the financial management system should be based on a good internal environment, so it is necessary to create a good internal environment.

2.2 Establish a scientific financial analysis index system

Enterprise management should attach importance to the ideological education of employees, make employees deeply realize the importance of internal control of financial management, help employees establish correct values and moral concepts, focus on promoting the moral concept of honesty and trustworthiness and conscientious and responsible work attitude, improve the professional quality of employees, strengthen their sense of responsibility, correct their work attitude, and create favorable conditions for the construction of internal control system of financial management. Strengthen the professional and professional construction of the internal audit team, build an internal audit team with excellent comprehensive quality based on the internal audit standards and guided by the needs of enterprise strategic risk management. Fourth, cultivate and improve the management and work innovation awareness of the internal audit team, and enhance the internal audit team's sensitivity and handling ability to contingencies and uncertainties.

Based on the practical background, we attach great importance to the internal audit department of the enterprise, regard the audit department as the aorta to enhance the competitiveness of the enterprise, and support the integration of internal audit work and all aspects of the enterprise's internal operation, so that the internal auditors can perfectly connect with the enterprise's senior managers and decision-makers after comprehensive understanding and in-depth control of the whole process, and explore and evaluate the company's internal risks for them, Processing should provide strong data and information support. The audit data think tank center is based on the conventional structured database and integrated unstructured database, based on the financial sharing service center, contingency combination of enterprise application scenarios, adhering to the principles of comprehensive integrity, full tracking, clear ownership, controllable rights and responsibilities, and intelligent sharing, configuring a professional team of auditors, and relying on clear audit clues to achieve audit objectives. The financial risk early warning mechanism is the basic guarantee to reduce the probability of risk occurrence. We must ensure the integrity and timeliness of the financial risk early warning mechanism.

3. CONCLUSION

Internal audit is an important path for state-owned enterprises to carry out risk management, and risk management is also an important category of internal audit work. Both can be unified in the long-term strategy of enterprises. As a representative link of deepening the reform of state-owned enterprises, the pace of the research on the construction and application strategy of the internal risk management mechanism of state-owned enterprises needs to be accelerated, and the status of internal audit should also be constantly improved, so as to ensure that the rudder of state-owned enterprises can, to a certain extent, continue to overcome the dangers and move forward smoothly in the market economy full of dangers.

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Analysis of Data Coupling Mode of On-Board Information Acquisition and Communication

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Abstract: This paper studies the research status and development trend of the Internet of Vehicles and vehicle information acquisition system. According to the basic functional requirements and basic design principles of the vehicle information acquisition system, the overall design scheme of the system is proposed. The key technologies used in the system design are also studied Provide convenience for vehicle positioning and navigation services. In order to facilitate the intelligent dispatching of intelligent public transport vehicles, the information collection module designed by the system provides the collection of various information of vehicles, such as the number of people on board, the opening and closing of doors, fuel consumption and driving status. In this way, the control center can formulate corresponding more intelligent scheduling strategies, and manage vehicle operation more effectively and conveniently.

Keywords: Data coupling mode; on-board information; acquisition; communication

1. INTRODUCTION

With the continuous increase of vehicles and the expansion of population, urban traffic congestion, congestion and accidents are becoming more and more serious, and people's travel problem has become an urgent problem to be solved. Moreover, with the increase of people's travel demand and the endless traffic problems, the traditional public transport system has been unable to solve new problems. The intelligent electronic stop board has the functions of bus route information display, dispatching information display, arrival prompt, station monitoring, video advertising, etc.

Intelligent electronic station signs also need to have wireless network function, which can realize the remote function of bus route information, automatic real-time update of dispatching information, automatic reminder of incoming vehicles, remote update of advertising information and other functions. The electromagnetic immunity measurement (EMS) of automobile electronic products is an important part of the electromagnetic compatibility test of automobile, which is related to whether the product can work normally in the complex electromagnetic environment of automobile and realize the function of the product.

When conducting immunity measurement, the method used is to apply useful and useless test signals to EUT through signal generator, and the basic schematic diagram of immunity measurement. The power supply voltage of ELM327 is 5V, and the voltage of passenger cars is generally 12V, so a voltage conversion circuit is required. Generally, 78L05 is used for voltage conversion to convert 12V voltage to 5V voltage required by ELM327. 78L05 is a common regulated power supply chip with few pins. In order to prevent interference, a 104 capacitor is added between Vout, VCC and GND respectively. On-board video monitoring can record all kinds of situations in the bus in real time, generate video streams, and keep them for archiving.

The on-board information transmission terminal can collect the video stream of the monitoring equipment and upload it to the remote server through the 3G network to realize the remote real-time playback of the on-board video. At the same time, the on-board information transmission terminal receives the control command issued by the remote server and forwards it to the video monitoring equipment. The main function of the on-board information transmission terminal is to collect the operation data of various on-board equipment on the bus through various communication interfaces, process it and transmit it to the remote server through the network. The vehicle environment in which it operates is characterized by large fluctuation range of on-board power supply, limited capacity of on-board power supply, severe equipment turbulence, long operation time of equipment, large temperature difference, etc.

SAE J1850 protocol interface circuit is shown below (Imane from the public document).

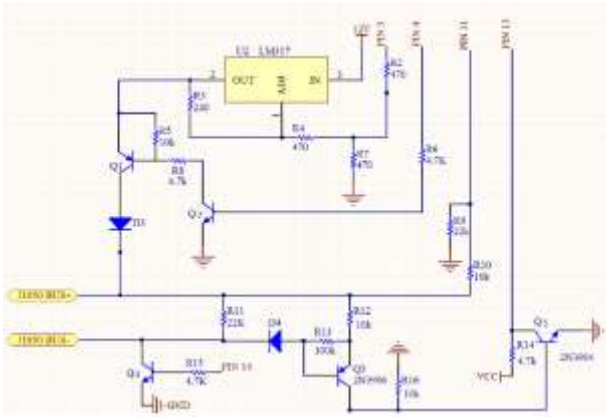

Figure. 1 SAE J1850 protocol interface circuit

2. THE PROPOSED METHODOLOGY

2.1 EMC design and test related technology of vehicle information acquisition module

When designing EMC-related PCBs, we mainly start with the layout and wiring of PCBs. The mutual position of various components on the PCB directly affects the EMC

performance of the circuit board. Reasonable layout can reduce the electromagnetic interference between components, and reasonable wiring can also effectively reduce interference and improve immunity The system will select the corresponding resolution nearby. When installing the application, the system will automatically select the layout and pictures according to the resolution and size of the device. Because the virtual dashboard in this article takes up a lot of space, the orientation of the screen is set to horizontal display in the Activity under the AndroidManifest.xml file, which avoids the switching between horizontal and vertical screens. The horizontal display is more humanized. In the design of this system, a total of 5 serial ports are required, while S3C2410A chip has 3 serial ports, so the serial port expansion chip needs to expand two serial ports.

The serial port expansion chip used in this system is Philips SC16C2550. This article uses the Bluetooth module to realize the connection and communication between ELM327 and Android vehicle-mounted platform. Android can support the software development kit (SDK) of Bluetooth 2.0 and later versions. The Android program provides the application. program programming interface (API) for Bluetooth, These. APIs enable applications written in the Android development environment to wirelessly connect with other Bluetooth devices and devices. The main feature of MCP2551 is that it supports a maximum speed of 1Mb/s, meets the physical layer requirements of ISO 11898 standard, has an external control slope mode, can detect TXD input ground fault, and can connect up to 112 nodes.

2.2 Software design of vehicle information acquisition system

There are two states of CAN bus, namely dominant state and recessive state. When the voltage difference between CANH and CANL is greater than 1.2, it is considered as dominant state. The recessive state refers to when the voltage between the two lines is less than 0V. In order to facilitate the selection of 3G network operators in the future, the 3G module is designed as an independent small module. When replacing 3G operators in the future, only the small module containing 3G needs to be replaced. In this system, the 3G module used is SIM5218A of SIMCOM.

It communicates with the main controller through USB port After the Android terminal receives the vehicle's engine load, rotational speed, vehicle speed, engine load and other relevant information through the OBD-based vehicle information acquisition module, it will display and store the data first, and then transmit the vehicle data to the background server through the wireless network on the Android terminal, such as 3G/4G network, and the server will extract the relevant data The hardware part of the vehicle information collection system is the FS4412 development board of the Android system and the OBD Bluetooth module inserted on the OBD II interface of the vehicle. The on-board resources and processing speed of the development board can meet the development requirements, and the user experience of the APP can be detected through the development board.

3. CONCLUSION

Based on the relevant theories of the intelligent public transport system, the development status of the intelligent public transport system in Changsha, and the mature embedded Linux, ARM, 3G and other information communication technologies, this project has completed the design and implementation of the intelligent public transport vehicle information transmission terminal based on 3G. This paper introduces the software realization process of vehicle information acquisition system based on OBD, including the realization of vehicle OBD system and Bluetooth communication function of Android terminal, the realization of vehicle information acquisition function and the realization of data remote transmission function.

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The Difference between Chinese path to Modernization and Western Models: Systematic Analysis

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Abstract: The new path of Chinese path to modernization is fundamentally different from the development model of western modernization. The latter is rooted in aggression, exploitation and oppression. The capitalist system established through modernization is also not the "end of history". Chinese path to modernization is from passive to active, from backwardness to catch up gradually. In the deepening and evolution of the theme of Marxist theory, it has realized the curve overtaking of the western modernization model. The Chinese model provides an example of development that late-developing countries can follow. However, the Chinese model is short and a transitional development model, which will eventually change its value-neutral characteristics through a series of value additions of economic growth, legal reform, democratization and constitutionalism.

Keywords: Chinese path; modernization; Western Models; Systematic Analysis

1. INTRODUCTION

Western countries have always maintained a "possession" attitude in the process of modernization. In the middle of the 20th century, the colonial system of imperialism gradually collapsed, peace and development became the theme of the times, and many backward countries began the process of modernization. In this process, the western countries vigorously pursued the "capitalist" modernization model, leading the world modernization pattern. In the 1990s, the United States put forward the "Washington Consensus", promoted the neo-liberal economic theory, and promoted the "Westernization" development model to the world under the banner of "aid".

It is through the capitalist mode of production established by the industrial revolution and the modern political state established by the bourgeois revolution that western modernization gains its own realistic basis. They are regarded as the correct way to achieve human happiness. With the expansion of capitalism in the world, the bourgeoisie of all countries is increasingly demanding the establishment of a capitalist mode of production. First, China's economic reform and modernization process is not driven by any ideological dogma or principle, but by the pragmatism of economic success orientation. This can be clearly seen from Deng Xiaoping's "no matter black cat or white cat, as long as you catch mice, you are a good cat" and Zhao Ziyang's "crossing the river by feeling stones".

Because of the pragmatic and experimental approach adopted, China's reform has shown a fragmented and gradual feature. At this time, the "end of history" theory in the field of western ideology is rampant. Japanese American scholar Fukuyama believes that the development model of capitalism is the last form of governance of human society. It is not difficult to find that although the direct colonial expansion has ended, the western countries still "colonize" in the economic field, promote "westernism" in the ideological field, and try to push the "westernization" modernization development model to all parts of the world. The modern production relations under the control of capital logic constitute the essence of the western modernization model. The dominance of things and the degradation of human beings in the process of modernization in the western society caused Rousseau's rebellion against modernization as early as the 18th century, and became the core clue of the whole western modernization reflection.

“China Dream: a wealthy and strong country” postage stamps is shown below. (from Baidu)

Figure. 1 “China Dream: a wealthy and strong country” postage stamps

2. THE PROPOSED METHODOLOGY

2.1 A Historical and Realistic Survey of the Modernization of Western Capitalism

It is different from the "rational modernization" insisted by western enlightenment thinkers. Finally, China's road to modernization, like other successful East Asian countries, involves "selective learning" of the western model, including the American model of neo-liberalism. The uniqueness of the Chinese model lies in the fact that the Communist regime can take the policy initiative when, where and how to adopt foreign ideas., Since the 20th century, many developing countries have not realized modernization according to the western model, but have lost their development autonomy, missed the development opportunity period, and fell into the western development trap. Some Latin American scholars put forward the so-called "dependency theory" when thinking about why the post-modernization countries will encounter these problems.

They believe that the western developed countries are the center of the world, while the developing countries are at the periphery. The former is in a dominant position in the world economy, while the latter is under the control and exploitation of the former. Chinese path to modernization is a modernization that actively guides capital development, liberates and develops productive forces. Seeking truth from facts, as the core content of the ideological line of the CPC, is not only the due meaning of adhering to dialectical materialism and historical materialism, but also the experience summary and great tradition of the CPC's century struggle. It runs through the whole historical practice of the sinicization of Marxism, making the CPC win major victories in leading the Chinese revolution, construction and reform in various historical periods.

2.2 The Realistic Evolution of the Course of Chinese path to modernization

In particular, although China's state machinery has adopted most of the basic macroeconomic principles of the Washington Consensus in the domestic economy, especially the emphasis on the market, entrepreneurship, globalization and international trade, it has rejected or revised those neo-liberal economic policies that will significantly reduce the role of the government. First, the "modern" capitalist system is based on the exploitation of human beings, The competitive accumulation of capital restricts the whole capitalist system. "Marx pointed out that capitalism has two basic characteristics - the exploitation of industrial workers and the competitive accumulation of capital", which constitutes the opposite relationship between capital and labor and between capital and capital.

When Deng Xiaoping called on the people to emancipate their minds, he pointed out that the old thinking of dualistic opposition between plan and market, capitalism and socialism must be abandoned. Market and capital are not the only criteria to judge capitalist society. As a means of economic adjustment, market can also be used by socialist countries. To promote China's modernization, we must make capital participate in production and distribution, provide corresponding institutional guarantee, establish and recognize the legitimacy of non-public ownership, and activate the vitality of capital in promoting national economic development.

3. CONCLUSION

China's modernization drive has shifted from passive acceptance to active pursuit, and has gradually formed a catch-up from a backward state. The concept of peaceful modernization and the independent way of realizing it have transcended the western modernization development model characterized by aggression, exploitation and oppression, and have broken through the plight of Latin America and other countries under the control of the West This new type of civilization has the possibility of being defined, and more and more shows its great significance to the world today: it not only means that China's modernization has entered a new stage, but also means that China will make greater contributions to the 21st century's Marxism, the world socialist movement, and even the whole human society at a new historical height.

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Python Implementation of Dynamic Effectiveness Modeling of Random Node Network Community Technology Assisted Open Chinese Excellent Traditional Culture Dissemination

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Abstract:This paper proposes a community key node shortest path algorithm based on random node social network. The algorithm divides the social network into communities and determines the shortest paths between core nodes and non-core nodes in each community. Facing the complex information and cultural environment and the influence of foreign cultures, it is necessary to use its media to integrate the advantages of new technologies and platforms, and to innovate the propagation paths and platforms of traditional culture. The path of mutual integration is expected to provide reference for the inheritance and promotion of China's excellent traditional culture and the enrichment of ideological and political education resources for college students. The hypothesis processing of the model is carried out, the dynamic performance evaluation model is established, and finally the dynamic performance modeling based on python is established.

Keywords: Python Implementation, Dynamic Effectiveness Modeling, Random Node Network Community, Chinese Excellent Traditional Culture

1. INTRODUCTION

The social network can be described as the application of graph, based on such algorithms to analyze the relevant properties of the social network [1], and the basis of the analysis is to calculate the shortest path in the social network, and the calculation process has problems such as complexity and performance. Many community discovery methods have been proposed in the related literature [2], one of which is to optimize the community quality index associated with the topology of the graph, such as the modularity proposed by Newman et al. [1]. For this idea of a reliable [3] community structure, many scholars have proposed related community discovery algorithms, among which the BiLPA algorithm that optimizes variant modularity is more typical [4].

"Learning Power" is a powerful and high-quality resource integration platform that organizes a large number of high-quality content through media integration to provide users with rich learning resources [5]. This article explores a new path for the spread of traditional culture through the cultural column created by "Learning to Strengthen the Country". Although the specific structures of complex networks [6] are different, and many complex and changeable network phenomena have emerged, they show surprisingly similar properties in a statistical sense. For example, most of the real networks show obvious community structures; It was the most glorious period in the history of Chinese [7] TV variety show development. And this brilliance is by no means just the prosperity of the show. I try to analyze it from three aspects [8].

The values of foreign western countries are constantly imported and infiltrated into our country, and the world outlook and values of the younger [9] generation are constantly being impacted, which in turn causes some young college students to lose their confidence in their own culture. The bad phenomenon of worshipping foreigners [10]. "Guidelines for Improving the Education of Chinese Excellent Traditional Culture". Therefore, based on the SysML of the DoDAF: Dept. of Defense Architecture Framework [11] of the US Department of Defense (DoD), the executable model modeling of SysML design and its system dynamic performance measurement and effectiveness analysis are discussed [12]. Since the late 2008s, my country's national defense science and technology community has gradually paid attention to the evaluation of the combat effectiveness of weapon systems, and successively invested a large amount [13] of manpower and material resources in research, and achieved gratifying results, and played an active role in the demonstration of national defense equipment [14].

It not only has important guiding significance for the construction of our radar network, but also the most ideal core node of a social network [15], that is, a node that is considered to be connected with all nodes in the network is the most important core node, such as the central node in a star network is obviously It is the most important [16] "core node" in the network, and the reliability of the entire network can be improved by focusing on protecting these core nodes. Moreover, it also has great inspiration for the tactics and tactics of our radar unit. At the same time [17], the operational effectiveness of the radar network is based on the specific situation and environment of confrontation, so it is necessary to do a good job in its evaluation [18].

The advantage of this type of algorithm is that it is simple to implement and can play a good role in artificially constructed networks. However, real-world networks are much more complex than artificially constructed networks, and in many cases, the quality indicators corresponding to real community structures are not optimal [19], which makes it difficult for the

above-mentioned algorithm based on metric optimization to detect the community correctly. With the development of communication technology, the way of information presentation is more multimedia. It is no longer a single communication symbol, but covers a variety of symbol forms, including visual image and auditory elements, as well as the use of integrated symbols of text and sound [20].

2. THE PROPOSED METHODOLOGY

2.1 The Random Node Network Community Technology

For example, the central node in the star network is obviously the most important "core node" in the network. By focusing on protecting these core nodes, the reliability of the entire network can be improved [21], and the entire network can be destroyed by attacking these "weak links". However in a social network it is a sparse matrix. Although abstracting complex systems in the real world into networks in graph theory is convenient for research work, it will inevitably miss some important information [22].

For example, users who belong to the same interest group in Reddit often have the same interest tags. If the attribute information can be converted into a part of the network, the internal structure of the community may be closer. A multi-layer network can be [23] defined as G = {G1,...,Gl,Em}, where Gl=(Vl,El) represents the network of the lth layer, and V={v1,...,vn} represents the multi-layer The set of all nodes in the network, Vl ∈ V represents the set of nodes in the lth layer network, and ElVl ×Vl represents the 1 [24] layer interconnected edge set. The algorithm combines hierarchical clustering and modularity optimization algorithm to iteratively update to form a hierarchical clustering structure. It is one of the most efficient and widely used community discovery algorithms [25]. The connection between the A community and the B community is realized. The path from A1 to A16 and the path from B7 to B1 are the shortest paths, and other communities are similar.

If there are multiple connections to other communities in the community, choose the one with the shortest sum of these multiple connection lines. The positions between them are unequal, but undirected edges cannot describe this relationship. Some scholars have redesigned the quality indicators according to the characteristics of directed networks. For example, Newman et al. proposed a directed version of the module on the basis of the original definition of modularity degree, the direction information of edges is considered, and it is one of the earliest community quality indicators based on directed networks.

Neural networks have been widely used to process graph data in the past two years due to their powerful ability to extract features. Especially with the rise of graph neural network, it can be well then used to solve problems such as community discovery.

2.2 The Technology-Assisted Open Communication of Chinese Excellent Traditional Culture

New media is born based on the integration of traditional media and technology. The combination of the two makes the dissemination of news information on the road of interaction, diversity and individuality. Therefore, traditional media and new media will share a lot of information. From the perspective of dissemination content, information sharing is the basic feature of media convergence. Chinese cultural variety shows are interpreting Chinese cultural content with a brand-new look, well performing the task of letting the world understand and understand China, highlighting the innovative spirit of Chinese art, and showing firm confidence in Chinese culture.

"May 4th" New Culture Movement caused a fault in traditional culture. In the early days of the founding of the People's Republic of China, China's poverty and backwardness and the rapid rise of the West led to a large number of intellectuals blindly worshiping Western culture and completely denying excellent traditional culture, believing that Chinese traditional culture is the cause of poverty in the country The culprit behind. "Learning to strengthen the country" can use the innovative application of big data, cloud computing, mobile Internet and other new technologies to establish users' thinking, analyze users' previous reading interests, and accurately push through user analysis to provide users with exclusive information. In the era of mobile Internet, everything is a medium, and information explodes. There must be enough reasons to attract the public's attention in the black hole of massive audio and video information. Content is informative, which is the most important factor in attracting public attention and a certain degree of attention. Finally, it is necessary to improve the curriculum setting, strengthen the construction of the teaching staff, and combine the excellent traditional Chinese culture with the ideological and political education of college students. It is not a mechanical or far-fetched combination, but an organic integration. It is necessary to fully consider the teaching content of the theoretical course of ideological and political education and the excellent tradition. Cultural fit point, to achieve seamless connection. When modifying the model transformation, the established CPN model should truly reflect the isomorphism of the system design, that is, the static organization of the static model structure, attributes, data flow and resource configuration of the view and product design.

2.3 The Python Implementation of Dynamic Performance Modeling

The CPN model is transformed from multiple design product models. For example, the SysML class diagram, activity diagram and state diagram of the system design need to be transformed together to obtain the basic CPN executable model. This also needs to be carried out: (1) Model structure verification to ensure the isomorphism of the CPN model and the design model of the combat view or system view. (The M in C rla method uses random experiments and statistical analysis methods that have the same probabilistic properties as the problem to be solved.

Statistical estimates and probabilistic characteristics required for solving: For problems in mathematics, physics, engineering technology, and production management, first establish a model of the stochastic process of the problem, and determine the indicators of the problem. It is understood as a measure of the difference between the initial combat situation and the final combat situation. The radar networking operation is different from the fire confrontation. The destruction and reduction of the target will not occur, but it is reflected in the radar network's perception of the real existence of the air target. superior. To quantify how well the system design fits the mission requirements, they are measured in the same metric space

Hot topics are all effective means of publicity and play an important role in dissemination, but if the content itself is meaningless and low-value, no matter what method is used,

good dissemination effects cannot be achieved. Good content and new means are definitely the best way. Moreover, only one attribute that is the same often does not mean that there is a strong connection between nodes.

3. CONCLUSION

This paper proposes a shortest path algorithm for community key nodes in social networks, which brings time efficiency to the dissemination of the entire social network and can be realized at the fastest speed, making the traditional culture a new look, and widely disseminated, establishing a good sample of media integration, and providing a good reference for future media integration platforms. Compared with the traditional dynamic performance evaluation, it is no longer a Python static average measurement based on probability and statistics, with search performance as the core.

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Vehicle Information Acquisition and Communication System Based on Multi-Satellite Fusion, CAN Bus and GPS

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Abstract:This paper proposes a GPS and GPRS-based multifunctional vehicle terminal design scheme, which uses an embedded platform based on S3C2440 (bit 23 microprocessor of ARM920T core) and operating system, expands GPS navigation module and GPRS module, video surveillance The module integrates the CAN bus interface to realize vehicle navigation, wireless Internet access, CAN bus communication, and video monitoring functions, and fully meets people's requirements for car safety, convenience and comfort. The GPRS navigation module selects the JP13 receiver, and completes the related hardware circuit design. The navigation system adopts navigation software design based on the eSuperMap platform, which can realize electronic map display and operation, satellite positioning information display, path analysis, navigation and other functions.

Keywords: Vehicle Information, Communication System, Multi-Satellite Fusion, GPS

1. INTRODUCTION

Urban traffic problems are becoming more and more serious with the progress of urbanization. In most areas of the world, the contradiction between traffic problems and urbanization is becoming more and more acute. Traffic problems cause casualties, waste of time and human resources, etc. These problems are becoming more and more obvious, but at the same time, in the process of urbanization, the development of urban road traffic has obviously lags behind the progress of urbanization, especially the development speed of the number of vehicles. To a certain extent, the traffic problem has become an obstacle to the further development of the city, and an obstacle to economic and social development [1-6].

Intelligent transportation systems are now the most popular and all-socialized projects to be developed. The difference between intelligent transportation and previous transportation systems is that intelligent transportation pays more attention to the importance of information transmission, and intelligent transportation systems use the most Advanced technology integrates information technology, electronic technology, control theory, etc. Through the application of advanced technology and the establishment of models, real-time organic connections between vehicles, roads, and information service centers can be formed. In the intelligent transportation system model, the information center not only obtains the operating information of the vehicle, but also obtains the general traffic information of the road, and at the same time it can deliver this information to the car owner in real time. CAN bus, as a kind of reliable automobile computer network CAN bus, has now begun to be applied in advanced automobiles, so that all automobile computer control units can share all information and resources through CAN bus, so as to simplify wiring and reduce the number of sensors. The purpose of avoiding duplication of control functions, improving system reliability and maintainability, reducing costs, and better matching and coordinating various control systems [7-14].

In turn, the power, operational stability, and safety of the car have risen to new heights. With the development of automotive electronic technology, CAN bus communication protocol with high flexibility, simple scalability, excellent anti-interference and error correction capabilities will be more widely used in automotive electronic control systems. The remote monitoring system of public transportation vehicles is mainly used for remote dispatching and monitoring management of public transportation companies. Its equipment consists of a host and a display, installed on the terminal bus, built-in GPS satellite receiving module and wireless communication module, receiving GPS satellite positioning signals around the clock, and displaying the terminal vehicle's operating information latitude, longitude, time, speed, direction, etc. anytime, anywhere , It is transmitted to the main server of the dispatching command center through the network, which is convenient for the center to timely and accurately monitor and manage. When an emergency situation is encountered, the dispatching command center of the bus company can dispatch and command terminal vehicles by means of on-board phone or text message.

At the same time, the client uses the Internet to log in to the main server database at any time, query the location information of each terminal vehicle, or send instructions to it. Through the on-board terminal and on-site dispatch monitoring, video monitoring of vehicles can be realized. The monitoring system will automatically alarm when the passenger flow increases the density of the train, or when the shuttle vehicle is speeding, does not follow the established route or stays outside the station for too long. Of course, in addition to these information services, the information service center can also provide users with entertainment, consulting and other services. The mobile information system is produced with the intelligent transportation system, and it is also a very important part of the intelligent transportation system. The mobile information system can exchange real-time information with users. Users can obtain information such as life-related information, business-related information, traffic-related information, etc., and the system can obtain information from users that is convenient for managing and

monitoring vehicles. The combination of mobile information system and other services such as blood navigation makes it more convenient for users to travel. At the same time, the mobile information system also integrates some security-related services, such as remote control locks, anti-theft alarms and other emergency measures. In the past, the bus terminal was based on 51 single-chip technology. The 51 single-chip hardware development platform realizes the main functions of GPS positioning solution [15-21].

2. THE PROPOSED METHODOLOGY

2.1 The GPS Vehicle System

All functions of the vehicle terminal are basically based on location information, so the acquisition of location information is of utmost importance. At this stage, most of the vehicle terminals on the market use GPS positioning systems, but due to the deliberate deviation of GPS in the Asia-Pacific region, the current positioning accuracy is not very high; moreover, GPS does not promise to use free of charge, and it may be closed at any time. risk. Although the Beidou satellite navigation system can meet the needs of vehicle terminals, it is not a system that operates stably on a global scale. The system is still under construction. During this period, there may still be a lot of problems to be solved, which may cause system instability [22-24].

Therefore, what is used in this design is based on Beidou/GPS dual-mode satellite positioning to achieve location information acquisition. The main functions of the car navigation module include positioning information reception and display functions, including initializing the serial port and class, reading the receiver's real-time positioning information, improving the positioning information for navigation, and displaying the real-time position information of the vehicle itself, such as longitude, latitude, and speed. The map display and operation are displayed on the display unit, including map display, movement, zoom in and zoom out, real-time display of vehicle position and other functions. Route planning and navigation functions. By entering the starting point and end point, the best driving route is calculated and displayed on the electronic map. According to the position of the vehicle itself, guide the car to follow the set route.

The module in this system adopts the company's module, and the data transmission interface between the module and the host adopts a standard three-wire serial interface. The signal data of the position of the vehicle terminal is collected through the carrier board, and the collected data is transmitted to further the data transmission rate can reach long, which can meet the needs of high-speed acquisition of real-time position information data. The power supply in the carrier board is also a linear stabilized power supply, which provides a linear stabilized power supply for the carrier board. In this system, a triode is used as the restart switch of the module, and this signal is controlled by the processor. In addition, the module is easy to use, stable in performance, and simple in interface circuit design.

2.2 The Multi-Satellite Fusion and CAN Bus

CAN, as a communication protocol describing the way of information transfer between devices in the automotive environment, is used to exchange information between ECUs of various electronic control devices on the vehicle to form a serial communication network that effectively supports distributed control or real-time control. The bus has significant features and advantages such as strong real-time data communication between nodes in the network, short development cycle, and has formed an international standard trend. It provides a powerful way for distributed control systems to realize real-time and reliable data communication between nodes. support.

The security data receiving module uses CAN bus as the communication protocol, and is mainly responsible for receiving, controlling and displaying the position coordinates and status values of the mobile terminal from the navigation data processing module that cooperates with the corresponding gravity sensor, photoelectric sensor and electromagnetic induction sensor. Real-time data. The MS320F2812-based digital information processing chip DSP can be used as the main body, and devices such as GPIO and SPI can be integrated to ensure that it provides high-speed and safe data processing functions. According to the way of function realization, the entire vehicle-mounted terminal is divided into two levels. The bottom layer is hardware resources. It mainly includes a core embedded hardware platform, including CPU, Flash and clock circuits to realize the functions of the central controller. Its main function is to control peripheral function chips through various interfaces to achieve specific functions. The peripheral chip is another part, which is connected to the vehicle's acquisition interface, which mainly includes the Beidou/GPS dual-mode satellite positioning module, GPRS wireless communication module and CAN information acquisition module.

2.3 The GPS Multi-Satellite Fusion and CAN Bus Vehicle Information Collection

The main control unit includes MCU, external FLASH, SDRAM, and peripheral clock circuits, etc., which make the MCU work normally; the vehicle data acquisition unit includes a high-speed CAN bus, a low-speed CAN bus, switch and analog acquisition interfaces, For some vehicles, these quantities can already fully cover the variables of the vehicle state, and there are acceleration sensors and vibration sensors in the vehicle data collection unit, which can independently measure the acceleration of the vehicle and independently perceive the state of the vehicle.

The vehicle-mounted data acquisition and communication device is responsible for collecting CAN real-time data and GPS data, and performing data preprocessing, system parameter configuration transfer, and at the same time transmitting real-time data to the on-board computer, and transmitting real-time data to the remote monitoring center through 3G wireless routing. The vehicle-mounted data collection and communication device collects equipment status information and construction operation data of large construction vehicles, as well as GPS geographic location information including time, longitude, latitude, speed, and direction. These data messages can be sent to the vehicle terminal display device through the network port communication, and transmitted to the remote monitoring point through 3G wireless transmission. When the external demand for the collection volume changes, it can be added or deleted through the powerful configuration function of the software, and the system supports remote and local configuration. For example, you can change the frequency of data transmission, configure the relevant parameters of 3G wireless routing, and the collection volume and collection channel of the CAN collection module. The entire device is to be applied to the industrial site, and its environment is relatively harsh, with high temperature, strong electromagnetic interference, humidity, compression resistance, seismic resistance, and corrosion all need to be

considered. Therefore, the design of on-board data acquisition and communication devices must consider these the influence of factors. For the functions to be realized by the vehicle-mounted data acquisition and communication device, that is, data acquisition, wireless communication.

3. CONCLUSIONS

The design of this vehicle terminal is mainly to provide high-precision location services for vehicles and monitoring platforms. This function is mainly realized by the TD3017A chip produced by Dongguan Taidou Microelectronics Technology Co., Ltd., which enables the vehicle terminal to have Beidou/GPS dual-mode satellite positioning Ability, its positioning accuracy depends on the mode with the highest accuracy, which combines the advantages of the two into one. Secondly, the vehicle information collection function is realized. The main information collected here is CAN bus information, because with the development of automotive electronics, a large number of sensors are used in automotive electronic systems, and these sensors are all connected to the CAN bus.

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Intelligent SME Financing Risk Control Platform Algorithm Based on Intelligent Internet Financial Architecture

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Abstract:Due to their poor conditions and the high loan threshold of banks, small and medium-sized enterprises are faced with the problem of difficult and expensive financing. With the rapid development of Internet finance, small and medium-sized enterprises can use Internet finance to obtain higher transparency, higher participation, and lower intermediate costs. It provides a certain reference for the development of SME financing model in the future. It further diversifies the financing channels of SMEs and facilitates the financing process, and finally puts forward countermeasures and suggestions based on the problems that may arise in the process of Internet financing.

Keywords: SME, Financing Risk Control, Intelligent Internet Financial Architecture

1. INTRODUCTION

Small and medium-sized enterprises are relatively active economic entities in the current economic environment in my country [1]. With the continuous development of social economy, more and more small and medium-sized enterprises play their own role in the market economy environment and contribute their own strength to economic development. SMEs are more flexible than large enterprises [2]. In the development process of today's small and medium-sized enterprises, financing difficulties generally exist. This is because the small and medium-sized enterprises themselves are small in scale [3], which can easily lead to their own development difficulties in production and operation. Therefore, it is necessary to establish a necessary financing model to ensure the long-term development of enterprises [4].

If we must say the difference between the two kinds of finance, it is that the form of the flow of funds between the two is different. Internet finance can take advantage of its own technical advantages [5], compared with the traditional financial model in currency. Corresponding improvements have been made in different aspects such as the form of circulation of the currency and the form in which the currency is essentially displayed [6]. In-depth analysis of Internet finance-related information, and careful research on innovative products of Internet finance, finally sorted out six major Internet financial models, including third-party payment, P2P online lending [7], big data finance, crowdfunding, information-based financial institutions, and Internet financial portals. This paper analyzes and studies the current financing problems of small and medium-sized enterprises in my country. Although our country has conducted research and analysis for a long time [8], most of them are still stagnant in theory and cannot solve the problem fundamentally. for most SMEs. With the development of Internet big data, the level of financial services has been effectively improved, and the ability to obtain data has also improved [9].

Taking Alibaba Small and Micro Finance, the representative of the current domestic Internet finance as an example, merchants make single [10] transaction orders through the e-commerce platform and collect relevant data. Due to the low entry threshold of Internet finance and the imperfect credit evaluation system [11], it is difficult for relevant platforms and institutions of Internet finance to conduct a comprehensive and accurate evaluation of SMEs. In this context, among SMEs financing through Internet finance. Secondly, for the issuance of marketable securities, including the issuance of corporate bonds and the issuance of stocks [12]. At present, my country's "Company Law" and other relevant laws have extremely high requirements for the issuance of bonds. The asset size and strength, profitability and solvency of small and medium-sized [13] enterprises cannot meet the requirements at all. Even if the requirements are met, higher interest must be paid regularly. The financial pressure is high and the feasibility is not high [14].

The second entrepreneurship is an internal reform process that an enterprise conducts in order to seek further development after it has achieved rapid growth. Its essence is a strategic transformation carried out in a certain stage of enterprise development [15], and a revolutionary change in the process of enterprise development. To develop a business, it is necessary to start a second business. In order to encourage the financing and development of small and medium-sized enterprises, in recent years [16], various government departments have successively issued many institutional arrangements to support the financing of small and medium-sized enterprises, including the Opinions on Financial Support for the Development of Small and Micro Enterprises. At present [17], the innovation of my country's economic model has brought about the development of the Internet information age, which requires us to continuously expand the scope of the development of the Internet information industry. In addition, compared with the traditional financial model [18], the Internet financial model has a more prominent ability to collect relevant information and data and do a good job in data analysis. This more convenient and efficient way is also the key reason why Internet finance can be accepted and recognized by many people [19]. Yibao payment, remittance to the world, fast money payment, etc. The operating models

of companies relying on third-party payment in the market can be divided into two categories according to the above types: one is led by Alipay and Tenpay [20]. The collection of information on SMEs is very important, and when accepting and distributing loans to SMEs, due to the need to collect and process information, this process will consume a lot of manpower, material resources, financial resources and time [21].

2. THE PROPOSED METHODOLOGY

2.1 The Intelligent Internet Financial Architecture

In response to the financing difficulties of small and medium-sized enterprises, the state has formulated many support policies to ensure that the financing behavior of small and medium-sized enterprises can be carried out under constraints. However, Internet finance is a new financing model [22].

Today, the financing difficulties faced by SMEs mainly include several aspects. First of all, the financing channels of SMEs are single, and the financing gap of SMEs is relatively large [23]. Most SMEs have insufficient financing in their development, and internal financing is the primary method adopted by most SMEs in the financing process. Internet finance It operates on the basis of two main entities: enterprises and banks, and is more in line with the development of the current era. Loans are granted through online application and review. It provides great convenience for both lenders and borrowers.

At the same time, P2P websites can make use of the effectiveness and timeliness of information dissemination on the Internet, making the transmission between data and information faster and more accurate. Therefore, the information between the borrower and the borrower can be transmitted more accurately and conveniently, and the communication is also more convenient. Improve the multi-dimensional, multi-level and multi-frequency monitoring and post-evaluation system for differentiated pricing of deposits and loans. Differentiated pricing of deposits and loans requires flexible and diverse differentiated authorization, efficient and fast interest rate approval, and a multi-dimensional, multi-level and multi-frequency monitoring and post-evaluation system. With support for different deadlines, different business types, and different institutional levels. The P2P website greatly improves the traditional media platform and makes the capital flow of enterprises more smooth. This model is based on Internet technology, so that it is not affected by geographical environmental factors, so that both borrowers and lenders only need to use the Internet, and they can be then realized with their fingers, breaking through the restrictions of geographical factors.

2.2 The Intelligent SME Financing Risk Control Platform

The P2P website has greatly improved the traditional media platform, making the capital flow of enterprises more smooth. This model is based on Internet technology, so that it is not affected by geographical environmental factors, so that both borrowers and lenders only need to use the Internet, and they can be realized with their fingers, breaking through the restrictions of geographical factors. Enterprise credit evaluation is very important both for small and medium-sized enterprises and for Internet platforms. The credit evaluation made by the third-party platform for SMEs is very convincing. Small and medium-sized enterprises with high-grade credit can obtain higher financing limits

Strengthen the training of outstanding talents in deposit and loan interest rate management. Interest rate marketization is a new field for most employees of the bank. To improve the quality of employees, strengthen the training of outstanding talents in the management of deposit and loan interest rates, in order to achieve refined management within the bank. Secondary entrepreneurship refers to those early development, which have already been For small and medium-sized enterprises that have completed the original accumulation. It is the only way for small and medium-sized enterprises to pursue higher goals, transition to a higher level, and develop at a larger level to occupy a place in the market. Compared with the first time, the way to obtain capital through external financing channels is for many small and medium-sized enterprises. is very difficult. Secondly, in the development process of SMEs, the supply and demand of corporate financing is in a stage of long-term imbalance. Many SMEs use bank financing to improve their capital reserves. Under the Internet finance model, SMEs can complete financing and loans on the Internet platform.

Promote the solution of financing problems for small and medium-sized enterprises by providing loans to multiple enterprises. This Internet model can minimize transaction costs and information processing costs. An information-based financial institution is developed on the basis of Internet information technology. In the Internet financial industry, it is a financial institution that realizes a comprehensive information-based operation and management by transforming the traditional operation mode and service products. Internet finance is a relatively innovative financial model that has just emerged in recent years. The financial model is developing rapidly and has good prospects. Although Internet finance has a relatively dominant position, most small and medium-sized enterprises have less capital and assets. The debt ratio is high and the mortgage assets are small. It is difficult to find institutions that can guarantee mortgage loans for them, and there is a lack of standardized and effective forms of guarantee.

2.3 The SME Financing Risk Control Platform Algorithm

In the annual national GDP accounting, small and medium-sized enterprises are indispensable. Although small and medium-sized enterprises cannot catch up with large-scale enterprises such as listed companies, they always affect my country's economy with their large number and great contribution. Therefore, for small and medium-sized enterprises the economic problems encountered in the process of enterprise development, especially financing problems, in the latter point of view, it actually obscures the main body of financial services. The conduct of business matters is collectively referred to as Internet finance.

For small and medium-sized enterprises in the big data Internet platform, through the sorting, analysis and mining of their certification information, operational data, financial data, upstream and downstream transactions, customer data, logistics data, corporate credit monitoring data and other indicators. But in fact, the Internet Finance and financial Internet are very different in all aspects, especially in terms of their conceptual definitions: First, the information asymmetry between banks and enterprises leads to high financing costs. Small and medium-sized enterprises have a strong family system color, which leads to the lack of operation and management systems of many enterprises, chaotic financial information, imperfect information disclosure, low reliability of financial information, and lack of ways for banks and other

financial institutions to accurately judge the financial status and profitability of small and medium-sized enterprises. It also requires a lot of manpower, material resources and financial resources to review the financial affairs of small and medium-sized enterprises. But there is no doubt that due to the small economic size and other reasons of this type of enterprises, there will inevitably be many unknowns and risks in the operation. Therefore, in the event of an economic downturn, relevant financial institutions will also be cautious in lending. Small and medium-sized enterprises will not spend too much money on internal control because of their lack of funds or the lack of high-level professionalism of the company's senior personnel. However, this negligence will make small and medium-sized enterprises lack of funds without knowing it.

3. CONCLUSIONS

The Internet financial model has many advantages and is much superior to the previous traditional financial model, and the characteristics and advantages of the Internet financial model are fast. Therefore, for the financing reform and innovation of small and medium-sized enterprises under the background of the Internet financial model, creating a new model, enhancing the credibility and the development of the enterprise's own quality advantages have positive practical significance for solving the financing problems of small and medium-sized enterprises and the reform of their own financing mode.

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Development of an Intelligent Platform for Enterprise Financial Management Based on Value Chain and Data Chain

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Abstract:This article attempts to combine value chain and data chain ideas with corporate financial management. By analyzing the limitations of traditional financial management models in value chain management, this paper puts forward the basic ideas for the construction of corporate financial management models based on the value chain, starting from the establishment of corporate internal Start with the value chain management system and tap the potential of the open value chain of enterprises to build a financial management framework based on value chain thinking suitable for Chinese enterprises. Analyzed the integrated financial accounting model from the perspective of the value chain, established a financial management framework based on the value chain; analyzed the construction methods of the financial management subject, financial management scope, and financial management content in the corporate value chain financial management model.

Keywords: Enterprise Financial, Value Chain, Data Chain, Intelligent Platform

1. INTRODUCTION

General Secretary Xi Jinping pointed out that the world is currently at the intersection of the new technological revolution and the industrial revolution. Science and technology show a wide range of integration and innovation. Big data, cloud computing, financial robots, etc. have all put forward new propositions for corporate financial management. If the era of manual bookkeeping is the 1.0 era of financial management, and ERP marks the entry of financial management into the 2.0 era, then the emergence of technologies such as smart finance and cloud finance has enabled financial management to enter the financial 3.0 era with unprecedented strides. The financial robot alone can liberate financial managers from traditional bookkeeping (recording) and settlement (measurement). Simple and repeatable tasks can be automatically realized by computers according to the set logic, enabling financial management the energy of personnel has shifted from simple repetitive work in the past to considering how financial management serves corporate strategy. Each enterprise is a collection of various activities that perform design, production, marketing, delivery, and assist products. All these activities can be expressed in the value chain [1-6].

The value chain of an enterprise and the way in which it is engaged in individual activities reflect its history, strategy, methods of implementing strategies, and the fundamental benefits of these activities. The final performance of corporate management will be implemented and reflected in specific financial indicators. As the information system of enterprise management, management accounting is inextricably linked with financial management. It is clear to everyone that the object of financial management research is the movement of funds in the process of enterprise reproduction, which specifically manifests itself in investment, fundraising, daily operation of funds, and dividend distribution. According to monetary theory, capital is the representative of value, and capital movement has become the manifestation of value movement. Therefore, the research object of financial management is also the value movement; the research object of management accounting is also the value movement. The difference is that financial management is the entity management of the value movement, while management accounting does not directly touch the entity of the value movement. It is the analysis, management and reflection of the value movement, and the ultimate goal is to realize the value-added of the value entity. It is clear to everyone that the object of financial management research is the movement of funds in the process of enterprise reproduction, which specifically manifests itself in investment, fundraising, daily operation of funds, and dividend distribution [7-14].

According to monetary theory, capital is the representative of value, and capital movement has become the manifestation of value movement. Therefore, the research object of financial management is also the value movement; the research object of management accounting is also the value movement. The difference is that financial management is the entity management of the value movement, while management accounting does not directly touch the entity of the value movement. It is the analysis, management and reflection of the value movement, and the ultimate goal is to realize the value-added of the value entity. The direct purpose of corporate financial management activities is, of course, to maximize corporate value, and then to maximize customer value, so that the company can gain an advantage in market competition. In 2013, "China's Internal Audit-Type Audit Development." In order to ensure the theoretical support of value-added auditing, and because it is convenient for the smooth implementation of the current standards (hereinafter referred to as the new standards) in China, the function of internal auditing is combined with the internal auditing work and has a strong internal auditing ability. In the development process, there is no doubt that the original monitoring and

evaluation have been extended to the practical basis of confirmation and consultation. [15-21].

The cost control and reduction of each link of the value chain is an important part of corporate financial management. The analysis of the causes of the cost of each link, that is, the analysis of cost drivers, must be considered from the perspective of the management of the entire value chain. The traditional cost management of enterprises often only pays attention to the causes of tangible costs, but lacks due attention to the causes of intangible costs that are closely related to corporate strategy. Generally speaking, before actual production, companies already have a number of intangible factors that affect the cost of products or services that are difficult to quantify [22-24].

2. THE PROPOSED METHODOLOGY

2.1 The Discussion of A.Value Chain

Professor Michael Porter, a well-known management scholar, believes that the value chain is a collection of enterprise product realization processes and various supporting activities including product design, processing, assembly and sales, and advocates the use of the value chain for corporate strategic planning and management to help companies gain and maintain a competitive advantage. The value chain theory tells us that not all production activities produce value. The production and operation activities of enterprises include two major categories: basic activities and auxiliary activities.

The basic activities are manufacturing products in physical form, selling and sending to customers, and various activities included in after-sales service including: raw material procurement, processing and assembly operations, product sales, after-sales service, etc. The auxiliary value-added activities of the enterprise include organization construction, personnel management, technology development and procurement management. The technology and procurement here are broad, which can include both productive technology and non-productive development management. The application of value chain analysis in corporate financial management can be carried out around four basic steps, including: identification and decomposition, establishment of value standards, evaluation and classification, and reengineering processes. Identification and decomposition belong to the primary link in the application of value chain analysis in corporate financial management. This link needs to summarize and decompose all processes of the enterprise. The flow chart method or the text description method can be used to summarize the process, but the application of the two methods must describe the output process as a whole, and the risk factors, control methods, and impact on value of each link also need to be clarified.

Identification and decomposition are not evaluative, but descriptive. Subsequent business evaluation is directly affected by the neutrality of the result expression. Therefore, the value chain decomposition must strictly follow the principle of "complete exhaustion and mutual independence", so as to maximize the decomposition. The last link. Establishing value standards needs to combine the overall strategy of the enterprise and take it as the ultimate goal. Because of the high ambiguity in the strategy of the enterprise in many cases, the medium and long-term goals of the enterprise can be used as its strategy at this time to clarify the key to the enterprise strategy. The enterprise value chain and the supplier value chain and the customer value chain are realized through purchase and sale activities.

2.2 The Data Link Model

However, from the significance of adding value to the organization. The business process of an enterprise is also the process of creating value. After decomposing the process of enterprise value creation, the whole process will be transformed into a series of interrelated business activities, which are also activities for enterprises to realize value-added. The earliest proposed value chain theory is the analysis of the enterprise's own value activities, mainly to study the competitive advantage of a single enterprise. The business process of an enterprise is also the process of creating value. After decomposing the process of enterprise value creation, the whole process will be transformed into a series of interrelated business activities, which are also activities for enterprises to realize value-added.

However, due to the constraints of previous management ideas, most technology companies lack a comprehensive understanding of accounting. In their daily business activities, companies will be represented and presented in financial information. These financial information and non-financial information are the value of the enterprise.

2.3 The Intelligent Enterprise Financial Management Platform Based on Value Chain

It can be considered from both the external macro-environment and the changes in internal resource capabilities. The innovation motivation of enterprise managers is an important motivation for the transformation of financial management. The in-depth understanding of the importance of financial management in the process of corporate strategy by corporate managers, especially financial leaders, is the most direct and most driving motivation for the transformation of corporate financial management. Problems in current financial management practices such as pure profit first, short-term goals, and unreasonable performance appraisal indicators are also one of the important driving factors for financial management transformation. Financial management transformation should be carried out from two levels of concept and technology.

The basis of chain management. It is necessary to conduct audits of related parties to adjust the changes in demand status. Appropriateness and effectiveness of process management, by reference. Manufacturing enterprise supply chain audit evaluation and 2. Supply chain management performance audit. Supply high supply chain management performance to promote enterprise improvement Other special audits are different, except that the audit involving enterprise chain management performance level is supply chain audit governance, adding value and achieving goals. It plays a dominant, forward-looking and guiding role in the entire transformation process. Michael and Porter once decomposed the production and operation activities of the enterprise into several value activities related to the realization of the strategy of competitive advantage, and decomposed the value creation process into design, production, marketing, delivery, and a series of auxiliary products. Different but interrelated economic activities, or “value-added operations”, define the entire value-creating activity of the enterprise from the input of basic raw materials to the submission of end products as a value chain, thereby defining “value the analysis theory of "chain" is introduced into enterprise management. The relationship between the enterprise value chain and the supplier value chain and the customer value chain is realized through purchase and sales activities. In this way, the

enterprise, suppliers and customers form an organic whole that is connected and interacts with each other. This connection can be traced up to the provider of primary materials and extended down to the end users of the enterprise's products, thus forming a vertical chain of value transfer and value-added links during the formation of the final product from the input of raw materials. The purpose of management accounting's analysis of the vertical value chain is to determine what the enterprise should produce.

3. CONCLUSIONS

First of all, on the basis of the traditional balanced scorecard, the sustainable balanced scorecard integrates environmental and social factors closely related to Luqiao's corporate strategy, effectively promoting the understanding, communication and interaction between the company and various stakeholders. It is helpful to realize the coordinated development of economy, environment and society; secondly, the construction of a performance evaluation system based on the sustainable balanced scorecard has enabled corporate performance management to transform from abstract to intuitive, operable, quantifiable, and comparable.

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Intelligent Innovation Platform Design of Chinese Film and Television Music Based on Multi-Dimensional Information Fusion Algorithm

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Abstract:Experienced changes in recording techniques and musical styles. With the development of the times, digital technology is constantly developing and progressing. In the aspect of film and television music creation, the application of digital technology has been innovated accordingly. Using multi-source information fusion to build a music feature system to solve the problem of music recommendation cold start Users provide personalized music recommendations. The optimized high-concurrency Cuckoo Hashing algorithm is implemented on the DPDK platform, and the algorithm is optimized for large page memory, batch processing and preprocessing combined with DPDK features. Music information retrieval is expanded from the traditional retrieval based on keywords such as file name and artist name. At the same time, the evaluation of the example model of the system also verifies that the multi-information source fusion method proposed in this paper can optimize the precision and recall rate of the system.

Keywords: Intelligent Innovation Platform, Chinese Film and Television, Television Music, Multi-Dimensional Information Fusion

1. INTRODUCTION

In the art of film and television, an important part is film and television music. With the development of the times, digital technology is constantly developing and progressing, because the application of digital technology has made corresponding innovations in the creation of film and television music [1]. In my country, the non-traditional band method was applied to the creation of film and television music very early. The development history of traditional music in our country is quite long. In front of the public, the public's awareness of traditional music has been improved. Erhu is a well-known traditional musical instrument in my country. Its sound is bright and distinctive, full of the charm of ancient Chinese style [2]. With the comprehensive development of the current film and television industry, music recommendation has received extensive attention in the recommendation task of multimedia products. However, because music has connotations such as emotion and style, compared with other Internet products, it is difficult to quantitatively describe and extract features. and other characteristics, which makes the existing research still have many shortcomings [3].

In order to solve the above drawbacks and meet the communication needs of "high-speed", "high-efficiency", "mass" and "ubiquitous" in the future network, on the basis of in-depth research on the theory of future information network architecture at home and abroad, Beijing Jiaotong University's Next Generation Internet Interconnection the National Engineering Laboratory [4] for Equipment has creatively put forward the "Intelligent Collaborative Network Theory System". After years of construction and development in the film and television industry, relatively mature multi-terminal independent systems have been built in various fields, such as the digital copy satellite distribution and reception system for cinemas, and film key management [5]. System, cinema computer ticketing system, cinema management system and cinema network operation and maintenance center ticketing box office system, etc. The current music retrieval in the P2P network has the following problems: (1) The retrieval method is relatively simple, and only supports retrieval based on file name keywords or the simplest string matching [6], but cannot fully support retrieval based on semantic content information; (2) It cannot provide users with personalized retrieval. This is contrary to the personalized characteristics of music. The target tracking technology is to find out the area of interest in the video stream and match it with the target, so as to achieve the purpose of real-time tracking [7].

Using computers instead of humans to acquire and process external information can accomplish many tasks more efficiently and quickly, thus making the human society develop more rapidly [8]. The fault diagnosis of power transformer is based on fault characteristic information. When the fault has not been fully formed. Predict the possible faults of the transformer. after the failure occurs. Judge the fault type, fault location and fault cause. And develop a condition maintenance program [9]. The existing power transformer fault diagnosis methods are mainly divided into traditional methods and intelligent methods. The research objects of the power load analysis model in the power grid environment are multi-faceted, mainly including busbars, regions, new energy, distributed generation processing and intelligent terminal power consumption forecasting [10]. The design and construction of the relevant intelligent analysis platform using the existing conditions is the concrete embodiment of the smart grid management technology. According to the types of models used in data fusion, multi-source data fusion methods mainly include structured methods [11] and semantic methods [12].

The starting point of the structured method to solve the problem is the information structure, and does not consider the semantic connection between the information, and mainly solves the problem of structural heterogeneity of the data to be fused [13]. In film and television music, the traditional way of organizing material is lines, and the combination of different ways of music is assembled, which is usually an element of music in the aesthetics of traditional music [14]. With the development of the times and the continuous development of

digital technology, electronic music has emerged. The second is to innovate the genre of film and television music. The reason why traditional folk music rarely appears in film and television works is that it was influenced by foreign music and popular music in the early stage, which led to the neglect of folk music. At present, the national style trend has become popular, and people pay more attention to the inheritance and development of national music [15].

However, recommendations based only on audio, tags or categories will lose a lot of music characteristic information, so that better personalized services cannot be provided. In practical scenarios [16], the music cold start problem is common. It is difficult to solve the cold start problem by studying the explicit or implicit feedback data of users, that is, for newly added users and music [17], they cannot be recommended due to the lack of relevant feedback data. The intelligent service layer provides service identification and description, and is responsible for the intelligent search of services and the dynamic adaptation mapping of resources; the resource adaptation layer is responsible for the game decision-making of intelligent service requirements and network component behaviors, dynamically adapting network resources, and building network groups [18].

2. THE PROPOSED METHODOLOGY

2.1 The Multidimensional Information Fusion Algorithm

The construction of ontology is not a simple standard and matching, but a very complex and meticulous process. It is common to use traditional machine learning methods such as Gaussian mixture models, Bayesian networks, and hidden Markov models for music recommendation. Algorithm model tools, etc., in order to realize related algorithm functions. It will satisfy and realize the automatic arrangement of films, statistical analysis of the big data in theaters, identification algorithms, multivariate data fusion algorithms and other functions. Multi-dimensional information fusion technology is to uniformly process a large amount of information of each dimension in space and time. form an overall indicator. Provide a basis for decision-making and control. The key of multi-dimensional information fusion technology is to process multi-dimensional information with similar or different characteristic patterns. The data structure on the control cloud is different from that of the traditional EMS system. The data object-centered data association and integration of the control cloud is the data foundation. , and adopts a set of coding rules for data exchange and sharing as the unique identifier of the power data objects.

2.2 The Chinese Film and Television Music Based on Information Fusion Algorithm

Music is narrative. In the development process of erhu music, the development history is quite long. In the long-term development, there have also appeared many excellent works, which are well known to the world, such as "Erquan Reflecting the Moon", "The Birds of the Empty Mountain", "Liu Bo Song", Listening to Song", "Cold Spring Song", etc. In order to be compatible with various data storage and computing engines and maintain a unified interface structure, the system plans and designs the engine layer, including various script execution security sandbox executors (including SQL, Shell, Python , Spark executor).

We use the RDFPeers architecture to build a distributed DHT index of triples, that is, the RDF subject, predicate, and object triples in the music ontology are distributed and stored in the nodes of the P2P network. For the introduction of the specific architecture, please refer to [14]: The following We give examples of how to implement static and dynamic information retrieval in the RDFPeers architecture. When researching and analyzing target feature information, it is found that the target in this environment generally does not emit sound continuously; at the same time, due to the characteristics of the Kinect microphone array, the parameters related to sound source localization will also be affected when the environment changes. Figure 3 shows an example of storing, indexing, and dynamically computing RDF triples in six nodes in a 4-bit flag space RDFPeers network: by studying the internal correlation of correlation matrices between parameters. Find common factors for all variable properties.

The variables are grouped according to the degree of correlation between the variables. The variables with high correlation degree are all in one group. The correlation between different groups was low. Common factors are variables that can represent basic related attributes within the group. The equipment basic information table (such as circuit breaker basic information table, bus basic information table, transformer basic information table, etc.), equipment parameter table (such as transformer winding parameter table, AC line parameter table, bus parameter table, etc.) in the cloud database will be regulated). The recurrent neural network cannot capture information from a long distance, which may cause information loss, resulting in the problem of gradient disappearance, but LSTM adds a "gate" structure to the model, stores information in neurons, and is controlled by multiple gates. The memory unit Multi-task operations such as input and output.

2.3 The Intelligent Innovation Platform Design of Chinese Film And Television Music

All data is integrated and summarized, data warehouses are built, reports that assist business improvement are developed according to the data required by the business, and then the reports are made into a visual data interface, so that any report can be viewed and exported at any time. The test music set is divided into two groups: the first group contains 107 dance pieces performed by 73 artists; the second group contains 103 classical pieces performed by 50 artists. For this test music set, on the one hand, we automatically extract user labels for the features of music signals, and on the other hand, we grab the corresponding label information through the Web.

The design principle of this module is the particle filtering method based on HSV color histogram, and the specific principle is mentioned in the second chapter. The applicable environment of this module is indoor environment and dynamic background. The complexity of the environment is relatively stable, and the trajectory and speed of the moving target will not change greatly. At the same time, the obtained results are preliminary tracking results based on visual information. The data layer fusion model is directly related to The collected raw data are fused. Extract feature vectors based on fusion results and perform diagnosis. The data layer fusion model belongs to the bottom layer fusion. Its integration cost is high. 0, the space is directly created by this function and the pointer is returned, and then the memcpy() function is used to store the registration packet information, IPv6 header and Mac header. Finally, through the output() in Click. push() Nl number, send the data packet from the corresponding port.

3. CONCLUSIONS

Based on the network architecture model of the smart collaborative network, this paper realizes the service registration and resolution mechanism in the smart collaborative network, and completes the design and implementation of the smart service resolution platform. In the semantic-based music information fusion and retrieval system architecture for peer-to-peer networks, the multi-information source fusion method improves the recall rate of the system while maintaining a low error rate. For multi-information source data including low-level features, we propose a storage and retrieval method for static and dynamic information based on RDFPeers architecture.

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Game of Advantages and Disadvantages of Intelligent Financial Shared Information Center Service on Enterprise Financial Management

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Abstract:This article studies the pros and cons of the intelligent financial sharing information center for corporate financial management, which can efficiently improve corporate financial management. First of all, the enterprise has a wide range of points, a large number of independent accounting projects, and a large flow of funds. This article focuses on the financial sharing model for corporate financial management. The promotion of the aspect was discussed, and then, after continuous development and improvement, the financial shared service was gradually modelized, combined with the corporate industry background, and formed a relatively advanced modern corporate financial management model-the financial shared service center. The results show that the rise of financial shared service centers in my country has become an inevitable trend. For Chinese enterprises, it is necessary to construct and implement financial shared service centers reasonably and effectively.

Keywords: Game of Advantages, Intelligent Finance, Shared Information Center, Enterprise Financial Management

1. INTRODUCTION

Financial sharing services have been gradually applied to some of the world's leading companies since the 1980s. After more than 30 years of development, the financial sharing services [1] concept has built a relatively mature and complete system. There are nearly 70 global Fortune 500 companies. % of enterprises [2] adopt a financial shared service management model. With the transformation of my country's economy and the upgrading of the industrial [3] structure, the financial sharing center planned and constructed by Chinese enterprises has become increasingly [4] clear in the context of the wave of new technologies and the new [5] global business landscape. Driven by new technologies, financial sharing services will welcome with new development [6] opportunities, the rise of financial shared service centers in my country has become an inevitable trend. For Chinese [7] enterprises, it is necessary to construct and implement financial shared service centers reasonably and effectively [8]. Article 34 of the "Standards for Enterprise Accounting Informationization" issued by the Ministry of Finance [9] (Cai Kuai [2013] No. 20) stipulates: "Large enterprises and enterprise groups with a large number of branches and subsidiaries [10] and a wide distribution shall explore the use of information technology to promote Concentration of accounting work, and gradually establish a financial shared service center [11].

"Construction enterprises are very suitable for establishing a financial sharing service center to improve the management level of financial accounting [12] due to the large number and wide distribution of the construction projects of branch companies and independent accounting [13]. Taking the author's company as an example, the annual average output value exceeds 10 billion [14], and independent accounting is required. There are 285 sets of accounts and 213 in-service financial accounting personnel [15]. The main problems caused by this are: in accordance with the requirements of the internal control system [16], each independent accounting unit needs to be equipped with more than two financial personnel, and the financial personnel is seriously insufficient. Due to construction the industry characteristics of the enterprise, the number [17] of projects is determined according to the bidding situation, and the problem of large fluctuations and shortage of personnel [18] has not been solved well. The financial shared service management mode is a new type of financial management mode for enterprises, which specifically refers to the use of modern [19] information Modernization technology effectively processes financial information and handles basic financial business [20]. Through the information processing of financial business, financial data information is used as a service platform to optimize the work flow of the enterprise and reduce the operating [21] cost of the enterprise. Financial shared service management mode It is of great benefit to the comprehensive improvement of financial work, and it is directly related to the development of the enterprise [22].

In the process of establishing the corporate financial shared service model, the financial work will also be transformed [23]. Facing the market and customers, the internal departments and the relevant departments of external cooperative enterprises [24] are regarded as their own customers, and all financial services must meet the needs of customers. Demand is the fundamental principle. The financial shared service management model should be a comprehensive management model, including technology management, organization management, and service management. In the context of the development of the new era, the financial shared service management model will be a new direction for the development of corporate financial management, and corporate financial management will have greater responsibility for the development of the enterprise. FSSC is the English abbreviation of Financial Sharing Center. It is a higher requirement for financial management under the

development of the times. The most fundamental thing is to concentrate all financial management-related businesses into a unified sharing center, so as to be able to Better accounting and reporting operations. The existence of the financial sharing center itself is to ensure that all accounting records and reports can be carried out in a more standardized and uniform situation, and because the entire process does not rely too much on human operations, the emergence of the financial sharing center is very large. Part of it can save the labor cost of the financial system. The Financial Shared Service Center is a new type of financial management model. It relies on the financial system, financial standardization process and information technology level, by bringing together and re-integrating the homogeneous business involved in different departments within the company, it breaks the subdivisions.

2. THE PROPOSED METHODOLOGY

2.1 The Intelligent Financial Sharing Center

First of all, after the establishment of the financial sharing center, about half of the financial staff will be transferred to the financial sharing center to work. The system randomly allocates the business volume, and the business volume will be relatively balanced. If the processing is not timely, the business can be redistributed manually. Performance appraisal improves the work efficiency of financial staff. Secondly, the financial sharing system unifies business processing rules and procedures. Accounting subjects are preset by the system based on business documents, and manual modification is not allowed. Business processing tends to be simple, integrated, and automated, resulting in economies of scale, and financial staff's accounting work tends to Professional and simplistic, the error rate will be greatly reduced, so as to quickly improve the level of financial accounting.

The Financial Shared Service Center uses integrated Internet technology and data management technology, integrates resources, optimizes processes, innovates traditional financial management systems, adopts modern financial management thinking, and establishes a modern financial management system through the professional division of the labor and standardized processes.

2.2 The Corporate Financial Management

It can be considered from both the external macro-environment and the changes in internal resource capabilities. The innovation motivation of enterprise managers is an important motivation for the transformation of financial management. The in-depth understanding of the importance of financial management in the process of corporate strategy by corporate managers, especially financial leaders, is the most direct and most driving motivation for the transformation of corporate financial management. Problems in current financial management practices such as pure profit first, short-term goals, and unreasonable performance appraisal indicators are also one of the important driving factors for financial management transformation.

At present, the more popular financial sharing services, financial robots, etc., to a certain extent, focus on the upgrading of traditional business processing methods on the technical level. The transformation of ideas is a higher level of financial management transformation, and is the "soul" of financial management transformation. It plays a dominant, forward-looking and guiding role in the entire transformation process. Michael and Porter once decomposed the production and operation activities of the enterprise into several value activities related to the realization of the strategy of competitive advantage, and decomposed the value creation process into design, production, marketing, delivery, and a series of auxiliary products. The relationship between the enterprise value chain and the supplier value chain and the customer value chain is realized through purchase and sales activities. In this way, the enterprise, suppliers and customers form an organic whole that is connected and interacts with each other.

2.3 The Game of Advantages and Disadvantages of Intelligent Financial Sharing to Enterprise Financial Management

The Financial Sharing Center has established a group fund management platform to standardize the centralized management of funds and the management of receipts and payments. All expenditures are paid through bank channels as much as possible, which greatly reduces the use of cash. Through the establishment of direct bank-enterprise linkages, the bank accounts of the entire group are under unified monitoring, reducing the risk of fund payment. At the same time, compared with the original decentralized accounting of various projects, centralized accounting can ensure the timeliness and uniformity of business accounting, and also avoid more regulatory and tax risks.

Under the financial shared service management model, the quality of corporate financial services and information is higher. Under the corporate financial shared service management model, the enterprise will establish a financial shared service platform.

The platform uses network technology and information technology to process financial data. Compared with traditional financial data processing methods, the accuracy of processing financial data is higher.

3. CONCLUSIONS

The Financial Shared Service Center brings together financial personnel scattered in various places, and re-distributes the accounting functions according to the division of labor, breaking the isolation of independent accounting projects. As a new whole, it completes the accounting and payment work of all projects of the company together, and the work intensity tends to be even. Professional division of labor is more detailed, thereby quickly improving the efficiency of financial management. For enterprises, the close integration of financial accounting and the Internet is a major innovation in financial management. Through the construction of a financial sharing center, financial business integration is finally realized, thereby greatly improving the level of financial management.

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Dynamic Information Grid Optimization of Trade Logistics Industry Sharing Based on Remote Sensing Image Analysis of Guangdong, Hong Kong and Macao

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Abstract:Using the nighttime light image of "Luojia No. 1", the urban built-up area of the Guangdong-Hong Kong-Macao Greater Bay Area is extracted by the simple threshold method and the urban night light index method adjusted by vegetation. It can weaken the oversaturation phenomenon of the "Luojia No. 1" image and reduce Mistaken extraction due to the "overflow" of the image. Calculate and compare the landscape index of urban built-up areas in the Greater Bay Area. Then use the gravity model to measure the highway logistics gravity in Guangdong, Hong Kong and Macau, determine the road freight volume between cities, and use the logistics network The road logistics network in Guangdong, Hong Kong and Macao is optimized with the goal of minimizing the total cost, and the robustness of the optimization results under different carbon policies is further tested. The economic and social development of mainland China has had an important impact on the evolution of logistics layout in the Guangdong-Hong Kong-Macao Greater Bay Area. In regional logistics planning, attention should be paid to the impact of industrial agglomeration such as spatial correlation, and attention should be paid to the impact of the environment and economic cycles on the optimization of regional logistics layout and the deep integration of industries. influences.

Keywords: Dynamic Information Grid Optimization, Trade Logistics Industry Sharing, Remote Sensing Image Analysis, Guangdong, Hong Kong and Macao

1. INTRODUCTION

From the development status [1] and development practice experience of the three most influential Bay Area urban agglomerations in the world, New York Bay Area, San Francisco Bay Area, and Tokyo Bay Area, it can be found that the spatial distribution of the development of Bay Area urban agglomerations is mostly represented by a balanced development model based on regional division of labor is conducive to the common prosperity of the region. A new model of regional integrated development based on differences in basic economic systems [2].

However, in the process of development, the Guangdong-Hong Kong-Macao Greater Bay Area also faces challenges such as inconsistent strategic goals, uncoordinated systems, unbalanced industrial development, fierce competition for external resources, and spatial imbalance [3]. Finally, the remote sensing monitoring of surface water quality and quantity in Guangdong, Hong Kong and Macao will be implemented, and in conjunction with conventional monitoring, the effectiveness of water environment monitoring in the region will be improved by leaps and bounds, providing important information support for water environment protection in the region. Urbanization and urban expansion monitoring is one of the important research directions of land use change [4].

In recent years, the development of satellite remote sensing technology has provided a new method for the study of urban spatial pattern changes. Many cities in Hong Kong, Guangdong and Macao are one of the starting points of the Silk Road, such as Dongguan, Guangzhou, etc., [5] and Guangdong, Hong Kong and Macao are also the concentrated locations of important regional logistics hubs in my country and one of the key development areas of the country. With the construction of economy, urban infrastructure and the development of the Guangdong-Hong Kong-Macao Greater Bay Area. In the existing research, the research methods are roughly divided into natural science methods and humanities methods [6].

In the aspect of normative analysis, the research focuses on logistics network optimization and shortest path analysis in business management and transportation engineering. In the logistics distribution network [7], how the logistics distributor chooses the optimal path according to certain rules and completes the logistics demand distribution work has always been a researcher [8]. important topics, and the research results are rich. Networked manufacturing poses new challenges to the logistics system, requiring a high degree of agility in the logistics system, informatization, networking, integration, and rapid response. achieve effective integration [9].

Based on the above background, this paper takes the measurement parameter of this service capability in the grid environment as the main index to evaluate the comprehensive capability of logistics information service in the grid area. global limit [10]. Reasonable planning of the layout of urban space can solve the problems caused by the unreasonable urban spatial structure of the Greater Bay Area, promote the economic development of the urban agglomeration in the Greater Bay Area, and strengthen the economic influence of its core cities [11] - Industrial concentration and production factors in geographic The flow of space has changed the structure of urban development, but the industrial isomorphism in some cities also shows an unbalanced situation, which should be revised and improved in terms of promoting the sharing of resource elements, enhancing the level of cooperation between local governments, and optimizing the spatial layout of the industrial chain [12].

The goal is to study the key technologies of remote sensing of surface water quality in Guangdong, Hong Kong and Macao, establish a water quality remote sensing model suitable for the region, realize remote sensing monitoring of the main water quality parameters of surface water in Guangdong [13], Hong Kong and Macao, and obtain important information such as the spatial distribution of the main water quality parameters in the region and the location of pollution sources [14].

Among them, DMSP/OLS noctilucent remote sensing data has been gradually accepted by the academic community due to its wide coverage, data continuity, high accuracy and unique observation angle, and has become one of the important data sources for the study of urban expansion. The regional logistics network is optimized [15]. Gao Ying (2017) took the logistics network in the Beijing-Tianjin-Hebei region as the research object, and constructed a multi-objective optimization model to optimize the logistics network structure in the region [16].

2. THE PROPOSED METHODOLOGY

2.1 The Remote Sensing Image Analysis of Guangdong, Hong Kong and Macao

Logistics network optimization and shortest path focus on the distribution of geographical significance of entities, and there have been some planning studies in the background of cities, emphasizing the urban problems brought about by the spatial performance of logistics, and paying insufficient attention to the spatial connections and correlations between geographical units, which Probably the economics and geographical analysis of logistics is good at. J. More et al. [17] proposed a dual-objective shortest delivery path problem and gave an algorithm. The above models are generally steady demand models or static path models, which are effective for the planning of medium and long-term logistics distribution networks.

2.2 The Guangdong-Hong Kong-Macao trade logistics industry sharing

Currently, the Guangdong-Hong Kong-Macao Greater Bay Area is based on the pattern of "one country, two systems, three customs areas, and four core cities". Element segmentation is very prominent. According to the "dynamic threshold method" proposed by Yang Yang et al. [5], using the built-up area of each city as auxiliary data, the threshold value of the minimum difference between the lighting area under the dynamic threshold of each city and the area of the built-up area in the statistical data in different years is calculated in turn. But these achievements are by no means achieved overnight, and have their important historical and realistic motivations.

Since the handover of Hong Kong and Macao, especially in January 2004, the Mainland and Hong Kong and Macao signed the "Mainland and Hong Kong Closer Economic Partnership Arrangement" and "Mainland and Macao Closer Economic Partnership Arrangement" respectively. , Based on the panel time-varying decay model constructed by Battese and Coelli (1992), it is first necessary to use maximum likelihood estimation (MLE) to analyze the impact of the core explanatory variables, regional economic integration and coordinated development of logistics on the industrial structure. Scale night light remote sensing research, such as the study of housing prices in urban communities, etc. [25] - Higher image spatial resolution can retain more urban interior spatial details [26], thereby improving the accuracy of urban built-up area extraction results. Provide a basis for the spatial distribution pattern.

2.3 The Dynamic Information Grid Optimization of Guangdong, Hong Kong and Macao Trade and Logistics Industry Sharing

Regional innovation is the endogenous force for the continuous breakthrough of industrial total factor productivity, and more regional innovation investment is conducive to high-tech. The subject integrates various remote sensing models and methods such as inland surface water quality, water quantity remote sensing, ocean water quality remote sensing model, and salt tide remote sensing. It is used in remote sensing monitoring of water quality and quantity in Guangdong, Hong Kong and Macao; in terms of data, this project integrates multi-type, multi-temporal remote sensing data and conventional ground monitoring data. Referring to the methods of Wanyi et al. [8] and He Chunyang et al. The change analysis mainly includes the analysis of the change of urban lighting brightness and the analysis of the change of urban spatial pattern.

The main indicator is the average brightness of urban lights. The impact of highway logistics location on logistics is mainly reflected in the impact of the development of urban highway network on the logistics industry, which is one of the core factors affecting the development of urban logistics. When the road location of a city is high, it means that the road network in the city is denser, and the transportation efficiency will be improved accordingly, and transportation is one of the main functions of logistics. In this paper, the actual cost is divided into objective cost and loss of time value of goods. The so-called loss of time value of goods means that the logistics demand does not reach the destination within the specified time, so that the goods lose a certain time value.

3. CONCLUSIONS

The method in this paper only uses the simple threshold method and the U MTH method when extracting urban built-up areas. In the follow-up research, the fusion of night light images and high-resolution remote sensing images can be considered, and the supervised classification method can be used to improve the classification accuracy. Six landscape indices describe the urban built-up area patches. Secondly, the road logistics network in Guangdong, Hong Kong and Macau is optimized from the perspective of the region, and the gravity model is used to measure the logistics gravity between cities in Guangdong, Hong Kong and Macau, and determine the road freight volume between cities, with the goal of minimizing the total cost of the logistics network, considering the capacity decision of the logistics hub.

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Research on Distributed Software of College Online Education Based on Information Gain Optimization Algorithm

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Abstract:The paper analyzes the shortcomings of the information gain method, applies frequency, concentration and dispersion to the information gain method, and proposes a feature optimization selection method based on information gain. By introducing the service resource framework WSRF technical specification, a new grid distance education system model GEM based on the open grid service structure OGSA. According to the existing problems of modern distance education, a distributed distance education system based on object Web computing is studied by using CORBA/Java. On this basis, a new dynamic distributed system structure technology and idea based on object-oriented technology is applied to develop and realize the distance education question bank system.

Keywords: Distributed Software, College Online Education, Information Gain Optimization Algorithm

1. INTRODUCTION

Object-oriented technology represents a brand-new programming idea and method of observing, expressing and dealing with problems [1]. It is different from the traditional process-oriented development method. Object-oriented programming and problem solving strive to conform to people's daily natural thinking habits. In response to the above problems [2], combined with the characteristics of distance education, the thesis starts from the video streaming channel scheduling and distributed system perspective, and studies a distributed video-on-demand system suitable for large-scale user access in distance education [3]. To this end, the research starts from the actual application of VOD, the fifth stage, the focus of which is to establish an online automatic response system [4].

In a word, distance education in the 21st century is aimed at open, flexible and lifelong educational development. It is the continuation of traditional education, and at the same time, it is [5] also a huge change to traditional education. Some continuous attributes in the monitoring data of new energy smart vehicles the accuracy of the value of is too high, which will cause [6] the subsequent mining algorithm to take up too much space and time, and the trained model is prone to overfitting. The purpose of data discretization is to convert continuous attribute values into discrete interval values [7]. The basic algorithm of decision tree is greedy algorithm, which uses top-down recursion to construct decision tree. Ideally, when all the leaves are is a pure node, that is, when the instances of each leaf node belong to the same class, the decision tree stops growing [8].

Feature selection is mainly to select a set of features that are most effective for classification from the original feature space [9], which can effectively reduce the dimension of the feature vector space of the text, delete redundant features [10], and reduce the interference of irrelevant information on the text information processing process [11]. Its theory is clear, the method is simple, and the learning ability is strong. It is suitable for dealing with large-scale learning problems [12]. It has solved many problems in practical applications, especially for non-incremental learning tasks [13]. Good choice. Grid computing is a support platform for distributed and parallel computing, a seamless, integrated computing and collaborative environment [14].

It can be used as a virtual whole in geographically dispersed computing resources [15]. The grid computing system based on it not only enables people to gather dispersed computing resources. The global network is that all devices and software connected online become a vast resource shared by the world [16]. The environment has also developed from a centralized to a distributed open system, so that users can transparently apply different models made by different manufacturers [17]. At the same time, the key technologies such as resource scheduling, video storage and program distribution in the VOD system are in-depth Research, and put forward the following improvements and innovations [18]: the use of distributed on-demand system to replace the traditional centralized on-demand system. Modern distance education is just a simple extension of traditional classroom education on the Internet [19].

Judging from most of the so-called "distance education" at present, the teaching form and content are no different from traditional classroom education [20]. At present, the commonly used supervised discretization algorithms can be divided into: discretization algorithms based on statistics, discretization algorithms [21] based on class and attribute correlation, and discretization algorithms based on information entropy [3]. Among them, the discretization algorithm based on statistics. At present [22], the more commonly used processing method for this situation is to use the majority voting method to determine the classification of this sample, that is, to convert the node in the decision tree into a leaf node and use the majority of the samples. The class it is in marks it. Not enough attention is paid to the word frequency of the feature item [23].

The second: wrongly increases the weight of feature items that appear infrequently in one category but frequently appear in other categories [24]. Aiming at these shortcomings, a feature optimization selection method based on information

gain is proposed. That is, the optimization algorithm of twice information gain. Whenever a new attribute is selected, the algorithm not only [25] considers the information gain brought by this attribute, but also Consider the information gain brought by the attributes that continue to be selected after selecting this attribute, that is, consider the two-level nodes of the tree at the same time. Computer network is a typical heterogeneous system. Different models, different operating systems, different computer programming languages, application software running on various models and operating systems, etc., make it very difficult to develop distributed system software.

2. THE PROPOSED METHODOLOGY

2.1 The Information Gain Optimization Algorithm

In information theory, the amount of information refers to the measure of information required to select an event from four equally possible events, event a. The amount of information can be measured by a log: P(ai), where P(aj) represents the probability of the occurrence of event ai. Information gain is an important concept in information theory and is widely used in the field of machine learning. For the classification system, calculating the information gain is for each feature item, it calculates the information of the feature item t on the category c by counting the number of documents in which a feature item t appears or not in the category C. Gain, the core of the algorithm is to select attributes at all levels of nodes in the decision tree, and use the information gain rate as the criterion for attribute selection, so that when each non-leaf node is tested, the largest category information about the tested example can be obtained. This difference indicates the amount of information provided by the attribute pair classification.

Therefore, information gain can be used to quantify the relevance of an attribute to a given class or concept, with greater information gain indicating greater relevance to the classification task. That is, the number of texts that do not contain feature t is divided by the total number of texts; p(c. Idiao means that the text does not contain feature items and belongs to the conditional probability of class q, that is, the number of texts that do not contain feature t and belong to class G is divided by The number of texts that do not contain the feature f; the book is the number of categories. The two-time information gain optimization algorithm is based on the foundation. Whenever a new attribute is selected, the algorithm not only considers the information gain brought by the attribute, but also considers the selection of the The information gain brought by the selected attribute after the attribute.

On the basis of ID3 algorithm, the performance of ID3 algorithm is improved by combining attribute reduction based on information gain and minimum distance classification method. The attribute reduction Ho based on information gain is based on the size of attribute gain and the correlation coefficient between attributes.

2.2 The Online Education In Colleges and Universities Based on Information Gain Optimization Algorithm

Current distributed computing models make the following assumptions in order to reduce their complexity. There is no concept of a network and no remote address space. All components utilize a common language - an interface language and are made independent of their specific programming language through the interface language. The same Each host in the subnet must respond to broadcasts, causing unnecessary host interruptions and wasting processor resources; in the current network with a switch-centered flat structure, the broadcast method is prone to the well-known "broadcast storm" problem. Teaching resources Low level of sharing and low quality. Since there is no accurate standard for learning resources and courseware, the quality of learning courseware published online is often low, or even a simplified version of the syllabus. The ideal selection strategy for candidate breakpoints should ensure the discrimination of the original information system. On the premise of the relationship, select the fewest candidate breakpoints.

The bottom layer of the grid is the resource layer, which is a collection of distributed resources in the grid, mainly including the computing resources, storage resources and other educational resources of various departments and institutions of the school. Since these resources belong to different colleges or institutions, various resources meet user needs in different virtual organizations according to certain sharing strategies.

2.3 The Distributed Software for Online Education in Colleges and Universities

The deeds of Tarjing are often less than the disturbance it brings. Because the value of attributes often has the same impact on the classification and attributes of instances, the existing decision tree inductive learning algorithms only pay attention to the selection of attributes, and put the value of attributes in a secondary position. It is a toolkit and version One of the core components is an information service framework based on describing the overall grid environment, and its goal is to effectively represent a large number of geographically distributed, heterogeneous and also dynamic resources and services in the grid computing environment.

3. CONCLUSION

Aiming at the defect that the algorithm proposed in the literature is not effective for multi-valued attributes, this paper proposes an information gain optimization algorithm for attribute 0-value pairs by taking advantage of its advantages for two-valued attributes. Some related key technologies involved in distributed VOD system are studied, which lays a theoretical foundation for proposing a VOD system suitable for distance education. Since the system is based on J2EE and XML platforms, the concepts of movable code, movable data and strong type robustness requirements in J2EE platform make it possible to build a truly dynamic distributed system. Instead, the minimum distance classification method is used to determine its category.

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Research on Online Framework of Distributed Computer Communication Network Course Training

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Abstract:The article mainly analyzes the structure of distributed computer network and the specific measures for its optimization. The distributed computer network includes the connections and servers of different clients, and the architectural style is introduced into the existing "computer communication network excellent course system", which makes the system more concise and standardized, and improves the scalability of the system. At the same time, any system can communicate with other systems. Compared with other network structures, the multi-version parallel development mode is adopted to ensure the development of new functions and the improvement of stability. This enables new requirements functions to be quickly responded to in high versions, while reducing their impact on the stability of the framework itself.

Keywords: Online Framework, Distributed Computer Communication Network, Network Course Teaching

1. INTRODUCTION

In the network structure of distributed computers, there is no processing and control center, and any node in the network is connected with other two nodes [1]. As information travels from one node to another, various paths can be taken. CAN (Controller Area Network) bus technology belongs to the category of field bus [2]. It is a serial communication network originally designed by German Bosch Company for the distributed system to work reliably in environments such as strong electromagnetic interference [3].

The distributed computer network structure divides the large-scale network into two sub-regions that are equal to each other [4], and the sub-regions are managed by multiple managers. If the administrator wants to obtain other sub-region information, it must communicate with the peer system. It has the functions of point-to-point [5], point-to-multipoint and global broadcast data transmission; it can be seen from the above description that the characteristics of distributed systems are more determined by software. In a sense, a distributed system is more like an operating system in the traditional sense [6]. From the perspective of resource management, distributed systems allow multiple users and applications to share various resources on the distributed network. At present, many companies and related open source organizations at home and abroad are solving this problem and there are many mature solutions [7], most of which are based on standards.

At present, among the three mainstream service implementation schemes, more and more services begin to be designed and implemented [8] in style because the service of the pattern is obviously more concise in comparison with the complex one. With the widespread use of sensor technology and physical information systems in the industry [9], industrial production has entered the 4.0 era with the goal of realizing intelligent production and intelligent manufacturing [10]. The operation mode of the CNC system has also developed from the early stand-alone operation [13] mode to an intelligent production process through simple networking and network interoperability. Provide clinicians with real-time patient and artificial heart status data. These studies facilitate doctors to grasp the patient's condition in a timely and effective manner, so as to take measures to treat the patient [14].

Medical monitoring is becoming a new hot application field of distributed monitoring system. The distributed computer network [15] structure has the following advantages: First, the network structure is more flexible in the actual operation process, and most users are more aware of the distributed computer network [16] structure. Second, the network structure of distributed computers can reduce the traffic of network management. There are two types of widely popular CAN bus devices [17]: one is an independent CAN controller, such as 82C200 and Intel82526/82527; the other is a microcontroller with CAN.

Such as P8xC592 and 16-bit microcontroller 87C196CA/CB, etc. As a software technology with a strong development momentum, middleware has kept pace with operating systems and data sources, and has become the troika in the field of basic software [18]. Data access middleware is one of the most mature middleware, which is widely used in general business fields, but how to successfully apply it to the field of industrial control needs to be further studied. The distributed service [19] framework is a set of service governance solutions that provide transparent remote procedure calls and service governance functions. Generally speaking, the distributed service framework contains several key technologies [20].

If you can accept that files in different formats actually represent the same idea, then if the URL is in terms of format, it may be a display that can be displayed on the browser, which records the content [21]. But if it is format, he may be a record of who the author is. The development of information technology has strongly promoted the process of networking and integration of CNC systems. With the advancement of the enterprise informatization process, it is required to realize the exchange and information [22] sharing of manufacturing information across workshops, factories, regions and even across regions in the production process. The current distributed monitoring system seldom considers this issue in-depth in the design. The architecture adopted by its internal information system is difficult to directly communicate with the external information system due to the high degree of

coupling, openness and flexibility of each part. to integrate [23].

According to the network structure characteristics and development methods of distributed computers, it can be seen that the future optimization method of the network structure needs to be closely combined with the current network state. PCA82C200 is an independent CAN controller produced by Philips, which can interface with various CPUs through a parallel bus. In order to enable upper-layer [24] applications to transparently access different data sources at the bottom layer, this paper, from the perspective of middleware, extracts the functions of access and other data sources in different applications into a separate layer, and trades its own complexity for the simplicity of the application [25].

2. THE PROPOSED METHODOLOGY

2.1 The Distributed Computer Communication Network Course Teaching

The subscription method can ignore the slight changes of the analog value, which can reduce the load of the server and the application and improve the efficiency of data access. Because the user's business is different, the framework will always have some configurations. As a general framework, everything that can be done by configuration files must be done programmatically, otherwise it will bring a lot of unnecessary trouble when users need to integrate your framework with another framework. "Computer Communication Network Excellent Course System" is to display the teaching content of "Computer Communication Network" to the majority of students through the online course platform. The teaching platform provides a large number of tools to support teaching activities, and teachers use the "course announcement" tool to publish course announcement information.

In the network manufacturing mode, the CNC system not only needs to quickly respond to the production planning issued by the enterprise management, but also needs to provide the enterprise management with real-time data reflecting the underlying operation through the Internet/Intranet in a timely manner. Although the data acquisition method based on characteristic physical signal detection can solve the problem of data acquisition of a considerable part of the working state of scientific instruments, it also has great limitations in its specific implementation. This is mainly because scientific instruments are usually precision instruments, which are expensive and have strict requirements on the working environment, especially the electromagnetic environment.

2.2 The Online Framework for Course Teaching

In remote process communication, the question of how services communicate is the most fundamental and critical. The purpose of remote service communication is that the local computer initiates a request, and the remote computer performs corresponding operations after receiving the request and transmits the result to the requester through the network. It is used for discussion and exchange of common issues in this course, where students can put forward their own concerns or ideas, so as to communicate with teachers and classmates. The course forum provides a space for students to ask questions and leave comments. Teachers will give clear and specific answers to students' questions. In the network manufacturing environment, as a basic node in the manufacturing network, CNC manufacturing equipment can feed back its own operation information while completing its own manufacturing and processing tasks. Through the network platform, the CNC system can obtain the remote service of Internet/Intranet, and realize the remote monitoring, online programming and parameter adjustment of the CNC equipment.

Monitors the delivery of messages in Windows systems and intercepts and processes messages as required by the user before they reach their destination. Through the understanding of Windows messages, different types of custom hooks can be installed in the system to monitor the occurrence of specific events in the system. According to the analysis of the current state of the distributed computer network structure, it can be found that the network structure has a certain foundation. In the future development process, it is enough to break through the limitations of the current framework. It can start from an objective point of view and effectively combine subjective needs.

Defines the behavior of the elements of the application model and how they relate to related processes. The logical level of the program that defines the application model is independent of the physical level of the device. The process model describes the mapping between the elements of the application model and the implementation, so as to establish the connection between the logic and the physical.

2.3 The Online Framework of Distributed Computer Communication Online Course

After the corresponding investigation and research, it is shown that the optimization of the distributed computer network structure can be based on the genetic algorithm. Based on genetic algorithm has the following advantages: First, the network structure characteristics based on genetic algorithm and distributed computer are similar, and it has no influence on the basis of network structure. According to the characteristics and requirements of the shotcrete operation, the shotcrete robot should have two working modes: master-slave remote control and automatic trajectory control, and can be switched at any time. Therefore, the design of each node of the system should focus on enabling the control system to complete these two functions.

A unified service registry is used to dynamically resolve service requests into endpoint addresses and calling policies. This provides a flexible and maintainable solution to the above problems. The registry will contain all the deployment, location and invocation association policies of services, and provide three main functions of service registration and query and service data storage for the entire distributed system. Any operation behavior on resources is realized through the bamboo protocol. Most of the previous development used the sum method in the protocol, and rarely used other methods, which was actually caused by a one-sided understanding of the bamboo protocol. Not just a simple protocol for carrying data, but a protocol for network software with rich connotations. The reason for using this optimization method is mainly to decide after a comprehensive consideration of the network structure.

Because the development of the network is not accidental, even if the foundation of the network structure of the distributed computer is solid, its optimization work cannot be ignored. The planning level is the brain of the computer control system of the shotcrete robot. Once it fails, the robot in the "automatic" working mode will not be able to perform automatic trajectory control. To this end, it has a dual-

machine redundant fault-tolerant design. Since the control system of this robot adopts CAN bus, there is no need to add any additional hardware resources.

3. CONCLUSIONS

This paper analyzes the distributed computer network structure and specific optimization measures in detail. For the analysis and optimization work at the current stage, users have made some progress in the network expectations of distributed computers. It is flexible in architecture, not only can maintain the integrity and stability of core functions, but also very easy to expand functions. In addition, this data access middleware fully draws on the current data access specification, industrial distributed automation specification and also data access middleware specification in other fields. It improves the data accuracy of the networked sensors of the CNC system. The paper conducts experiments and tests on the spindle.

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Design and Development of Integrated Platform for Automobile Sales Model under the Background of Big Data

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Abstract:Based on the integration of the big data background and the exploration of related technologies in the enterprise service bus, this article focuses on the management strategy of auto parts, carries out theoretical analysis on parts classification, parts demand forecast, parts inventory control, and combines the characteristics of the auto parts industry. Research. At the same time, combined with the demand analysis of the actual business process of the car dealer, the car dealer business system based on the SOA integrated platform is designed. In the system design stage, the current more popular model-view-controller (MVC) three-tier design pattern is adopted to better focus on the hierarchical development of each level.

Keywords: Integrated Platform, Automobile Sales, Big Data, Platform Design

1. INTRODUCTION

Since 2010, China's automobile production and sales have consistently ranked first in the world for four consecutive years. In 2013, my country's automobile production and sales exceeded 20 million vehicles. The data is very beautiful. From another perspective, although the overall automobile production and sales scale has maintained a certain degree of growth, the growth rate has tended to slow down. In the second half of 2013, car sales were 10.782 million, a year-on-year increase of 12.34%, and the year-on-year growth rate was 9.41 percentage points higher than the previous year. Among them, passenger car sales were 8,665,100 units, a year-on-year increase of 13.81%, and the year-on-year growth rate was higher than the previous year. 6.73 percentage points; commercial vehicle production was 2,117,100 units, an increase of 6.68% year-on-year, and the data for the same period last year was negative [1-6].

However, as the sales growth of the new car market has encountered a bottleneck, automakers and their dealers also need to make strategic adjustments and strategic transformations. In 1986, 76% of the profits of American car dealers came from the sale of new cars. Seven years later, in 1993, this figure had dropped to 27%. Dealers also began to think: Since the increase in the new car market has been very limited, new car sales can no longer be the sole source of profit for their own profits, how can they more effectively improve the overall operation and after-sales marketing? At the 2013 Global Automobile Forum, Chinese and foreign auto dealers reached an unanimous consensus: in less than three years, the profitability of “post-market” will surpass new car sales. Shifting the battlefield to the "post market" can relieve sales pressure to a certain extent, and it is also a new development direction in the industry. Although the term “aftermarket” for automobiles is simple, it actually encompasses many aspects. Vehicle grooming, new car modification, second-hand car transfer, repair services, auto financial services, and auto technology upgrades are all within its scope. Domestic car sales adopt the franchise brand sales model, which integrates "complete vehicle sales, spare parts supply, after-sales service, and information feedback" as a store model [7-14].

This kind of sales model is usually that the car manufacturer signs a contract with the car dealer, authorizing the car dealer to engage in the marketing activities of the designated brand car in a certain area. Automobile manufacturers make unified arrangements for automobile dealers' sales methods, publicity methods, service standards, and sales procedures. Only one brand of car products are sold in the same store. For automobile manufacturers, dealers are one of the important ways for them to collect customer needs and market information, which can guarantee the revenue and profit of automobile manufacturers in terms of after-sales service. In the face of a huge automobile marketing network composed of dealerships, how to communicate quickly and effectively with dealers, collect dealers’ customer information and sales data in time, and realize real-time sharing of automobile and other product information is that automobile manufacturers are distributing automobiles. Real-world problems to be solved before the product. Obviously, relying on traditional information exchange and storage methods, such as intercommunication of messages between dealers and car manufacturers through telephones, faxes, etc., or paper storage of product data for transmission, is a time-consuming and laborious task [15-21].

Such information management methods cannot centrally manage data, nor can it improve the level of information sharing and business collaboration capabilities between automobile manufacturers and dealers. The establishment of a scientific and effective dealership business system is the prerequisite and core competitiveness for automobile brand manufacturers and dealers to occupy the leading position in the after market and expand market share. The dealership business system is mainly used for automobile the company's huge sales network for communication and management. The comprehensive customer information collected by the DBS system can help dealers carry out targeted after-sales service

reminders. Product and service recommendations that are user-friendly and directly address customer needs are not only easy to be accepted by customers, but also allow them to experience the dealers' Customer Care. Further strengthen the loyalty to dealers and increase their return rate. Once the information is not delivered in time, it may cause the decision makers of the enterprise to be unable to grasp the changes in the market in the first time, thus losing the opportunity to promote the enterprise's products [22-24].

2. THE PROPOSED METHODOLOGY

2.1 The Car Sales Model

For the "Internet +" marketing strategy, there are still many problems in the implementation process. Among them, there are serious limitations in the scope of consumers. It is worthy of in-depth consideration. For network marketing, its development scope and development efficiency often depend on the number of online consumer customers and the desire of online consumer groups to purchase. Although Internet technology has been rapidly developed and every household has a personal computer, the number of Internet cafes and cafes on urban streets has gradually increased. This has a promoting effect on the development of Internet marketing, but for rural areas, The Internet has not been fully popularized, and the Internet has not covered some remote areas. In addition, the problems of excessively high network charges and slow Internet speeds in some areas have not been resolved. This will cause serious obstacles to the development of automobile network marketing.

In the 1990s, my country's automobile market entered the threshold of the international market. At this time, the domestic automobile market was in full swing. People's enthusiasm for buying cars was high, and the market was in short supply. Therefore, sales and publicity by personnel were not required. At this time, the seller's sales form on the market is single, and the most common are the direct sales of products by manufacturers and the sale of products by dealers . In the mid-1990s, with the increasingly fierce market competition and the influence of the social economy, the trend of the market changed from a seller's market to a buyer's market, which means that the previous sales model could no longer support automakers to profit from it. Therefore, sellers need to find ways to attract customers, sell vehicles, and ensure the relative balance of their production and sales. Therefore, special stores are needed to complete a series of after-sales problems after car sales. With the emergence of "Fengshen Auto Stores" and "Shanghai General Motors Sales and Service Center", it indicates that my country has begun to learn from the business model of foreign auto 4S stores. The 4S shop officially introduced the automobile sales market.

Automobile sales are divided into four parts: production, sales process, transaction, and after-sales. Comprehensive service is the goal requirement that all industries must achieve nowadays.

2.2 The Big Data Model

The content of data is huge, and we need to sort out the data that is beneficial to ourselves to organize and utilize it, provide a database for auto companies, and establish a data marketing model that suits the needs of auto companies. Every consumer's car purchase behavior contains a large amount of data and information. The consumer's consumption behavior is expressing his needs to the car company. You can observe which information is related to the consumer's consumption behavior, such as buying a car product. What is his point of attention, such as: brand, function, model, price, service, etc. These are all very important. Car companies can analyze these data and obtain customer needs from them. The positioning, marketing and after-sales service of automobile products have important reference value.

Reasonably arrange human resources to inject fresh power from big data analysts and customer resource allocation personnel into the marketing team. Form a progressive workflow relationship from data mining to resource allocation and finally to sales positions. Data analysts mainly use big data technology to efficiently and accurately mine potential customers, as well as to sort and store customer resources to achieve centralized management of enterprise customer resources. It not only ensures the accuracy of customer information resource mining, but also reduces the risk caused by the loss of corporate sales staff; resource allocation personnel are the hub of marketing and are mainly responsible for the allocation of customer resources. According to the sales staff's personal experience and work ability, the customer resources of different values divided by data analysts are matched. This allows sales staff to pay more attention to the improvement of their professional quality and focus on providing better services to customers who come to the store instead of focusing too much energy on customer mining that they are not good at. More importantly, this can avoid malicious competition among internal sales staff of the company's customer resources for performance, which blurs the focus of competition and brings losses to auto companies. Reasonably arrange human resources to inject fresh power from big data analysts and customer resource allocation personnel into the marketing team.

Form a progressive workflow relationship from data mining to resource allocation and finally to sales positions. Data analysts mainly use big data technology to efficiently and accurately mine potential customers, as well as to sort and store customer resources to achieve centralized management of enterprise customer resources. It not only ensures the accuracy of customer information resource mining, but also reduces the risk caused by the loss of corporate sales staff.

2.3 The Integration Platform of Automobile Sales Model Based on Big Data

First, the salesperson receives customers who have car purchase needs and registers customer reception information. Customers who have not signed a sales contract are called potential customers. The sources of potential customers are as follows: customers who come to shop to buy cars, customers who call for inquiries, customers who accept salesmen's door-to-door sales, customers who buy cars online, etc. Customer reception information consists of two parts: one is the customer's basic information, including name, gender, address, phone number, nature of work, travel mode, dressing, etc.; the other is the vehicle information the customer wants to buy, including car series, model, color, etc. Price, ways to learn about vehicle information, expected time of car purchase, degree of car purchase intention, whether to purchase a car for the first time, car focus, etc.

This information helps the sales staff to initially understand the customer's ability to buy cars, and then formulate a targeted follow-up plan for the customer to facilitate the continuation of the car purchase transaction. WSDL is used to provide a language for describing services and how to communicate. It is an excuse definition standard for SOA. It mainly consists of five elements, including data types, definitions of input and output parameters for a set of

messages, definition of web service operations, descriptions of specific service interface protocols and bound port addresses. Its language is based on XML and is used to describe web service functions, return values, and formal parameters. Web service and WSDL can be converted to each other through tools, which is very convenient. Through the analysis in the previous chapters, dealers should better manage vehicle sales and after-sales services through effective accessory management. All of these require a large amount of data support, including a series of 1) standard data (accessory codes, names) , Minimum order quantity, etc.) 2) Real-time data (parts inventory, parts in transit, parts waiting to be collected) 3) Other department data (service department: service appointment, due maintenance) 4) Historical data (historical sales records, inventory records) 5) Manufacturer data (parts replacement information, discontinuation notice, promotion plan) 6) Reference data (local auto market and after-sales parts market sales, competitors, etc.) to determine key indicators such as order cycle, safety stock, and reorder points.

3. CONCLUSIONS

Aiming at the business needs of the dealership of a certain automobile brand manufacturer, as well as the information exchange and data sharing needs with the manufacturer, this article considers the cross-platform and scalability of the system, and weighs the differences with these two system development models. Advantages and disadvantages, designing the B/S structure of the automobile 4S shop sales management system based on the JAVA platform; at the same time, in order to shorten the response time of the SQL system, the technology is applied to the system design.

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Development of Rural Social Governance Intelligent System Based on Multi-Data Integration Algorithm and Realization of Multi-Platform Interaction of Mobile Terminals

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Abstract:This paper needs to uphold the concept of governance community "according to the times", "according to local conditions" and "according to people's conditions", and by improving the integration ability of rural social governance resources, building an embedded rural social governance ecology, and promoting the rational layout of rural social organizations, the application of the most The optimal band combination is obtained by the optimal band index method, and the above optimal bands are classified and studied by using unsupervised classification, maximum likelihood method, support vector machine classification method, and decision tree classification method. 's research and development.

Keywords: Rural Social Governance, Multi-Data Integration, Multi-Platform Interaction, Mobile Terminals

1. INTRODUCTION

At present, under the background of rapid urbanization, consolidation and expansion of poverty alleviation achievements [1], and the comprehensive implementation of the rural revitalization strategy, rural social organizations are developing vigorously, not only functionally expanding the original traditional village social connection method based on blood and mutual assistance [2], but also establishing On the basis of organizational rules, new content has also been added to rural social governance. In the context of "governance community" [3], the purpose of remote sensing image classification is to divide each pixel in the image into different categories according to a certain rule or algorithm, to obtain the corresponding information of the remote sensing image and the actual objects [4], how to classify these Classification and extraction of information has always been one of the important topics in remote sensing research.

A natural area with a certain scale has diverse material compositions, and the ground objects are intertwined in time and space, and they transform each other to form complex mixtures with different structures and forms [5]. The phenomenon of the same spectrum occurs. To realize the further development of smart highways, it is necessary to clarify the concept and theory [6], and start from the data architecture form, the mechanism and method path of the data fusion algorithm to achieve innovation. With the continuous maturity of highway engineering [7], the integration with informatization construction is also becoming more and more close. In order to realize the informatization of highway construction [8], the rational and efficient use of digital technologies such as BIM and GIS must start from the theory of data processing, and have an in-depth understanding of data processing algorithms and platform architecture techniques. The decision on several major issues concerning comprehensively [9] deepening the Reform (referred to as the "Decision") pointed out that the overall goal of comprehensively deepening the reform is "to improve and develop the socialist system [10] with Chinese characteristics, and to promote the modernization of the country's governance system and governance capacity [11]."

Accordingly, governance can become an important factor to reflect and evaluate the effectiveness of deepening reforms. The concept of "governance" reshapes the social management system. Systematic governance [11], legal governance, comprehensive governance, and source governance will become the development trends in different reform areas. This proposal It has almost mobilized the entire social landscape in the context of the big data era [12], but the role and role that the local government should interpret in it is not clear enough. The description of "local government" in the "Outline of Action for Promoting the Development [13] of Big Data" is as follows: one is "combining the implementation of information benefiting the people with the construction of smart cities, and promoting [14] the integration and joint pilot of central departments and local governments" in Chinese characteristics In the socialist government governance system structure, the social governance innovation [15] of rural grassroots party organizations is an important part of the overall goal of advancing the national governance system. It is related to the realization of "four comprehensive strategic layouts" and the sustainable development of my country's rural economy and society [16].

The innovation of rural social governance is conducive to safeguarding the rights and interests of rural development. First of all [17], the village party branch committee is required to innovate the concept of rural grass-roots social governance, and be good at educating and guiding the villagers to protect their legitimate rights and interests with the concept of the rule of law. Secondly [18], the village party branch committee is required to innovate the rural grassroots social governance model. Mobile learning (Mobile Leaning, M-Leaning) is a kind of online learning that can be carried out at any time and any place with the help of mobile terminals such as mobile phones, PDAs, iPods, and iPads [19]. Mobile learning originated abroad. At that time, Desmond Keegan, an international distance education authority and an Irish education technology expert [20], came to a rule when he studied distance learning: "It is not that the technology itself has the characteristics suitable for teaching, and the same user on multiple platforms. The development of the interface

brings extra burden to the programmer [21]: not only need to strive to implement roughly the same user interface code in the programming language corresponding to different platforms in an application project, but also bear the maintenance workload caused by this [22].

2. THE PROPOSED METHODOLOGY

2.1 The Multi-Platform Interactive Realization Of Mobile Terminal

The principal component change of the remote sensing image is the transformation of the centralization and orthogonalization of the multiple bands of the remote sensing image. In order to achieve the purpose of information integration and enhancement [23]. Openfire is an open source real-time collaboration (RTC real time collaboration) server application developed using Java and based on the XMPP protocol. It is an open source project under igniterealtime. Openfire is very convenient and simple to install and use. Since it is based on the XMPP protocol, it is compatible with various IM client software login services that support the XMPP protocol, such as spark [24].

It is managed using web pages. First of all, if you want to describe a user interface at an abstract level, it is different from describing the interface on a specific platform, which requires using a specific platform to describe the interface (for example, Android is described in XML and iOS is described in X. Old S file description), if you want to describe an abstract user interface, you need to provide the description of the abstract interface components at this abstract level. Such as Android will use the component description textView. iOS has an elegant and intuitive interface, and you'll know how to use your iPhone, iPad, and iPod touch the first time you get started. It is also because of its excellent interface, coupled with its ease of use.

The device's near-perfect appearance design, smooth operation, and powerful performance make iOS mobile devices have a high market share, and are also loved and praised by the majority of users. Through the first two sections, we can see that the XAML language in the virtual platform has the ability to describe the abstract user interface, such as defining the component and the properties inside the component, and also proves that it has the ability to interact with the specific platform programming code. Then the description language of the abstract user interface on the virtual platform should also have the capabilities that the specific platform interface description language does not have. On the virtual platform in this paper, the proposed XAML is used to define abstract user interface components and its properties.

Syntactic analysis develops the grammatical expression of physical objects, collects data of various features of physical objects in a structural relationship, and realizes the conversion of physical models to three-dimensional entity models. Applying this method requires the development of specific language and syntax for each object, which is cumbersome. The estimation analysis method uses Kalman filtering, maximum likelihood estimation, and least squares method to achieve the rough construction of the physical model.

2.2 The Multivariate Data Integration Algorithms

Analysis plays an increasingly important role in remote sensing classification and recognition. This paper mainly applies the more mature texture extraction based on gray level co-occurrence matrix. It represents the texture by calculating the second-order joint conditional probability density p between the gray levels of the image. The common data algorithms based on information theory are the entropy theory method in the data fusion system, and the neural network proposed in modern neurological theory. Network algorithms, clustering analysis algorithms that reasonably classify large volumes of data, etc. The entropy theory algorithm reflects the amount of information by calculating the probability and expected value of a random thing. In this theory, the entropy of events with small probability of occurrence is extremely large, and the time entropy of events with high probability of occurrence is extremely small.

In multi-source data fusion, the use of entropy theory algorithm to measure the overall benefit of a system has great advantages. As the source of streaming media data, the publishing center needs to collect streaming media data, encode and compress it, and then send the compressed encoded data to the server through socket communication with the data server. At the same time, it is also necessary to store the encoded data in a specific file format, such as the avi media file format. After the recording is over, the entire file can be uploaded to the server so that the production center can make edits to the course content. In this paper, principal component analysis, various vegetation index extraction, remote sensing image texture extraction based on gray level co-occurrence matrix and other methods are used to extract as much information as possible from the image. The optimal combination is to prepare the data for the subsequent classification. In this study, the band with larger information entropy is selected first.

The Bayesian inference algorithm weakens the unshakable position of the prior function on the basis of the classical inference algorithm. The algorithm uses the given pre-likelihood estimation combined with the additional condition of the observation as the basic model of the minimum risk cost. The Bayesian inference algorithm greatly reduces the prior requirements. Based on this feature, the difficulty of the Bayes algorithm is reflected in the need to define the maximum likelihood estimation more accurately; like the classical inference algorithm, if there are multiple assumptions or variables, the definition of the maximum likelihood estimation function will be more complicated. It seems that the attribute element will be longer and more complicated than the original method, which is indeed the case in the example, but when the value of an attribute is complex, it cannot be represented as a simple string. In the properties element, you can define another component and set the properties of the component, such as the following example.

2.3 The Development of Rural Social Governance Intelligent System

The relationship between rural social organizations and the government is very close. Rural social organizations play a bridge role in communication and interaction with rural residents, rural communities and government departments in the formulation, advocacy, implementation, monitoring and evaluation of social policies. . In recent years, the policy advocacy of rural social organizations in rural social governance can be described by user interface language through interaction with government departments, and the interface description language has a standard interface model definition. The definition of a standard interface pattern requires these parts: context, problem, solution, example, and so on.

The schema in this paper needs to be described in XAML language. As for the original schema, whether it is a picture, a prototype or a natural language description, as long as the description can be understood by developers, it can be converted into an interface schema described by XAML. The collaborative governance system aims to form an interconnected social operation mode, thereby realizing intelligent governance innovation. Focusing on the smart governance process of Xi'an local government, the dynamic collaborative governance system is extremely imperfect. Due to various reasons such as unclear positioning and the interests of departments and regions, the process of smart governance has its own system, and different regions or even different departments in the same region have established their own independent sets of systems. Rural areas are the combination of the power control of the party and the government and the self-governance of villagers, and the frontier of social governance. The rural grass-roots party organization is the basic cell of the party, and it is the bridge for the ruling party to closely contact the expression of interests and emotional appeals of the masses and villagers.

3. CONCLUSION

Through the value of technical tools of big data, it can promote the ingenious sharing of internal information of government departments, improve scientific decision-making capabilities, and strengthen internal self-correction mechanisms, thereby affecting government governance capabilities; from the macro level, it affects the driving mechanism of governance model reform, and the development of big data technology. The application makes the government governance pattern from single to multiple. Both the amount of information contained in the bands and the correlation between the bands are considered, which not only improves the classification accuracy but also avoids information.

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