# DECISION-MAKING MODEL FOR REMOTE DIAGNOSIS AND TREATMENT IN TRADITIONAL CHINESE MEDICINE IT SYSTEMS IN CHINA

LI RUI

A thesis submitted in partial fulfillment of the requirements for Doctor of Philosophy Program in Digital Technology Management for Education

Academic Year 2025

**Thesis Title** Decision Making Model of remote diagnosis and treatment courses Traditional Chinese Medicine Information Technology in China

**Author** Mr.Li Rui

**Thesis Committee**

..... Chairperson
(Assistant Professor Dr. Prapai Sridama)

..... Committee
(Associate Professor Dr.Pong Horadal)

..... Committee
(Assistant Professor Dr. Kanakorn Sawangcharoen)

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Accepted by Bansomdejchaopraya Rajabhat University in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Digital Technology Management for Education

..... Dean of Graduate School
(Assistant Professor Dr. Nukul Sarawong)

..... President
(Assistant Professor Dr. Kanakorn Sawangcharoen)

**Defense Committee**

..... Chairperson
(Professor Dr.Apichart Pattaratuma)

..... Committee
(Associate Professor Dr.Supawat Lawanwisut)

..... Committee
(Associate Professor Dr.Duang-arthit Srimoon)

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| **Title** | **Decision Making Model of remote diagnosis and treatment courses traditional Chinese medicine IT in China** |
| **Author** | **Li Rui** |
| **Program** | **Digital Technology Management for Education** |
| **Major Advisor** | **Assoc. Prof. Dr. Prapai Sridama** |
| **Co-advisor** | **Dr. Piyanan Issaravit** |
| **Co-advisor** | **Asst. Prof. Dr. Kanakorn Sawangcharoen** |
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## ABSTRACT

The rapid evolution of information technology (IT) has transformed global healthcare systems, introducing innovative solutions for remote medical services. In the context of Traditional Chinese Medicine (TCM), a discipline deeply rooted in holistic and individualized treatment approaches, the integration of IT presents both opportunities and challenges. This dissertation proposes a comprehensive Decision Making Model for Remote Diagnosis and Treatment Courses in Traditional Chinese Medicine IT in China, aimed at enhancing clinical decision-making, improving treatment efficiency, and ensuring the sustainability of TCM in the digital era.

The proposed model is developed through a multi-disciplinary, expert-driven methodology, involving three distinct groups of professionals: 10 information technology experts, 10 TCM practitioners, and 10 experts specializing in remote diagnosis and treatment. The model was evaluated through a structured Delphi study and iterative expert consultations, ensuring that it not only reflects the latest advancements in IT infrastructure but also respects the philosophical and clinical principles inherent in TCM practice. The combined expertise of these 30 specialists resulted in a unanimous consensus affirming the scientific validity, practical feasibility, and clinical relevance of the decision-making framework.

Following this foundational validation, the model was subjected to a second round of critical assessment by a higher-level expert panel consisting of 9 senior authorities, each with extensive experience and recognized leadership in their respective domains. Their unanimous approval further confirms the model's strategic importance and readiness for practical implementation in the national TCM telemedicine system.

The model features a layered structure that incorporates patient data acquisition, pattern recognition based on traditional diagnostics (such as pulse, tongue, and symptom differentiation), algorithmic decision-making supported by AI and cloud computing, and adaptive feedback mechanisms to continuously improve diagnostic accuracy and treatment outcomes. The model is particularly designed to support practitioners in rural and underserved areas, where access to high-level TCM expertise may be limited.

The significance of this study lies in its ability to bridge ancient medical wisdom with contemporary digital tools, creating a hybrid framework that supports personalized care, standardized procedures, and scalable implementation. This research also addresses key challenges in remote TCM practice, such as data standardization, practitioner training, patient engagement, and legal-ethical considerations in cross-regional telemedicine delivery.

This dissertation contributes not only to academic knowledge but also offers a practical roadmap for policymakers, healthcare administrators, and medical IT developers aiming to build a more integrated and resilient healthcare system in China. Future research may expand this model to include cross-border applications, integration with Western medicine systems, and the use of big data analytics for national healthcare strategy development.

**Keywords:** Curriculum Development; Remote Diagnosis; Treatment Courses; Traditional Chinese Medicine; Information Technology

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I am also deeply grateful to Bansomdejchaopraya Rajabhat University for providing me with the opportunity to pursue my doctoral degree in Digital Technology Management for Education. The university's commitment to academic excellence and innovation has provided me with a conducive environment for learning and research.

Furthermore, I wish to extend my heartfelt appreciation to my employer, Yunnan Huang Family Medical Circle Industrial Group. This organization, comprising a traditional Chinese medicine hospital, a TCM school, a research institute, and a pharmaceutical factory, has been an invaluable source of practical knowledge and support. The group's dedication to the advancement of traditional Chinese medicine has inspired my research and fueled my passion for integrating TCM with modern digital technologies.

A special note of thanks is due to my supportive boss, whose encouragement and understanding have allowed me the flexibility and resources needed to balance my professional responsibilities with my academic pursuits. His belief in the value of my doctoral studies has been a source of great motivation.

Lastly, I am deeply indebted to my family. Their unwavering support, patience, and belief in my abilities have provided me with the strength to persevere through the challenges of this doctoral journey. Without their love and encouragement, this achievement would not have been possible.

To all those who have contributed to my academic and professional growth, I extend my deepest gratitude. Your support has not only facilitated the completion of this dissertation but has also shaped my future aspirations in the field of education and traditional Chinese medicine.

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Li Rui

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# Chapter 1
# Introduction

## Rationale

In China, with the rise of traditional Chinese medicine information technology education platforms, remote diagnosis and treatment courses are playing an increasingly important role in the field of traditional Chinese medicine education. This is due to the rise of platforms that allow traditional Chinese medicine teaching to be integrated into modern technology, providing a more convenient and efficient education method. In this context, research into remote diagnostic and therapeutic sessions becomes crucial.

The development of remote Chinese medicine information technology education platform is of great significance in the current digital era. With the rapid development of technology, the demand for remote diagnosis and treatment is increasing. As a unique medical system, traditional Chinese medicine is expected to be disseminated and applied remotely with the support of information technology. The theoretical basis of this study is the combination of remote TCM diagnosis and treatment and education, aiming to explore the impact of curriculum design on the training of TCM information technology practitioners.

The rise of TCM information technology education platform: The rise of TCM information technology education platform in China marks that TCM education has entered the digital era. This platform provides students with online learning and practice opportunities, breaking geographical restrictions and making TCM education more inclusive and flexible.

The Importance of Remote Diagnosis and Treatment Courses: Remote diagnosis and treatment courses provide students with academic experiences across time and space through the support of information technology. In the field of traditional Chinese medicine, this distance learning method can better integrate into

practice, improve students' clinical abilities, and at the same time promote innovation in traditional Chinese medicine education.

## Research Question (s)

Currently, remote diagnosis and treatment courses still have some shortcomings, which hinder their comprehensive development on the traditional Chinese medicine information technology education platform. Therefore, this study aims to explore and solve these problems to promote better application of remote diagnosis and treatment courses in traditional Chinese medicine education. For remote diagnosis and treatment courses,

There are insufficient teaching contents, insufficient interactivity, and limited practical links. Problems such as limitations limit the comprehensive development of students in distance learning. In order to better adapt to the trend of the times, the traditional Chinese medicine information technology education platform needs to continue to develop to provide more complete remote diagnosis and treatment courses. This is crucial for cultivating TCM professionals with the ability to apply modern medical technology.

## Research Objectives

In order to meet the needs of a traditional Chinese medicine information technology education platform, this study sets the following goals:

1. Through research and practice, design a set of high-quality remote diagnosis and treatment courses that meet the needs of a traditional Chinese medicine information technology education platform.

2. Improve the teaching quality of the traditional Chinese medicine information technology education platform by optimizing remote diagnosis and treatment courses to ensure that students learn remotely

3. Set specific learning goals, including obtaining high-quality education in mastering key skills such as remote diagnostic tools and patient information management.

Design and develop TCM remote diagnosis and treatment courses that meet needs:

Through research and practice, design a set of high-quality remote diagnosis and treatment courses that meet the needs of a traditional Chinese medicine information technology education platform.

**population:**

1. Interns who are about to graduate from Yunnan colleges and universities of traditional Chinese medicine and secondary vocational schools: These people are the beneficiaries of this course. They will soon enter internship positions in various hospitals of traditional Chinese medicine. Their learning of information technology and remote diagnosis and treatment will help them become more professional. Good internship.

2. Information technology professionals in schools and hospitals: These personnel have professional knowledge and skills in the field of information technology, including solving IT problems in hospitals and schools, developing software applications, managing networks and systems, and maintaining information technology

3. Some people in Chinese society who are in need of remote diagnosis and treatment and information technology: some of these people are veteran doctors in traditional Chinese medicine hospitals, and some open their own clinics. They have practical needs for the modernization, scientificization and digitalization of traditional Chinese medicine.

**Sample group:**

10 Interns who are graduating from Yunnan Traditional Chinese Medicine Universities and Secondary Vocational Schools

10 Information technology professionals in schools and hospitals

10 people in Chinese society who are in need of remote diagnosis and treatment and information technology

**Independent variables:**

Independent variables refer to variables that are controlled or manipulated by the researcher in the study. Here, independent variables may include:

1. Course structure design
2. Teaching methods
3. technical support methods

**Dependent variable:**

The dependent variable is the variable observed or measured in the study and is the result or effect of the independent variable. Here, dependent variables might include:

1. Practical level of remote diagnosis and treatment of interns
2. Students' application level of traditional Chinese medicine information technology

These independent and dependent variables will be measured and evaluated through field observations, student feedback, course results, etc. to ensure that the design of the course meets the expected needs and goals.

Improve the teaching quality of the traditional Chinese medicine information technology education platform:

By optimizing remote diagnosis and treatment courses, we will improve the teaching quality of the traditional Chinese medicine information technology education platform and ensure that students receive high-quality education in distance learning.

**population:**

1. Interns who are about to graduate from Yunnan colleges and universities of traditional Chinese medicine and secondary vocational schools: These people are the beneficiaries of this course. They will soon enter internship positions in various hospitals of traditional Chinese medicine. Their learning of information technology and remote diagnosis and treatment will help them become more professional. Good internship.

2. Information technology professionals in schools and hospitals: These personnel have professional knowledge and skills in the field of information technology, including solving IT problems in hospitals and schools, developing software applications, managing networks and systems, and maintaining information technology

3. Some people in Chinese society who are in need of remote diagnosis and treatment and information technology: some of these people are veteran doctors in traditional Chinese medicine hospitals, and some open their own clinics. They have practical needs for the modernization, scientificization and digitization of traditional Chinese medicine.

**Sample group:**

10 Interns who are graduating from Yunnan Traditional Chinese Medicine Universities and Secondary Vocational Schools

10 Information technology professionals in schools and hospitals

10 people in Chinese society who are in need of remote diagnosis and treatment and information technology

**Independent variables:**

An independent variable is a variable that is controlled or manipulated by the researcher and can be adjusted to affect the dependent variable. Here, independent variables may include:

Course design optimization

Improvement of teaching methods

Upgrade of technical support means

**Dependent variable:**

The dependent variable is the variable that is observed or measured in the study and is the result or effect of the independent variable. Here, dependent variables might include: Students' remote learning experience Teaching satisfaction Students' practical application ability in the field of traditional Chinese medicine information technology The improvement of these dependent variables will be considered an important indicator of the teaching quality of the traditional Chinese

medicine information technology education platform, and will be measured and evaluated through field surveys, student feedback, performance evaluation, etc.

Develop specific learning goals, including mastering key skills such as remote diagnostic tools and patient information management.

In order to ensure that the remote diagnosis and treatment courses on the TCM information technology education platform can effectively cultivate students' practical skills, we need to clearly define specific learning objectives, including key skills such as remote diagnostic tools and patient information management.

**population:**

Interns who are graduating from Yunnan Traditional Chinese Medicine Colleges and Secondary Vocational Schools (10people):

Interns will be the main beneficiaries of this course, and they will soon enter internships in major traditional Chinese medicine hospitals. Their learning about information technology and remote diagnosis and treatment will directly affect their performance in the internship.

Information technology professionals in schools and hospitals (10people):

Personnel with specialized knowledge and skills in information technology will provide critical professional perspective to ensure that learning objectives meet actual technical requirements.

Some people in Chinese society who are in need of remote diagnosis and treatment and information technology (10 people):

This group includes veteran doctors from traditional Chinese medicine hospitals and doctors who open their own clinics. They have practical needs for the modernization, scientificization and digitalization of traditional Chinese medicine.

**Sample group:**

1. Graduate interns from Yunnan traditional Chinese medicine universities and secondary vocational schools (10people)

2. Information technology professionals in schools and hospitals (10people)

3. Some people in Chinese society who are in need of remote diagnosis and treatment and information technology (10people)

**Independent variable: An independent variable is a variable that is controlled or manipulated by the researcher and can be adjusted to affect the dependent variable. Here, independent variables may include:**

1. Learning goal setting for course design
2. Choice of teaching methods
3. Simulation scenario design for practical operation

**Dependent variable:**

The dependent variable is the variable that is observed or measured in the study and is the result or effect of the independent variable. Here, dependent variables might include:

1. Students' ability to use remote diagnostic tools
2. Students' practical level of patient information management
3. Students' overall understanding and application ability of traditional Chinese medicine information technology

By clearly defining these independent and dependent variables, we can more accurately assess students' actual outcomes during the learning process and ensure that course objectives match actual needs.

## Scope of the Research

This research will be limited to the context of China's traditional Chinese medicine information technology education platform, focusing on solving the problems and needs of remote diagnosis and treatment courses on this platform.

## Advantages

The distance teaching advantages of the traditional Chinese medicine information technology education platform will bring the following advantages to this study:

Flexibility across time and space: Distance teaching makes learning no longer restricted by geographical location, and students can arrange learning according to their personal time and location.

Convenience of digital education: The traditional Chinese medicine information technology education platform provides a convenient and efficient learning method through digital means, allowing students to better master traditional Chinese medicine knowledge.

## Definition of Terms

To ensure readers understand the technical terminology within the research scope, the following are definitions of some key terms:

Traditional Chinese Medicine Information Technology Education Platform: Using information technology to provide traditional Chinese medicine students with an online learning, practice and interactive education platform.

Remote Diagnosis and Treatment Courses: The use of information technology and the Internet to teach the subject of TCM diagnosis and treatment, allowing students to participate in academic practice at different locations.

## Research Framework

The overall framework of this study includes the following key elements and relationships:

**Demand analysis:**

By investigating and analyzing the needs of the traditional Chinese medicine information technology education platform, the design direction of remote diagnosis and treatment courses is clarified.

**Course design and development:**

Based on demand analysis, design and develop remote diagnosis and treatment courses adapted to the traditional Chinese medicine information technology education platform.

**Improvement of teaching quality:**

Comprehensively improve the teaching quality of the traditional Chinese medicine information technology education platform by optimizing course content, enhancing interactivity, and providing practical opportunities.

**Evaluation and feedback:**

Conduct evaluation during the implementation process, collect student feedback, and continuously improve and adjust the course to ensure the continued provision of high-quality remote diagnosis and treatment courses.

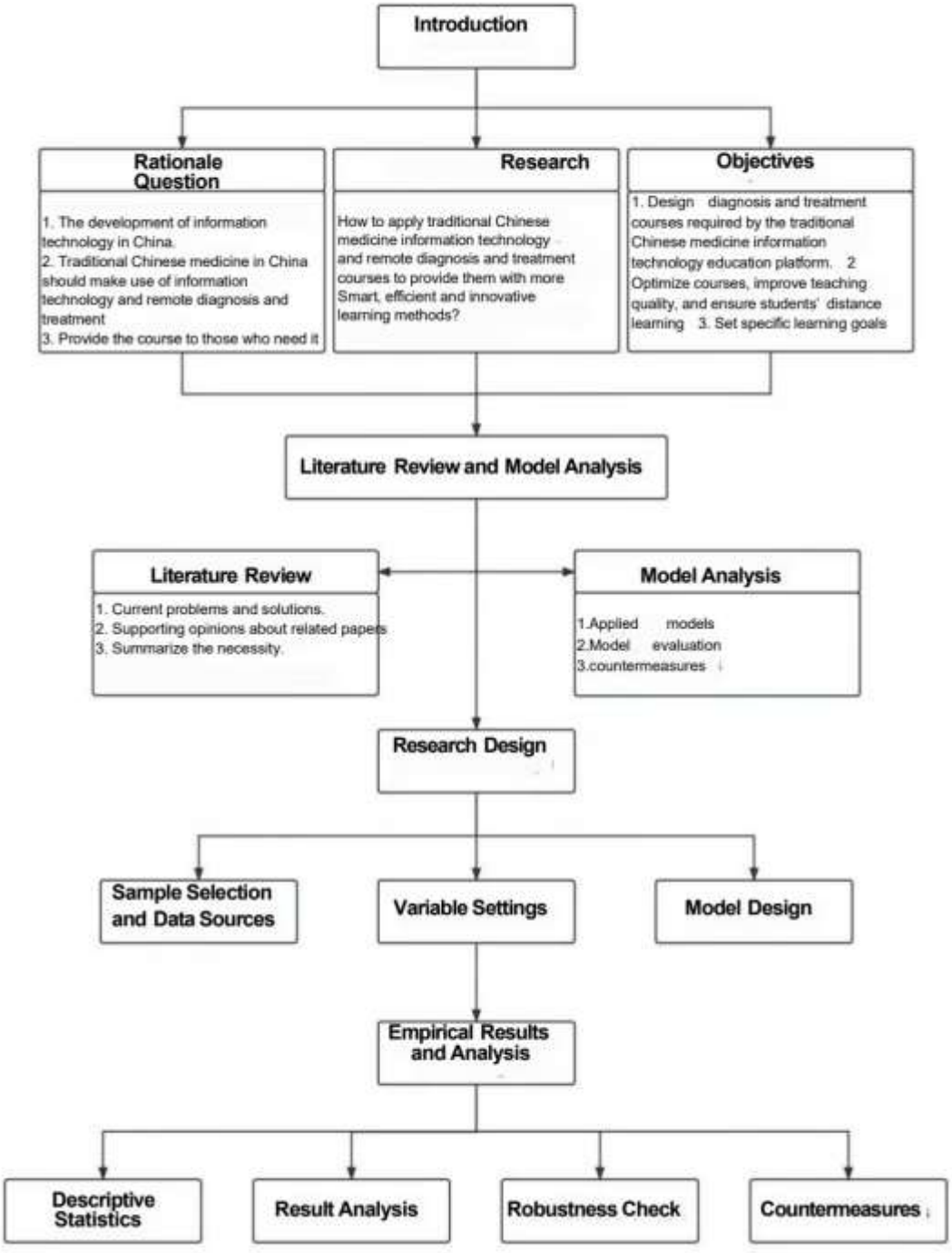



**Figure 1.1** Research Framework

# Chapter 2

# Literature Review

The design and optimization of remote diagnosis and treatment courses are key components of the development of traditional Chinese medicine information technology education platforms. This chapter will conduct a literature review around three main goals to comprehensively understand the current research status at home and abroad on remote diagnosis and treatment course design, teaching quality improvement, and learning goal setting. The literature review in this chapter will focus on these three themes. By studying these Thesis on 3 topics is supported by the views of our thesis and the value of this doctoral thesis

1. Through research and practice, design a set of high-quality remote diagnosis and treatment courses that meet the needs of a traditional Chinese medicine information technology education platform.

2. Improve the teaching quality of the traditional Chinese medicine information technology education platform by optimizing remote diagnosis and treatment courses to ensure that students learn remotely

3. Set specific learning goals, including obtaining high-quality education in mastering key skills such as remote diagnostic tools and patient information management.

## Objective1: Design high-quality remote diagnosis and treatment courses

1. Related research papers: Remote diagnosis and treatment systems serving special purposes

Author: Bai Jing, Zhang Yonghong

Related abstract: Remote diagnosis and treatment is also an important part of telemedicine. According to the requirements of different applications in remote diagnosis and treatment and the differences in technologies involved, it can be divided into remote diagnosis and treatment systems that serve special purposes,

remote consultation systems, and remote diagnosis and treatment systems. Medical consultation system, telerehabilitation technology and telesurgery technology. In this article, we will introduce systems and technologies for remote diagnosis and treatment that serve special purposes, including: emergency diagnosis system for travelers; emergency vehicle-mounted remote diagnosis system; specially designed for doctors Portable paging diagnostic system; remote diagnosis and treatment system for mental illness.

Source: China Electronics Society Year: 2001-05-01

2. Papers on related research: The significance and limitations of remote consultation to guide diagnosis and treatment

Author: Zhang Wei

Related summary: After more than two years of telemedicine practice, we have a total of 168 outlets across the country, covering 32 provinces, municipalities and autonomous regions across the country. As of April 1999, a total of 1182 consultations have been conducted, including 26 emergency cases and a total of 746 patients. Medical experts' participation in consultations has won praise from local doctors and patients and promoted the development of local medical undertakings. 1. Current status of remote consultation organizational structure China Medical Foundation International Medical China Internet

Source: Zhangqiao Scientific Research Magazine Year: 2000.06.31

3. Related research papers: Application and evaluation of building a telemedicine ECG network cloud platform

Author: Shandan, Jin Tianliang

Related summary: The telemedicine cloud platform is a method that uses advanced communications, electronics, mobile phones, computers and other technologies to conduct remote ECG monitoring and transmission and diagnostic reports. It uses the digital port of the ECG machine to collect ECG examination data and transmit and convert it remotely. Centralize storage management for standard formats, use software to realize waveform display, processing, diagnosis, realize ECG examination browsing, diagnosis, reporting, query statistics, shared process

management, and realize digitization, networking, and intelligence of ECG examination. and standardization, which can optimize the electrocardiogram examination process and control the quality of diagnostic reports.

Source: Titanium Academic Magazine Year: 2018

4. Related research papers: A brief discussion on the diagnosis and treatment of duodenal fistula

Author: Dai Shuwen

Related abstract: The key to the treatment of duodenal fistula lies in early diagnosis, timely intraduodenal decompression and extraintestinal drainage, infection control, reasonable nutritional support, and correction of homeostasis imbalance. According to the three different characteristics of intestinal fistula Treat in stages to strive for self-healing of the fistula, and be careful not to lose sight of one thing or the other, otherwise you will be very passive.

Source: Baidu Library Year: 2010

5. Related Research Papers Development of Internet-Based Home Remote Fetal Monitoring System

Author: Li Hongbo, Fang Shaoyuan

Related abstract: An internet-based home remote fetal monitoring system is proposed to automatically monitor, analyze and alarm the fetus's fetal heart rate and movements. Establish a fetal monitoring information system completely based on web technology to facilitate network sharing of fetal monitoring data and provide doctors with real-time result analysis and suggestions. The system makes full use of the existing network, has low operating costs and has clinical significance.

Source: VIP Journal Professional Edition Year: 2006

6. Related research papers: Remote diagnosis and treatment systems for special purposes

Author: Bai Jing, Zhang Yonghong

Related abstract: Remote diagnosis and treatment is also an important part of telemedicine. According to the requirements of different applications in remote diagnosis and treatment and the differences in technologies involved, it can be

divided into remote diagnosis and treatment systems serving special purposes, remote consultation systems, and remote diagnosis and treatment systems. Medical consultation system, remote rehabilitation technology and remote surgery technology. In this article, we will introduce systems and technologies for remote diagnosis and treatment that serve special purposes, including: emergency diagnosis system for travelers; emergency vehicle-mounted remote diagnosis system; specially designed for doctors Portable paging diagnostic system; remote diagnosis and treatment system for mental illness.

Source: Wanfang Magazine Year: 2001

7. Papers on related research: Design of remote real-time medical system under new technology conditions

Author: Ye Jiadong

Related abstract: Telemedicine is of great significance to improving people's living standards in our country. Telemedicine includes: remote diagnosis, expert consultation, information services, online examination and distance learning, etc. High-quality telemedicine can help improve the health of the entire population, especially in the care of the elderly and chronic patients; it can also conduct cross-regional consultations on difficult cases, effectively improving the quality of medical care in some areas. Telemedicine consultation establishes a new connection between medical experts and patients, allowing patients to receive consultation from remote experts and treatment and care under the guidance of remote experts at the same place and hospital, thereby saving doctors and patients a lot of time and money. Communication technology, computer technology and image processing technology have made great progress. Various international organizations and groups have developed a series of high-performance multimedia algorithms and standards; network technology has spread rapidly. Telemedicine has gained a certain technological development space, and remote diagnosis has become more feasible. Telemedicine focuses on contacting medical information, such as various medical images, patient files, medical information, etc. The DICOM standard is the international de facto standard for medical digital imaging and communication.

Therefore, in the process of integrating hospital information systems and video conferencing software, it is necessary to develop corresponding middleware to completely realize medical informatization. Through the comparison and application of various new technologies, this paper proposes a design scheme for a remote real-time medical system to provide end-to-end QoS and security. The bearer network not only adopts the latest technologies such as full-network MPLS, fast convergence and fast rerouting, but also uses QoS technology based on the differentiated service (Diffserv) mode to divide multiple service levels, allocate different bandwidths and use different queues for different levels of services. The scheduling mechanism solves the QoS problem on the IP backbone network. ADSL access networks are suitable for using the DiffServ framework. The ADSL differentiated service method requires a scalable, high-capacity and intelligent DSLAM to provide IP forwarding functions and support various QoS mechanisms and user management functions required by DiffServ.

Source: Zhangqiao Scientific Research Magazine Year: 2007

8. Related research papers: Traditional Chinese medicine secret recipe verification platform and verification method that combines face-to-face diagnosis and remote diagnosis

Author: Zhou Sen'an, Guo Chunhui

Related abstract: Provides a traditional Chinese medicine secret recipe verification platform and verification method that combines face-to-face diagnosis and remote diagnosis. The invention uses a patient data collection module, a face-to-face physician processing module and a traditional Chinese medicine secret recipe holder processing module to cooperate with the diagnostic mode. Judging the cause and symptoms of the patient is especially suitable for the treatment model of traditional Chinese medicine. At the same time, the holder of traditional Chinese medicine secret prescriptions collects all the treatment plans prescribed by the diagnosis and treatment platform through the intelligent analysis module of the big data database, and records the treatment plans prescribed in the past according to the intelligent analysis module of the big data database. The cure rate is sorted, and

treatment plans with higher cure rates are screened out for selection by the TCM secret recipe holder processing module. This not only effectively improves the diagnostic efficiency of the secret recipe holder, but also assists the secret recipe holder in reviewing past prescriptions. Evaluate the treatment plan to further improve the cure rate of the secret recipe

Source: Baidu Library Year: 2020 12 29.

9. Related research papers: Design of server software for remote home diagnosis system

Author: Luo Jianjun

Related abstract: Remote home diagnosis is a part of the telemedicine system that has been booming in recent years. At present, there are not many systems involving home diagnosis in telemedicine. This system is a product of the combination of IT technology and medical technology. It uses computers, communications the technology forms a certain network to connect home patients and medical staff. The medical staff can come from hospitals, medical guidance centers or medical expert institutions to achieve remote diagnosis and remote treatment guidance. As people's concepts change, their understanding of medical care Health care has put forward higher requirements, and people have more urgent needs for increasingly convenient medical systems. In response to this situation, this paper mainly discusses the server software of such a remote home diagnosis system and the implementation of its functions. The paper mainly focuses on the establishment and management of network databases and physiological parameters... Remote home diagnosis is a part of the telemedicine system that has flourished in recent years. At present, there are not many systems involving the home diagnosis part of telemedicine. This system is an IT technology A product combined with medical technology, it uses computers and communication technologies to form a certain network to connect home patients and medical staff. The medical staff can come from hospitals, medical guidance centers or medical expert institutions to achieve remote diagnosis and Remote treatment guidance. As people's concepts change, higher requirements are put forward for medical care, and

people have more urgent needs for increasingly convenient medical systems. In response to this situation, this paper mainly discusses such a remote treatment system. The server software of the home diagnostic system and the realization of its functions. This paper mainly conducts in-depth research on the establishment and management of network databases and the reception and processing of physiological parameter data, and makes some new attempts in the realization of network functions. In When developing the software, it is considered that the users should be professional medical institutions and patients in urgent need of medical care. Therefore, patient users need to pay and register to enjoy better medical services, thus ensuring good medical quality. The main functions that can be implemented currently are: 1. The medical service center station can simultaneously receive physiological parameters from multiple users or patient data sent by email, and complete functions such as storage, display, and printing, and has the function of automatic verification and error correction when receiving data; 2. Based on the received parameters and the user's medical record information, the doctor of the medical service center will reply to the user with diagnostic and treatment opinions, and store and print the results. 3. The database administrator can modify the user information and related permissions. This paper is completed In addition to the design and implementation of server-side software and the establishment of databases, certain explorations have been made in developing and improving other functions. This paper discusses the concept of remote home diagnosis based on the current medical situation in China, which is mainly aimed at chronic diseases in China. The incidence rate is getting higher and higher, and when existing medical resources are limited, how to make full use of existing resources to meet the medical care needs of the broad masses of the people, therefore, has strong practicality.

Source: Yunnan Dali University (internal magazine) Year: 2003.

10. Related research papers: Clinical application of modern remote medical consultation in tumor diagnosis and treatment

Authors: Huang Fugui, Li Yanbing, Ren Zhen, Qi Xin, Li Yadong

Related abstracts: Objective To discuss the application value of remote medical consultation in tumor diagnosis and treatment based on the experience of using the remote medical consultation system. Methods 18 tumor patients, 14 males and 4 females, with an average age of 52 years, used ISDN and two-way satellite consultation System. Results: All patients underwent remote medical consultation, 6 cases of tumors underwent arterial infusion embolization, and the remaining 12 cases underwent surgical resection, and 10 cases were consistent with the preoperative consultation diagnosis. Conclusion Modern remote medical consultation is simple and fast in the technical processing of tumor diagnosis and treatment., low cost, saving time, and can provide sufficient information for clinical practice, accurately diagnose and guide tumor treatment.

Source: Zhangqiao Scientific Research Magazine Year: 2006

11. Related research papers: Progress and prospects of China's telemedicine system construction

Author: Zhu Xinjian, Wu Baoming, Peng Chenglin

Relevant abstract: This article introduces the progress of domestic telemedicine system construction. Based on the classification analysis and comparison of existing telemedicine systems, it lists some typical domestic telemedicine systems according to their scale, and discusses the main functional characteristics of each system. An analysis was conducted. Finally, the prospects for the development of domestic telemedicine were prospected.

Source: Zhangqiao Scientific Research Magazine Year: 2003

12. Papers on related research: Development status and future trends of telemedicine

Author: Zhao Jie, Cai Yanling, Sun Dongxu, Zhai Yunkai

Relevant summary: Telemedicine is a very effective application of information technology in the national medical and health system, and has been widely developed around the world. Telemedicine provides services to alleviate the lack of medical resources in various countries and regions and improve national health

levels. It has played a huge positive role. The article starts from discussing the dynamic changes in the concept of telemedicine. Based on the analysis of the development and application status of telemedicine around the world, it reasonably predicts the future development trend of the telemedicine system and puts forward universally applicable Sexual management advice.

Source: Baidu Library Year: 2014

13. Related research papers: Client/server structural model of telemedicine system

Author: Hu Bingyi, Bai Jing, Ye Datian

Related abstract: The study of telemedicine system models is of great significance to the implementation of telemedicine systems. A good model can not only implement telemedicine applications more effectively, but also reduce the cost of the system. In view of the characteristics of telemedicine systems, through Introducing the concepts of communication services and system services, a message-driven client/server structural model is proposed, and the principles and methods of the structural model are discussed in layers. Finally, for an example of remote ECG and blood pressure monitoring, the Internet and the specific implementation of the system based on this model in the Windows95 environment. The results show that the model has good expansion characteristics and is easy to implement.

Source: Zhangqiao Research Year: 1999

14. Related research papers: Looking at the development of telemedicine in China from the perspective of information technology

Author: Xu Lusheng, Tang Huiming

Related abstract: This article briefly introduces telemedicine as a comprehensive application of information technology from a technical perspective, analyzes the development status of telemedicine in China, and proposes current thoughts on further developing telemedicine in China.

Source: Zhangqiao Scientific Research Magazine Year: 2006

15. Related research papers: Development status and prospects of ophthalmic telemedicine

Author: Zhang Xiao, Chen Youxin

Related summary: With the advancement of technology, doctors can diagnose and treat diseases through telemedicine. Currently, ophthalmic telemedicine is mainly used for screening and diagnosis of certain eye diseases, monitoring of chronic eye diseases, and remote consultation of ophthalmic diseases, etc. As the demand and application of ophthalmic telemedicine continue to increase, some existing problems are gradually exposed, such as infrastructure and staffing, medical risks, patient acceptance and satisfaction, network security and privacy protection, medical insurance coverage, etc. COVID The COVID-19 global pandemic has pushed telemedicine to the forefront of ophthalmic medical services and may continue to change the diagnosis and treatment model of eye diseases. With the development of artificial intelligence technology and the expansion of 5G communication network coverage, the training of primary medical service personnel has With the introduction of standardization and related laws and regulations, ophthalmic telemedicine will be more standardized and improved, with a wider range of applications, providing patients with high-quality, sustainable medical services.

Source: National Science and Technology Library and Documentation Center Year: 2030

In the process of realizing the needs of a traditional Chinese medicine information technology education platform, the first task is to design a set of high-quality remote diagnosis and treatment courses. The experience and research results in the relevant literature will provide us with a theoretical framework and practical guidance on the design of remote diagnosis and treatment courses. Successful cases at home and abroad on traditional Chinese medicine information technology education platforms and the demand for remote diagnosis and treatment courses in different fields will be key points.

**Objective 2: Improve the quality of teaching and ensure the effectiveness of distance learning**

1. Relevant research papers: Research on the application of information technology in modern traditional Chinese medicine

Author: Traditional Chinese Medicine Modern Science and Technology Development Strategy Research Group

Related abstracts: In the topic "Research on the Development Strategy of Modern Chinese Medicine Science and Technology", "Research on the Application of Modern Traditional Chinese Medicine Information Technology" (sub-topic) includes three aspects: a new model of traditional Chinese medicine research based on virtual private network technology, and an intelligent information system for traditional Chinese medicine. Research and systematic research and development project of ancient Chinese medicine literature resources. This article selects the first two aspects, and the third aspect will be published in the next issue. This article summarizes the development ideas, key tasks and key points of the application of traditional Chinese medicine information technology in the information age technology

Source: National Science and Technology Library and Documentation Center Year: 2001

2. Relevant research papers: Using information technology to promote the standardization of TCM syndrome types

Author: Cheng Fuchun, Fang Zhaoqin, Zhu Kangmei, Liu Min, Zhong Yi

Related abstract: The core of traditional Chinese medicine lies in syndrome differentiation and treatment, so the study of syndromes has always been the core content of the basic theoretical research of traditional Chinese medicine. It is mainly reflected in two aspects: the study of the essence of syndromes and the standardization research of syndromes, and the study of the essence of syndromes is also inseparable. Standardization of certificates, so how to standardize certificates has become the primary and prominent issue.

Source: Zhangqiao Scientific Research Magazine Year: 2007

3. Related research papers: The significance and role of modern information technology in research on traditional Chinese medicine characteristics

Author: Tian Wenjing

Relevant abstract: The characteristics of traditional Chinese medicine are mainly reflected in the overall thinking of syndrome differentiation and treatment, the correspondence between nature and man, and the individualized treatment plan that adapts to people, places and times. In the process of clinical diagnosis and treatment, patients are collected through inspection, hearing, questioning and other means. Various status information reflected by various parts of the body during the illness, such as pain, itching, numbness, numbness and other uncomfortable feelings in a certain part of the body or overall sleepiness, weakness, mental pleasure, listlessness, slowness, or dynamic The patient's behavior is vigorous, the gait is unsteady, etc. After the doctor's brain classifies, summarizes, fuses, abstracts, studies, judges, and refines the information generated in the patient's body, it is determined whether the disease syndrome is external syndrome, internal syndrome, or deficiency syndrome. , Empirical evidence shows that it belongs to cold, heat, yin, and yang, and then the decoction and medicine are given according to the local climate characteristics, seasonal characteristics, regional characteristics, living environment, age of the patient, differences between men, women, old and young at that time. Acupuncture, or sticking, or applying, or pressing, or rubbing, etc. In this sense, the implementation of clinical syndrome differentiation and treatment with traditional Chinese medicine characteristics is a process of information collection, analysis, induction, integration, and research and judgment. Therefore, we should carefully explore The relationship between traditional Chinese medicine informatics methods and modern information technology and the research on Chinese medicine characteristics and their application are very necessary. For this reason, the author would like to share some opinions on this issue to seek advice from fellow practitioners.

Source: National Science and Technology Library and Documentation Center

Year: 2006

4. Related research papers: Research and discussion on clinical efficacy evaluation of traditional Chinese medicine based on information technology

Author: Yan Chaosheng, Li Dan, Ma Jun, Wang Bo

Related abstract: Clinical efficacy is the basis for the survival and development of traditional Chinese medicine. How to effectively evaluate the clinical efficacy of traditional Chinese medicine has become the key to inheriting and developing traditional Chinese medicine. Through the analysis of the current research status of clinical efficacy evaluation of traditional Chinese medicine, the traditional Chinese medicine based on information technology is expounded. The research ideas and research content of clinical efficacy evaluation introduces the key information technology for clinical efficacy evaluation research of traditional Chinese medicine, in order to find an effective way to study the clinical efficacy evaluation of traditional Chinese medicine that suits its own characteristics.

Source: Baidu Library Year: 2009

5. Related research papers: A brief discussion of the impact of information technology on the discipline construction of traditional Chinese medicine

Author: Zhang Ting, Lin Jiang, Sun Kang, Fan Mengmeng

Related abstract: Currently, the discipline of traditional Chinese medicine is a first-level discipline under the medical category, including many subordinate second- and third-level disciplines. The continuous development of modern science and technology has promoted the intersection and penetration between disciplines, forming many emerging interdisciplinary and edge disciplines. Traditional Chinese Medicine Informatics is an emerging discipline resulting from the cross-fusion of Traditional Chinese Medicine and Informatics. The discipline of Traditional Chinese Medicine The system is developing towards more complete and richer categories.

Source: Baidu Library Year: 2012

6. Related research papers: Training model and practice of information technology talents in traditional Chinese medicine hospitals

Author: Wen Mingfeng, Chen Jianchao, Wu Dahe

Related abstract: On the basis of elaborating on the importance of informatization construction, the existing problems in the construction of information technology talent teams in traditional Chinese medicine hospitals and the knowledge they should possess are analyzed, and combined with the years of work practice of information technology talent team construction in Jiangmen Wuyi Traditional Chinese Medicine Hospital, the discussion of traditional Chinese medicine Training model of hospital information technology talents.

Source: Zhangqiao Research Year: 2016

7. Related research papers: Application and development of information technology in modernization research of traditional Chinese medicine

Author: Cheng Yiyu, Qu Haibin

Related abstract: The importance of information technology in the modernization research of traditional Chinese medicine is increasing day by day, and it has become an essential technical tool for the modernization research of traditional Chinese medicine. This article focuses on multivariate statistics, pattern recognition, knowledge engineering, neuron computing, fuzzy information processing and information intelligent integrated processing, etc. Based on a brief discussion of the main related technologies, the main application fields of information technology in the modernization research of traditional Chinese medicine are summarized. Finally, several aspects of traditional Chinese medicine information technology are discussed from the aspects of establishing a new traditional Chinese medicine creation system and constructing a traditional Chinese medicine data analysis and pattern discovery platform. Application ideas and development prospects

Source: National Science and Technology Library and Documentation Center Year: 2002

8. Related research papers: Related abstracts Research on the deep integration of information technology and higher education of traditional Chinese medicine

Author: Zhang Yaping, Yan Yonghong, Sun Ran, Liu Lili, Xue Pei

Related abstracts: The development of emerging technologies such as the Internet, big data, and artificial intelligence is forcing changes in traditional Chinese medicine higher education. The deep integration of information technology into higher education in traditional Chinese medicine is an inevitable choice for the modernization of traditional Chinese medicine education. As smart education enters a new stage of development How to achieve deep integration of higher education in traditional Chinese medicine with information technology in the special positioning of traditional Chinese medicine is an urgent problem that needs to be solved. Based on the perspective of smart education, this article starts from the connotation of the deep integration of information technology and higher education in traditional Chinese medicine. This paper analyzes the advantages and existing problems brought about by the deep integration of information technology and higher education of traditional Chinese medicine, and proposes countermeasures on how to achieve deep integration based on this, in order to provide reference for the practice of integration of information technology and higher education of traditional Chinese medicine.

Source: iAcademic Magazine Year: 2023

9. Papers on related research: Application of information technology in the informatization construction of traditional Chinese medicine

Author: Yao Xiaojie

Related abstracts: Purpose: To analyze the application effect of information technology in the construction of traditional Chinese medicine informatization. Methods: Randomly select 100 orthopedic patients who need to apply traditional Chinese medicine in Zhejiang Provincial Hospital of Traditional Chinese Medicine from 2020 to 2030 as research subjects, and randomly divide them into the control group There were 50 cases in each group and the observation group. The patients in the control group were all managed conventionally, and the patients in the observation group were managed traditional Chinese medicine using information technology. The management effects of the two groups of patients were compared. Results: The objectivity and standardization of the management of the patients in the first two

groups were compared. There was no significant difference in scores such as standardization (P>0.05). After management, the scores of objectivity, standardization, and standardization of patient management in the observation group were significantly higher than those in the control group (P<0.05). The traditional management of patients in the first two groups There was no significant difference in the scores of information application level, visual information application level, media information application level, and mobile information application level (P>0.05). After management, the observation group patients' traditional information application level, visual information application level, and media information application level were not significantly different (P>0.05). The application level, mobile information application level and other aspects of the scores were significantly higher than those of the control group (P<0.05). The observation group's error rates of inspection, smelling, questioning, and cutting were all significantly lower than those of the control group (P<0.05). 0.05). The error rate of traditional Chinese medicine dispensing and decoction of traditional Chinese medicine among patients in the observation group were significantly lower than that of the control group (P<0.05). The satisfaction of patients in the observation group was significantly higher than that of the control group (P<0.05). Conclusion: Information technology has good application value in the informatization construction of traditional Chinese medicine. It can further improve the quality of clinical management and the application level of information technology, reduce the error rate in diagnosis and treatment, distribution of traditional Chinese medicine and decoction of traditional Chinese medicine, and is more conducive to improving patient satisfaction with diagnosis and treatment.

Source: Zhangqiao Scientific Research Magazine Year: 2022

10. Related research papers: Research on the application of learning models supported by information technology in traditional Chinese medicine courses

Author: Sun Yanqiu

Related abstract: In the context of the gradual deepening of informatization in higher education, information technology has changed the environment and

conditions of college teaching to a great extent. The learning model supported by information technology is providing a new idea and method for the reform of college teaching. With the expansion of enrollment in colleges and universities, more and more students are graduating from traditional Chinese medicine schools. The previous learning model was a master-apprentice approach, but now it is mass production. Although the quantity is large, the quality is difficult to guarantee. Therefore, the current traditional Chinese medicine learning model makes There are not many "real" Chinese medicine doctors, and famous Chinese medicine doctors are even rarer. Chinese medicine courses are theoretical and practical courses. In teaching, students must not only have a solid theoretical foundation, but also have accurate and appropriate operational skills. But now The talent training model that still adopts theory first and then practice is obviously unable to adapt to the development of traditional Chinese medicine education. All these require the adoption of new learning models in traditional Chinese medicine teaching to quickly cultivate high-quality traditional Chinese medicine talents. Supported by information technology The learning model is based on modern educational ideas, teaching theories and learning theories, making full use of the support of modern information technology and the unlimited information resources provided by it to build a good learning environment and give full play to the initiative of learners It is a learning model of sex, enthusiasm and creativity. It has been applied to many disciplines and highlighted its advantages. This article selected a suitable learning model based on the characteristics of each traditional Chinese medicine course, and adopted the literature analysis method and case study method. Research. First, the concept and characteristics of a certain learning model are introduced, and then the specific application of this model in traditional Chinese medicine courses is introduced. The example application of the independent learning model in the traditional Chinese medicine meridian acupoints "Foot Yangming Acupoints" is introduced. , Research on the application of cooperative learning model in the traditional Chinese medicine diagnostics "TCM Tongue Diagnosis", explore the application of learning model in the traditional Chinese medicine diagnostics "Liver and Fu Organ Dialectics", application

of receptive learning in the course of acupuncture and moxibustion "Filiform Acupuncture", The application of experiential learning in Chinese medicine diagnostics "Pulse Diagnosis". Practice has proved that the learning model supported by information technology has achieved good results after the application of Chinese medicine courses. First of all, students' interest in learning Chinese medicine has increased, and they have overcome their lack of interest in learning Chinese medicine. fear, such as memorizing various medical history documents, studying obscure theoretical doctrines, etc.; secondly, various abilities have been significantly improved, such as the ability to process information technology, the ability to communicate and cooperate with others, and the ability to solve problems independently. Practical operation ability and other abilities; once again it plays a good role model for teachers, making them willing to try the application of various learning models in traditional Chinese medicine courses. The full text is divided into three parts. The first part introduces information technology and information The concept of learning models supported by technology. In the second part, the application of multiple learning models in traditional Chinese medicine courses is introduced. The third part is the conclusion and outlook.

Source: Zhangqiao Scientific Research Magazine Year: 2010

11. Related research papers: Construction of information technology support system for standardization of traditional Chinese medicine

Author: Zhao Zhen, Yang Haifeng, Sun Yangbo, Deng Wenping

Relevant abstract: In order to avoid the fragmentation, isolation and dispersion of traditional Chinese medicine standardization information resources and the formation of "information islands", it is necessary to strengthen the macro-planning and guidance of the information construction of traditional Chinese medicine standardization. Combined with the development of traditional Chinese medicine standardization in the current management system and operation The analysis of information technology application needs under the mechanism proposed that the standardization of traditional Chinese medicine should be constructed in five parts: traditional Chinese medicine standardization information service system,

online working platform, project management system, standard implementation promotion and monitoring feedback information system, technical specifications and information standards. Information technology support system

Source: Zhangqiao Scientific Research Magazine Year: 2009

12. Relevant research papers: Current status and development of information technology application in the field of traditional Chinese medicine

Author: Du Jianqiang, Wu Youping

Related abstract: With the rapid development of computer technology, network communication technology, software technology and database technology, information technology has become a powerful booster for traditional industries to seek breakthrough development, and has deeply penetrated into traditional industries, becoming an indispensable factor for the development of traditional industries. Indispensable part. This has been verified in industries such as finance, insurance, transportation and retail, and the pharmaceutical industry is no exception. In order to provide a reference for the majority of information technology workers who are interested in applications in the pharmaceutical field, this article introduces the current information technology The main application directions in the field of medicine are analyzed, and the development status of each research direction is analyzed and its future development trends are discussed.

Source: Zhangqiao Scientific Research Magazine Year: 2005

13. Related research papers: Construction and practice of “autonomous learning” model of traditional Chinese medicine diagnostics supported by information technology

Authors: Sun Guixiang, Huang Huiyong, Liu Wei, Ni Jia, Yuan Zhaokai, Jian Weixiong, Li Lin

Related abstract: This article explores the concept, construction methods and ideas of the "autonomous learning" model of traditional Chinese medicine diagnostics supported by information technology, and uses tongue diagnosis teaching as an example to introduce specific implementation methods. It has made a useful

attempt to implement the "student-oriented" educational concept and promote the teaching reform of traditional Chinese medicine diagnostics.

Source: CNKI Year: 2014

14. Relevant research papers: The status and construction strategies of information technology personnel in traditional Chinese medicine hospitals in poverty-stricken counties in central and western China

Authors: Yang Haifeng, Bian Li, Zhao Zhen, He Shuping, Wang Gaoliang, Sun Jing

Related abstract: Explore strategies for building information technology personnel teams in traditional Chinese medicine hospitals in poor counties in central and western China. Methods: Conduct a survey on the current situation of information technology personnel in 510 traditional Chinese medicine hospitals in poor counties, analyze the establishment of information departments of traditional Chinese medicine hospitals in poor counties and the sources of information technology personnel. Age composition, professional title distribution, educational background distribution, etc. As a result, the total number of information technology personnel is insufficient, the knowledge and ability structure is single, the value and role are not fully utilized, and the training mechanism is imperfect. Conclusion The lag in the construction of the information technology personnel team has become a problem of poverty in central and western my country The main bottlenecks in the informatization development of county traditional Chinese medicine hospitals

Source: Baidu Library Year: 2015

15. Related research papers: Talking about the integration of modern information technology and traditional Chinese medicine disciplines and courses

Author: Chang Xuehui, Zhang Liangzhi, Wang Zhentao

Relevant abstracts: Discuss the integration of modern information technology with traditional Chinese medicine disciplines and courses. Method: Combined with the author's actual work in teaching information technology courses in traditional Chinese medicine and analysis of the actual effects of participating in school basic education informatization work. Result: Information technology and subject teaching

The organic integration has fundamentally changed the traditional concepts of teaching and learning as well as the corresponding learning objectives, methods and evaluation methods, greatly improving efficiency. Conclusion: Information technology can indeed play a unique role in curriculum integration. To this end, we should vigorously promote and implement integration

Source: Baidu Library Year: 2010

This section will focus on relevant research in the literature on optimizing remote diagnosis and treatment courses and improving the teaching quality of traditional Chinese medicine information technology education platforms. Including but not limited to teaching methods, course evaluation, optimization of learning resources, etc. By analyzing different studies on the improvement of teaching quality, we provide theoretical support for subsequent course optimization.

## Objective3: Set specific learning goals

1. Papers on related research: Some thoughts on the discipline construction and professional education of information management

Author: Yang Wenxiang, Wang Jingming

Related abstract: Thoughts on the discipline construction and development direction of the information management major. In the catalog of undergraduate education majors recently promulgated by the Ministry of Education, under the management science and engineering category of the management discipline, there is an "information management and information system" One major. This is a new major based on the merger of five original majors belonging to different disciplines. These five majors are economic information management:

Source: Baidu Library Year: 1999

2. Papers on related research:

Author: Ma Feicheng

Related abstracts: This article examines information management activities based on the information process of human society. It focuses on introducing and discussing the content and characteristics of information and information

management, information exchange and transmission, information distribution, information acquisition, information organization, information retrieval, information system, and information service. , information institutions and their management, information policy and information law, etc.; at the same time, combined with the network and digital environment, the application of specific fields of information management in the network environment, as well as the new developments and trends that have emerged, are discussed

Source: Chaoxing Electronic Books Year: 2002

3. Related research papers: Core areas and development prospects of information management--Also on the construction of information management undergraduate curriculum system

Author: Lai Maosheng

Related abstract: This article explains the concept, origin, development and core research areas of information management, and discusses information management education issues. At present, society's requirements for information management major graduates and practitioners are becoming clearer. Objectively, information management education, especially the curriculum system design, must take into account both disciplinary traditions and social needs. Information management is an emerging discipline that is developing rapidly. It is a complex of several related disciplines, with each research background having its own characteristics.

Source: China National Knowledge Infrastructure Year: 2008

4. Related research papers: Research and analysis of medical information management curriculum

Author: Wang Xiuping, Yuan Yongxu, Sun Yan

Related abstract: The setting of medical information management courses is the key to good professional teaching. Now we statistically analyze the course setting of medical information management major in six domestic universities, and conduct a more in-depth analysis from the aspects of course type, number of hours and practical teaching. Discussion and analysis. We also conduct comparative analysis

with relevant foreign schools and majors, and propose corresponding countermeasures for common problems in the professional curriculum settings of each school.

Source: Zhangqiao Scientific Research Magazine Year: 2006

5. Related research papers: The establishment and role of hospital drug distribution centers

Author: Zhou Yuxia, Zhang Hui

Relevant summary: Pharmacy intravenous admixture service (PIVAS) is an operating environment that meets international standards and is designed based on drug characteristics. It is operated by trained professional and technical personnel in strict accordance with operating procedures, including total intravenous nutrient solution and cells. It is an institution that integrates clinical and scientific research for the scientific distribution of toxic drugs, antibiotics and other drugs. In November 2002, our hospital was the first to establish PIVAS among the general hospitals in the army, and also carried out the distribution of oral drugs. Drug distribution The center is responsible for intravenous drug distribution for 800 beds in 17 wards of the hospital. Relying on advanced purification equipment and strict scientific management, it provides high-quality pharmaceutical services to patients and clinical care.

Source: Zhangqiao Scientific Research Magazine Year: 2004

6. Papers on related research: On information management: Characteristics of information science and management perspective

Author: He Jiaxun, Lou Tianyang

Related abstracts: There are obvious differences between information management in traditional information science and information management in the management perspective. The information management framework in the management perspective comes from corporate strategy, business process reengineering, organizational change, and information systems in information technology and enterprise management theory. An organic integration of five aspects including management and corporate culture

Source: Baidu Library Year: 2003

7. Papers on related research: Comparative analysis of information science and information management

Author: Song Enmei

Related abstract: This article starts from solving the subject positioning problem of information science and information management, and conducts a comparative analysis of the two disciplines from the perspectives of subject meta-concept, subject analysis, subject development and subject positioning, and believes that there is a connection between the two. , but they have different subject connotations and research focuses, and it is proposed that information science and information management should highlight their own subject characteristics and directions in the network information environment to maintain the independence of the disciplines

Source: Baidu Library

Year: 2002

8. Relevant research papers: Current status and trends of the development of information management in China

Author: Qiu Junping, Yu Houqiang, Wang Feifei

Related abstract: The development of a discipline is mainly composed of its subject education and scientific research content. This article first analyzes the macro development of information management from the perspective of subject education, and then comprehensively uses the subject word frequency analysis method and content analysis method from the perspective of scientific research content., analyzed the current research status, research focus and development trends of information management in my country, in order to reflect the development status of information management discipline in my country in a timely manner, and to accurately grasp the development trends and directions of this discipline

Source: Baidu Library Year: 2013

9. Related research papers: Research on the cultivation of college students' learning goals based on goal management

Author: Ren Lu

Related abstract: Colleges and universities bear the important responsibility of cultivating talents for the cause of socialist construction. The effectiveness of student work in colleges and universities directly affects the quality of talent training. Management by objectives is a scientific management model with performance as the value orientation. The student work in colleges and universities integrates goal management into college students. In learning management, it has a significant effect on improving the management level of student work in colleges and universities in my country and improving the training effect of college students.

Source: Baidu Library Year: 2014

10. Related research papers: Research and practice on the reform of teaching content and teaching methods in health information management courses

Author: Xiong Jun

Related abstract: Analyzing the problems existing in the existing teaching model of health information management courses, this paper proposes reform ideas and methods for health information management courses: constructing a teaching model in a network environment, making full use of free foreign high-quality teaching resources and domestic online teaching The platform carries out health information management teaching. Practice has shown that this method is conducive to updating teaching content, improving teaching methods, and increasing students' enthusiasm for independent learning, thus improving the teaching effect and teaching quality of the course.

Source: Zhangqiao Scientific Research Magazine Year: 2010

11. Related research papers: Current status and prospects of the integrated development of telemedicine and "Internet +"

Author: Yang Zhen

Related abstract: With the rapid development of Internet technology, it has been widely used in medical treatment. Exchanges such as remote consultation, remote surgery, emergency treatment, and remote communication are constantly unfolding at home and abroad. Telemedicine has also brought benefits to many sick people. Good news. The combination of telemedicine and the Internet can make full

use of advanced medical technologies at home and abroad, strengthen medical research and exchanges in various places, solve a large number of difficult and complicated diseases, and further advance the development of medical academics. If supported by economic policies, etc., there will be broader prospects. Prospects

Source: Zhangqiao Scientific Research Magazine Year: 2018

12. Papers on related research: Theoretical reflections on the integration of information technology and curriculum

Author: He Kekang

Related abstract: The essence and goals of information technology courses Regarding the development of information technology courses in primary and secondary schools, it is generally believed that it has gone through two stages: the first stage is called "computer courses" (or

Keywords: information technology, curriculum integration, network culture, programming language Source: Zhangqiao Scientific Research Year: 2002

13. Papers on related research: Research and practice on the integration of information technology and curriculum

Author: Zhang Jianwei, Yao Zaohua

Related abstracts: What is the teaching focus of information technology education in primary and secondary schools? What role does information technology play in the integration of information technology with other subjects, especially in classroom teaching? How can we make the learning of information technology more helpful? Cultivating students' innovative spirit and practical ability, clarifying these issues is of great significance to guide our educational practice. This article attempts to use current relevant research results and school teaching practices to research and discuss teaching models and methods for integrating information technology and curriculum.

Source: VIP Journal Professional Edition Year: 2001

14. Papers on related research: The process of integrating information technology and education

Author: Liu Rude

Related abstract: With the continuous development of computer-centered information and its application in education, education itself will eventually undergo fundamental changes in terms of purpose, content, form, methods and organization. Of course, this change will not happen overnight., need to go through many

intermediate processes. This article intends to explore the various intermediate stages of the integration of information technology and education, with a view to making teachers understand the broad prospects of future education reform.

Source: Zhangqiao Scientific Research Magazine Year: 1997

15. Related research papers: Research on teaching model integrating information technology and curriculum Just-in-time teaching (JiTT) model

Author: He Kekang, Liu Chunxuan

Related abstract: This article is the sixth in a series of research papers that systematically studies "Information Technology and Curriculum Integrated Teaching Model". This series of research papers addresses the important issues that teachers must face during the implementation of information technology and curriculum integration -" It makes a more in-depth discussion on how to correctly understand the connotation and characteristics of teaching models in the information technology environment, and how to effectively implement such teaching models; this article focuses on another influential model of extracurricular integration. Conduct research on the representative "Just-In-Time Teaching (JiTT) model", and from the background, connotation and characteristics of this model, Source: China National Knowledge Infrastructure Year: 2008

In this section, we delve into methods and practical experiences regarding the formulation of learning objectives in telediagnosis and treatment courses. Focus on setting specific learning goals for mastering key skills such as remote diagnostic tools and patient information management. By analyzing the literature, we look for successful experiences in previous research and provide references for setting learning goals.

## Literature review conclusion:

This chapter provides theoretical support for subsequent course development and optimization through an in-depth review of the literature on remote diagnosis and treatment course design, teaching quality improvement, and learning goal setting. Through a comprehensive review of domestic and foreign research, we will be able to better grasp the cutting-edge trends in remote diagnosis and treatment course design, thereby better meeting the needs of traditional Chinese medicine information technology education platforms.

# Chapter 3
# Research Methodology

The main purpose of this doctoral thesis is to explore how to use digital technologies, including artificial intelligence, to strengthen and support the development of traditional Chinese medicine information technology and traditional Chinese medicine remote diagnosis and treatment. This study is based on a carefully designed research question and aims to reveal how artificial intelligence technology can be used to improve the current information technology curriculum education of traditional Chinese medicine and remote diagnosis and treatment of traditional Chinese medicine under the unique social, cultural and economic background of China, and to provide more information for more people. Traditional Chinese medicine information technology and traditional Chinese medicine remote diagnosis and treatment provide support and services to those in need.

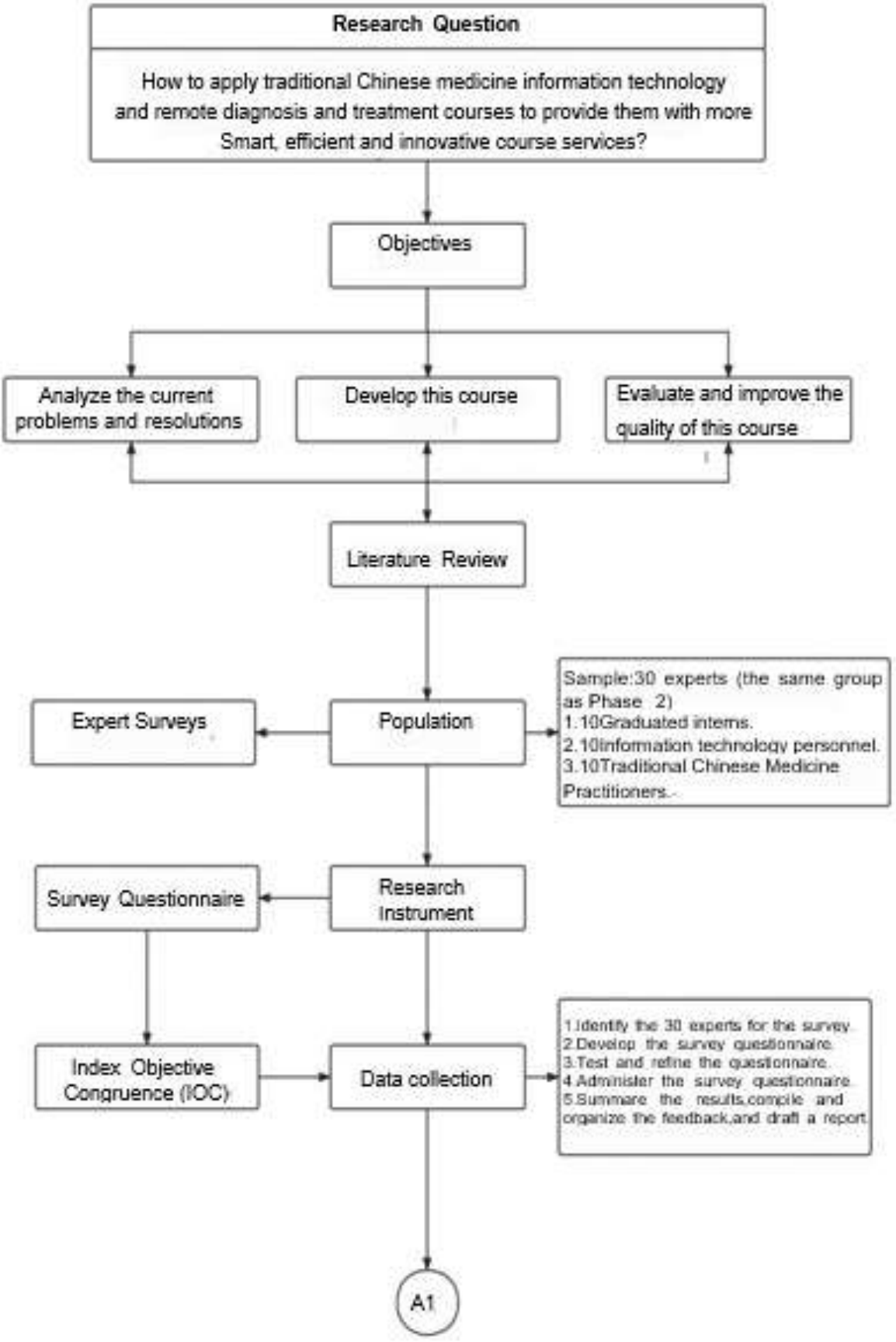
This study has three core objectives. The first goal is to design a set of high-quality remote diagnosis and treatment courses that meet the needs of a traditional Chinese medicine information technology education platform. The second goal is to optimize remote diagnosis and treatment courses, improve the teaching quality of the traditional Chinese medicine information technology education platform, and ensure that students learn remotely. The third goal is learning goals, including obtaining high-quality education in key skills such as remote diagnostic tools and patient information management.

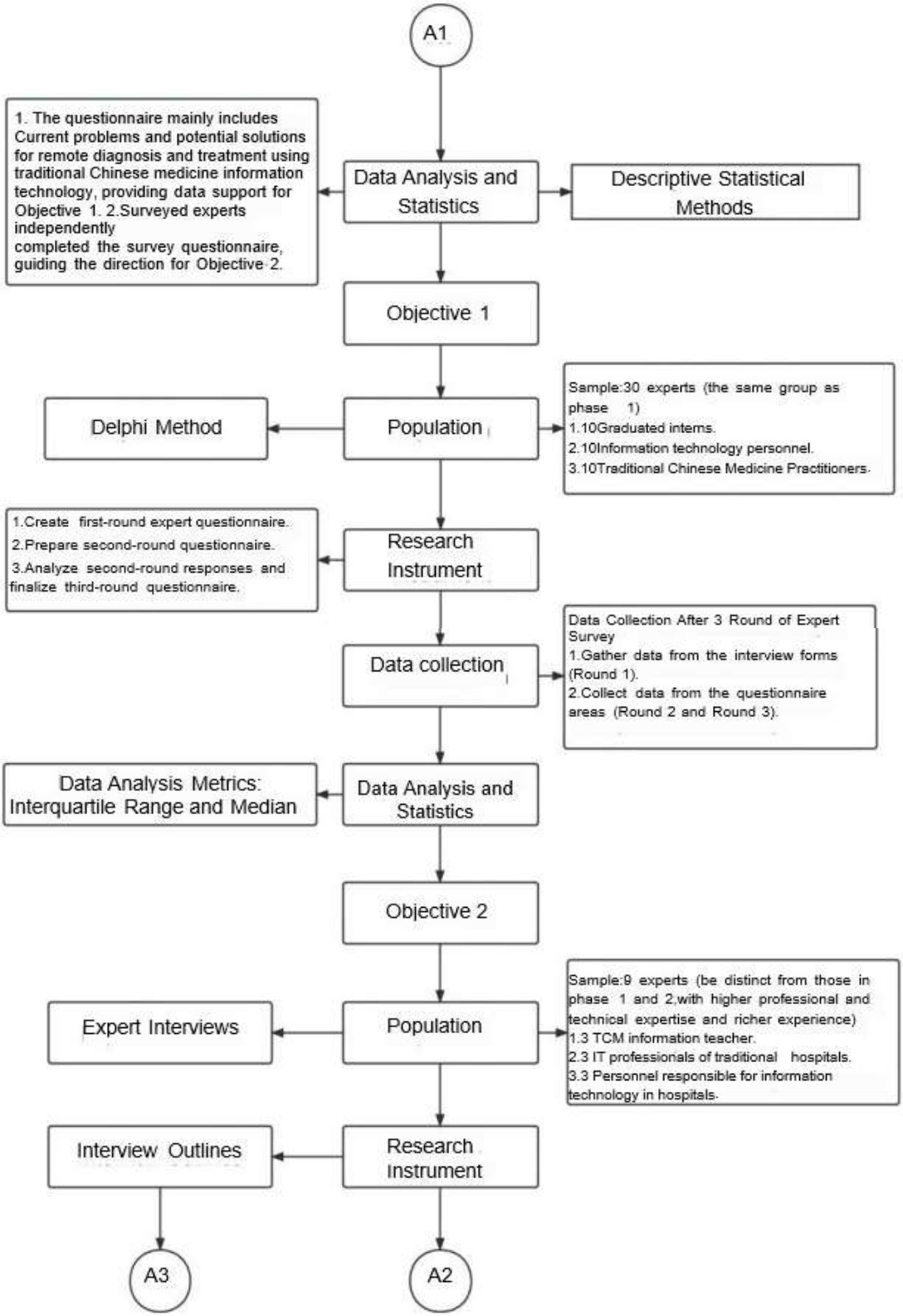
Together, these objectives form the framework for this article's research methodology. The following chapters delve into the specific details of the research methodology, outlining the research design, data collection strategy and analytical techniques used to achieve these objectives and addressed the core research questions.

In the academic work of this doctoral thesis, the research can be divided into three sequential aspects: the initial formulation of the research plan, the execution

of the research procedure and the subsequent writing of the research report. Programming uses a multi-stage approach to achieve stated goals. Specifically, expert interviews are used to achieve goal 1 and design a set of high-quality remote diagnosis and treatment courses that meet the needs of a traditional Chinese medicine information technology education platform. The Delphi method was used to achieve objective 2, as a rigorous means of reaching expert consensus. This uses an expert interview method to achieve objective 3, providing valuable qualitative insights through evaluation results. This methodological framework ensures a robust and comprehensive exploration of the current research question.

The diagram below outlines the entire research process from inception to knowledge dissemination. It visually summarizes structured content Methods were adopted to achieve the research objectives


Research Question
How to apply traditional Chinese medicine information technology and remote diagnosis and treatment courses to provide them with more Smart, efficient and innovative course services?
Objectives
Analyze the current problems and resolutions
Develop this course
Evaluate and improve the quality of this course
Literature Review
Population
Sample:30 experts (the same group as Phase 2)
1.10Graduated interns.
2.10Information technology personnel.
3.10Traditional Chinese Medicine Practitioners.
Expert Surveys
Research Instrument
Survey Questionnaire
Data collection
1.Identify the 30 experts for the survey.
2.Develop the survey questionnaire.
3.Test and refine the questionnaire.
4.Administer the survey questionnaire.
5.Summare the results,compile and organize the feedback,and draft a report.
Index Objective Congruence (IOC)
A1


A1
1. The questionnaire mainly includes Current problems and potential solutions for remote diagnosis and treatment using traditional Chinese medicine information technology, providing data support for Objective 1. 2.Surveyed experts independently completed the survey questionnaire, guiding the direction for Objective 2.
Data Analysis and Statistics
Descriptive Statistical Methods
Objective 1
Delphi Method
Population
Sample:30 experts (the same group as phase 1)
1.10Graduated interns.
2.10Information technology personnel.
3.10Traditional Chinese Medicine Practitioners.
1.Create first-round expert questionnaire.
2.Prepare second-round questionnaire.
3.Analyze second-round responses and finalize third-round questionnaire.
Research Instrument
Data collection
Data Collection After 3 Round of Expert Survey
1.Gather data from the interview forms (Round 1).
2.Collect data from the questionnaire areas (Round 2 and Round 3).
Data Analysis Metrics: Interquartile Range and Median
Data Analysis and Statistics
Objective 2
Expert Interviews
Population
Sample:9 experts (be distinct from those in phase 1 and 2,with higher professional and technical expertise and richer experience)
1.3 TCM information teacher.
2.3 IT professionals of traditional hospitals.
3.3 Personnel responsible for information technology in hospitals.
Interview Outlines
Research Instrument
A3
A2

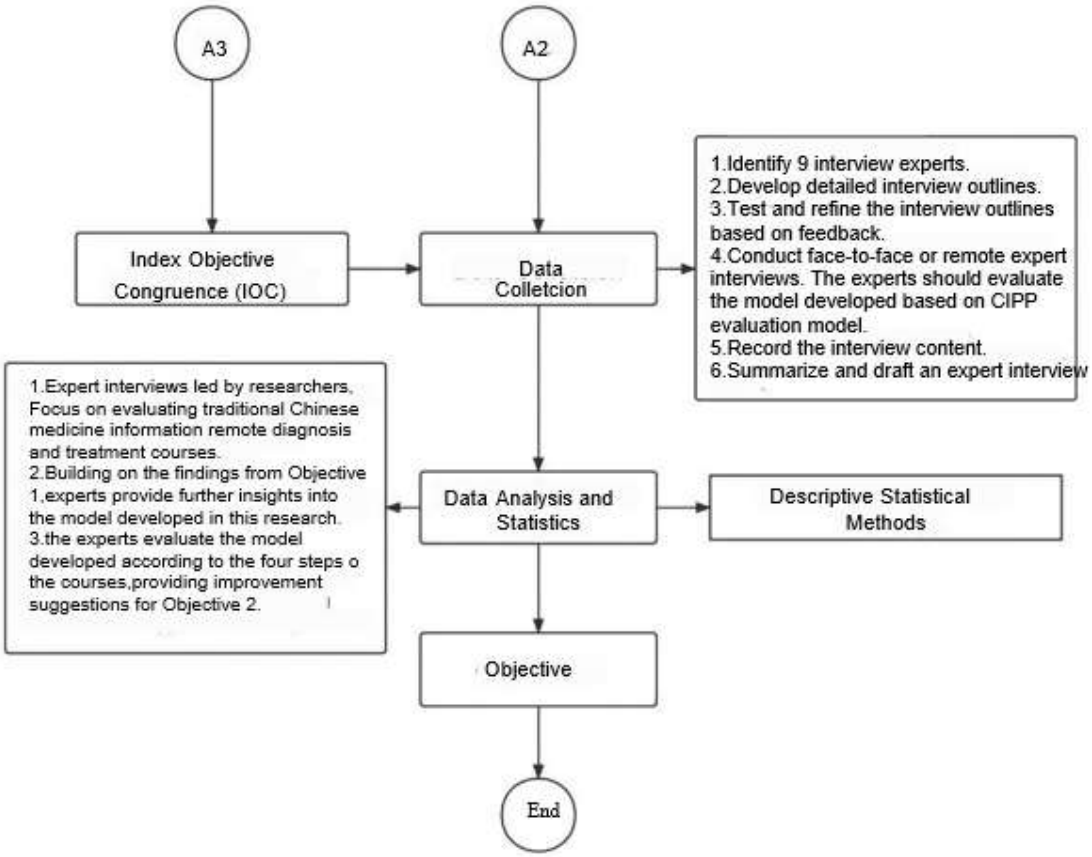



**Figure 3.1** Details of the Research Process Steps

## Phase One

Apply expert surveys to achieve objective 1.

## The Population

Targeted sampling method was used, with 30 experts with traditional Chinese medicine qualifications

The selected experts include 10 interns who are about to graduate from colleges and universities of traditional Chinese medicine and secondary vocational schools, 10information technology professionals from schools and hospitals, and 10people in society who are in need of remote diagnosis and treatment and information technology.

The qualifications of these 30 experts are as follows:

1. Graduates who have already interned and need work experience.

2. Technical professionals should have senior professional titles or doctor of traditional Chinese medicine

3. Some clinics have their own Chinese medicine practitioners who have improved their skills.

4. Have extensive experience in using digital technologies.

## Research Instruments

### Questionnaire

A comprehensive questionnaire was developed, including questions and themes to guide the interview process. The content of the questionnaire covers all aspects of the Traditional Chinese Medicine Information Technology system, including recruitment, training, performance management, benefits and related issues artificial intelligence technology

## Data Collection

The data collection process proceeds as follows:

Step 1: identify 30 experts who will participate in the survey.

Step 2: Prepare the questionnaire.

Step 3: Invite 5 experts to test the inter-observer agreement (IOC) The questionnaire was refined based on expert feedback.

Step 4: Manage the questionnaire.

Step 5: Summarize the survey results, compile and organize them Questionnaire feedback and drafting expert investigation report.

## Data Analysis

Based on the results of the questionnaire, statistics and expert opinions, the analysis aims to identify issues, challenges, opportunities, potential solutions and

recommendations regarding Traditional Chinese Medicine Information Technology systems in Chinese universities. Specific details include:

1. Design and distribute a questionnaire to understand the needs and expectations of the sample group for remote diagnosis and treatment courses, as goal 1 (information technology of traditional Chinese medicine and remote diagnosis and treatment courses of traditional Chinese medicine).

2. Investigate experts, using their knowledge background, management experience and experience in using digital technology, to independently Complete the questionnaire to guide the development direction of goal 2 (developing an effective Chinese medicine information technology and Chinese medicine remote diagnosis and treatment course platform

3. Use descriptive statistical methods to statistically analyze the research data.

**Phase Two**

Use the Delphi method to achieve goal 2.

**population**

Targeted sampling method was used, with 30 experts with traditional Chinese medicine qualifications

The selected experts include 10 interns who are about to graduate from colleges and universities of traditional Chinese medicine and secondary vocational schools, 10 information technology professionals from schools and hospitals, and 10people in society who are in need of remote diagnosis and treatment and information technology.

The qualifications of these 30 experts are as follows:

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2. Technical professionals should have senior professional titles or doctor of traditional Chinese medicine

3. Some clinics have their own Chinese medicine practitioners who have improved their skills.

4. Have extensive experience in using digital technologies.

To ensure the continuity and validity of the research work, the study was

The second stage population and sample groups can be replicated from the first stage.

**Research Instruments**

1. Contents of expert questionnaire

The expert questionnaire consists of three versions, each corresponding to One of the three rounds of expert opinion solicitation:

(1) The first version is the expert interview questionnaire. Questionnaire The method used by the researchers has three parts:

Part 1: Demographic Variables (Checklist) - General Information defendant

Part 2: Variables used to determine an effective Traditional Chinese Medicine Information Technology System model (five-point rating scale).

Part 3: Suggestions and additional comments (open-ended).

Tool "Recommendations for the Development of Traditional Chinese Medicine Information Technology and Traditional Chinese Medicine Remote Diagnosis and Treatment Courses"

Remote Diagnosis and Treatment Course in Traditional Chinese Medicine Information Technology Education Platform "Respondents were asked to indicate the extent to which each statement reflects a component of effectiveness. Each

The report uses Likert's five-point scale (1932) for measurement:

5=strongly agree, 4=agree, 3=neutral, 2=disagree, 1=strongly disagree.

See Table 3.1 for reference.

**Table 3.1** Validity of Traditional Chinese Medicine Information Technology and Traditional Chinese Medicine Remote Diagnosis and Treatment Courses Attitudes of Yunnan Secondary Traditional Chinese Medicine Vocational Schools

| Perception level | Score |
|---|---|
| Strongly Agree | 5 |
| Agree | 4 |
| Neutral | 3 |
| Disagree | 2 |
| Strongly Disagree | 1 |

The second version is a five-level estimation questionnaire that integrates First round expert opinion. The specific contents are as follows:

The functions of traditional Chinese medicine information technology and traditional Chinese medicine remote diagnosis and treatment courses.

The third version is a five-level estimation questionnaire with the same content as the second round, including corresponding indicator values (quartilesrange, median) second-round scores.

The preparation process of expert questionnaire:

Step 1: Create a first-round expert questionnaire.

Step 2: Invite 5 experts to test inter-observer agreement (IOC) Expert questionnaire.

Step 3: Modify the expert's questionnaire based on the expert's suggestions.

Step 4: Distribute the expert questionnaire to 30 experts.

Step 5: After collecting feedback from the questionnaire, draft a second copy Round expert questionnaire.

Step 6: Conduct the remaining two rounds of expert questionnaires Similar to the first five steps).

Step 7: Summarize the opinions of these three rounds of experts and draw

Traditional Chinese medicine information technology and traditional Chinese medicine remote diagnosis and treatment courses supported by artificial intelligence.

**Data Collection**

The researcher collected data based on these research instruments. Specific Proceed as follows:

1. Design and prepare an expert questionnaire to determine the list of 30 experts Who will participate in these three rounds of questioning.

2. Apply to the Graduate School of Panjahat University Responses from 30 experts were collected by writing letters.

3. Implement three rounds of expert opinion surveys and feedback.

4. Analyze expert opinions. After each round of expert feedback, collected Opinions should be based on the content of the expert questionnaire to reach a consensus.

**Data Analysis**

In the data analysis of this study, the researcher used the following statistical indicators to analyze the questionnaires provided in the first and second items

Several rounds of experts:

Interquartile range (IQR):

The interquartile range can be used to analyze the concentration and distribution of expert opinions. The consensus standard used in this study is Wu Jianxin (2014), summarized as follows:

**Table 3.2** Expert consensus level based on interquartile range (IQR)Opinion survey

| Interquartile range | Consensus Degree |
|---|---|
| 0 ≤ I QR ≤1.8 | High |
| 1.8 ≤I QR ≤ 2.0 | Med i um |
| IQ R ≥ 2.0 | Low |

Median (MD)

The median is the score in the middle of all the scores provided by the experts in order. It can describe the central tendency of expert opinions, and its interpretation is based on the standards set by expert opinions.

The researchers are as follows:

**Table 3.3** Classification of expert opinions based on median

| Median | The possibility of this item |
|---|---|
| Md ≥ 4.50 | Most likely |
| 3.50 ≤ Md ≤ 4.49 | More likely |
| 2.50 ≤ Md ≤ 3.49 | Moderate likely |
| 1.50 ≤ Md ≤ 2.49 | Less likely |
| Md ≤ 1.50 | Least likely |

From all the experts' answers, the median is derived and its meaning isAccording to the criteria established by the researchers, the explanation is as follows:

A median score of 4.50 or above indicates consideration by the panelstatement is most likely.

The median range from 3.50 to 4.49 means that the expert group

It's quite possible considering this statement.

The median range from 2.50 to 3.49 indicates that the expert group

Possibility to view information.

The median range from 1.50 to 2.49 indicates that the expert group

The consensus is that the information is less likely to be released.

A median below 1.50 indicates that the panel considers

Information is the least likely.

This study developed a questionnaire on "Courses of Remote Diagnosis and Treatment Courses in China's Traditional Chinese Medicine Information Technology

Education Platform", and confirmed the suitability and feasibility of the answers to the questionnaire through feedback from the second and third rounds of questionnaires. After feedback

After the third round of questionnaire survey, the medians were all above 3.5. This shows that experts believe it has reached a very high level. Experts The consensus is that the IQR (interquartile range) is 1.50 or lower.

**Phase Three**

Use the expert interview method to achieve goal 3.

**population**

Target sampling method was used to select 9 experts with rich experience in Yunnan Traditional Chinese Medicine Secondary Vocational School, including 3 graduate interns, 3 information technology professionals, 3 IT managers or University administrators.

The qualifications of these 9 experts are as follows:

1. Have more than 15 years of work experience.

2. Technical professionals should have senior professional titles or Ph.D.

3. Managers should hold positions such as university president or university president Administration.

4. Have extensive experience in using digital technologies.

To ensure the scientific rigor and validity of the Phase 3 model assessment, the population and sample group for Phase 3 should be different from those for Phases 1 and 2 and be composed of individuals with greater professional and technical expertise and greater experience. Composed of experts. Since the number of qualified individuals is relatively limited, it is recommended to appropriately reduce the sample group size, and the evaluation opinions of 9 experts were sufficient to achieve the research objectives.

**Research Instruments**

**Interview outline**

Develop a detailed interview outline including questions and topics to guide the interview process. The interview should cover all aspects of the model designed in this study.

**Data Collection**

The data collection process proceeds as follows:

Step one: identify 9 interview experts.

Step 2: Develop a detailed interview outline.

Step 3: Invite 5 experts to test the inter-observer consistency index (IOC) Interviews outlined and refined the outline based on expert feedback.

Step 4: Conduct in-person or remote expert interviews. During the interview process, the researcher will guide the experts to evaluate the model established in this study based on the CIPP evaluation model to collect their views, opinions, and experience.

Step 5: Use a recording device to record the interview and capture the keys Insights, questions and suggestions.

Step 6: Summarize and organize expert opinions and draft an expert opinion Interview report.

**Data Analysis**

Analyze its extent based on records and reports from expert interviews

They accepted the feasibility of the research model. Specific details include:

1. Expert interviews led by researchers focused on evaluating universities Remote diagnosis and treatment courses in China Traditional Chinese Medicine Information Technology Education Platform.

2. Based on the research results of Objective 1 (Studying current problems and solutions for remote diagnosis and treatment courses in Chinese traditional Chinese medicine information technology education platform), experts provide further insights for Traditional Chinese Medicine Information Technology decision support A systematic model for Chinese universities.

3. Experts, using their professional background and work experience, evaluate the remote diagnosis and treatment courses in the traditional Chinese medicine information technology education platform and provide improvement suggestions for Yunnan Traditional Chinese Medicine Secondary Vocational School according to the four steps of the CIPP evaluation model. Goal 2 (Develop China Courses of remote diagnosis and treatment courses in the traditional Chinese medicine information technology education platform

4. Use descriptive statistical methods to statistically analyze the research data.

**Summarize :**

This research is mainly divided into three phases and will be completed graduallyin chronological order:

The first stage: Through expert survey, analyze the current problems and potential solutions for remote diagnosis and treatment in China's traditional Chinese medicine information technology education platform to achieve goal 1

management system.

The second stage: achieve goal 2 through the Delphi method and establish an optimized remote diagnosis and treatment course in the Chinese traditional Chinese medicine information technology education platform

The third stage: Through expert interviews, achieve goal 3 and evaluate the effectiveness and feasibility of remote diagnosis and treatment courses in the human resources TCM information technology education platform.

A system model for Chinese college students based on the CIPP evaluation model.

# Chapter 4
# Results of Analysis

In the study of "Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China", the researchers mainly conducted three stages of model building. The researchers collected and sorted out relevant information, and conducted a detailed analysis and presentation of the research data, as follows:

Phase 1: Research the problems and solutions in information technology in Chinese schools.

In this stage, the researchers conducted an in-depth investigation and research on the current status of Chinese medicine information technology in Chinese universities through the literature review method. The researchers also adopted the expert survey method and conducted a questionnaire survey on relevant experts, including some old Chinese medicine practitioners from Yunnan universities and university administrators. Through the expert questionnaire, the researchers collected a large amount of data and conducted a detailed analysis of the problems existing in Chinese schools and possible improvement measures.

Phase 2: Design Chinese Traditional Medicine Information Telemedicine Course.

The focus of this stage is to establish a Chinese Traditional Medicine Information Telemedicine Course. Through the Delphi method and multiple rounds of expert questionnaires, the Chinese Traditional Medicine Information Telemedicine Course was finally determined. This stage of research is crucial for the Chinese Traditional Medicine Information Telemedicine Course.

Phase 3: Evaluate the Chinese Traditional Medicine Information Telemedicine Course.

Finally, the researchers conducted an expert interview to comprehensively evaluate the effectiveness and feasibility of the Chinese Traditional Medicine

Information Telemedicine Course. Based on expert opinions, researchers optimized and refined the model, which was crucial to finalizing the model design.

**Symbol and Abbreviations**

**Md** refers to the Median

**Mo** refers to the Mode

**IQR** refers to the Inter-Quartile Range

## Phase 1: Research the current status and solutions of information technology in TCM colleges and universities.

Through literature research, researchers found the problems and solutions of information technology management in TCM colleges and universities The composition of the 30 respondents is detailed in Table 4.1.

**Table 4.1** Composition of respondents (n=30)

| No. | Component categories | Number of people | Percentage |
|---|---|---|---|
| 1 | interns who are graduating | 10 | 33.33 |
| 2 | Information technology professionals in schools and hospitals | 10 | 33.33 |
| 3 | people in Chinese society who are in need of remote diagnosis and treatment and information technology | 10 | 33.33 |
| | **Total** | **30** | **99.99** |

According to Table 4.1, 30 respondents covered university Traditional Chinese Medicine Information Technology. Among them, there are 10 interns who are graduating accounting for 33.33%; 10 Information technology professionals in schools and hospitals, accounting for 33.33%; 10 people in Chinese society who are in need

of remote diagnosis and treatment and information technology, accounting for 33.33%.

The personal information gende Traditional Chinese Medicine Information Technology including, position, educational qualifications, working years, etc., is shown in Table 4.2.

**Table 4.2** Gende Traditional Chinese Medicine Information Technology personnel's personal information (n=10)

| Item | Personal Information | Number of people | Percentage |
|---|---|---|---|
| **Gender** | Male | 7 | 70 |
| | Female | 3 | 30 |
| | **Total** | **10** | **100.00** |
| **Position** | General Staff | 6 | 60 |
| | Administrator | 4 | 40 |
| | **Total** | **7** | **100.00** |
| **Educational qualification** | Bachelor Degree or below | 3 | 30 |
| | Master degree | 3 | 30 |
| | Doctor degree | 4 | 40 |
| | **Total** | **10** | **100.00** |
| **Working years** | 10-20 yrs | 5 | 50 |
| | 20-25 yrs | 3 | 30 |
| | Over 25 yrs | 2 | 20 |
| | **Total** | **10** | **100.00** |

According to Table 4.2, the demographic data of the Traditional Chinese Medicine Information Technology indicate that the researchers selected individuals of different genders, positions, educational backgrounds, and years of work experience as survey samples. Among them, males outnumber females, accounting for 70%.

In terms of positions, there were 4 general staff members, constituting 60%, and 4 managers, constituting 40%. Regarding educational background, 2 individuals had undergraduate or lower degrees and 2 had master's degrees, each comprising 30%, while 4 had doctoral degrees, accounting for 40%. In terms of work experience, all sampled individuals had over 10 years of experience, with the majority (50%) having between 10 and 20 years, 2 (30%) having between 20 and 25 years, and 1 (20%) having over 25 years of experience.

The personal information of information technology professionals including gender, educational qualifications, professional title, working years, etc., is shown in Table 4.3.

**Table 4.3** Information technology professionals' personal information (n=7)

| Item | Personal Information | Number of people | Percentage |
|---|---|---|---|
| **Gender** | Male | 6 | 60 |
| | Female | 4 | 40 |
| | **Total** | **10** | **100.00** |
| **Educational qualification** | Master degree | 3 | 30 |
| | Doctor degree | 7 | 70 |
| | **Total** | **10** | **100.00** |
| **Professional Title** | Lecturer | 5 | 50 |
| | Associate Professor | 3 | 30 |
| | Professor | 2 | 20 |
| | **Total** | **10** | **100.00** |
| **Working years** | 10-20 yrs | 6 | 60 |
| | 20-25 yrs | 2 | 20 |
| | Over 25 yrs | 2 | 20 |
| | **Total** | **10** | **100.00** |

According to Table 4.3, the demographic data of the information technology professional respondents indicate that the gender ratio is relatively balanced, with males slightly higher at 60%. In terms of educational background, all respondents held postgraduate degrees or higher, with doctoral degrees being predominant at 70%, accounting for 6 individuals. Regarding academic titles, there were 4 lecturers (50%), 2 associate professors (30%), and 1 professor (20%). In terms of work experience, all respondents had over 10 years of experience, with the majority (60%) having between 10 and 20 years, and 2respondent each (20%) having between 20-25 years and over 25 years of experience.

The personal information of information technology managers or university administrators including gender, position, educational qualification, professional title, working years, etc., is shown in Table 4.4.

**Table 4.4** Information technology managers or university administrators personal information (n=10)

| Item | Personal Information | Number of people | Percentage |
|---|---|---|---|
| **Gender** | Male | 10 | 100.00 |
| | Female | 0 | 0.00 |
| | **Total** | **10** | **100.00** |
| **Position** | Information technology manager | 6 | 60 |
| | University administrator | 4 | 40 |
| | **Total** | **10** | **100.00** |
| **Educational qualification** | Master degree | 2 | 20 |
| | Doctor degree | 8 | 80 |
| | **Total** | **10** | **100.00** |
| **Professional Title** | Lecturer | 2 | 20 |
| | Professor | 8 | 80 |
| | **Total** | **10** | **100.00** |

**Table 4.4** (Continued)

| Item | Personal Information | Number of people | Percentage |
|---|---|---|---|
| **Working years** | 10-20 yrs | 3 | 30 |
| | 20-25 yrs | 3 | 30 |
| | Over 25 yrs | 4 | 40 |
| | **Total** | **10** | **100.00** |

According to Table 4.4, the demographic data of information technology managers or university administrators respondents indicate that all respondents were male. The distribution between information technology managers and university administrators was relatively even, with 4 individuals and 3 individuals respectively, accounting for 60% and 40%. All respondents held postgraduate degrees or higher, with the vast majority (85.71%) holding doctoral degrees, totaling 6 individuals. In terms of academic titles, 6 respondents were professors (80%), and 1 respondent was a lecturer (20%). Regarding work experience, there were 2 individuals each with 10-20 years and 20-25 years of experience, each accounting for 30%, while a relatively larger proportion (40%) had over 25 years of experience.

**4.1 Results for Round 1: Current problems and resolutions on university Traditional Chinese Medicine Information Technology**

Through literature review, it was identified that there are five existing problems in the current Traditional Chinese Medicine Information Technology of Chinese universities. These findings were subsequently validated through an expert questionnaire survey. The current problems in Traditional Chinese Medicine Information Technology in China include: the data management organization and policy standards need to be unified, the application of big data technology needs to be strengthened, the application of information technology needs to be deepened, Database technology needs to be improved, and the application of artificial intelligence technology needs to be enhanced. These findings are detailed in Table 4.5.

**Table 4.5** Problems on university Traditional Chinese Medicine Information Technology in China (n=30)

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| **The data management organization and policy standards need to be unified** | | | | | | |
| 1 | Difficulties in personnel information data exchange and data redundancy. | 25 (80.95%) | 4 (14.29%) | 4 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 2 | Incomplete recruitment data and difficult analysis affecting decision accuracy. | 27 (90.48%) | 3 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 3 | Lack of training records and evaluation standards, making it hard to quantify investment and effectiveness. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 4 | Inconsistent performance data standards and evaluation methods affecting fairness and accuracy. | 23 (76.19%) | 4 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |
| 5 | Lack of standardized job descriptions and demand analysis, leading to low hiring match rates. | 28 (95.24%) | 0 (0.00%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.5** (Continued)

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 6 | Compensation and benefits policies lack scientific basis and uniform standards, resulting in low fairness and satisfaction. | 26 (85.71%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| **The application of big data technology needs to be strengthened** | | | | | | |
| 7 | Personnel information cannot extract effective insights and predictions. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 8 | The recruitment process struggles to accurately match candidates, increasing time and cost. | 27 (90.48%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 9 | Training plans lack personalization, with inefficient resource allocation and poor results. | 25 (80.95%) | 4 (19.05%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 10 | Performance analysis relies on traditional methods, resulting in less scientific evaluations. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 11 | Decisions on job requirements and position matching are not precise. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.5** (Continued)

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 12 | Compensation and benefits policies lack precision, leading to low employee satisfaction. | 26 (85.71%) | 2 (9.52%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| **The application of information technology needs to be deepened** | | | | | | |
| 13 | Personnel information lacks data integration and real-time updates, resulting in low efficiency in information management. | 27 (90.48%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 14 | Recruitment processes depend on manual methods, leading to low efficiency and poor user experience. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 15 | Employee training lacks personalized needs analysis and course recommendations, resulting in poor training effectiveness. | 27 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 16 | Performance evaluations rely on traditional methods, resulting in delayed and inaccurate data. | 26 (85.71%) | 2 (9.52%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.5** (Continued)

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 17 | Integration methods for job demands and talent matching are outdated, leading to less scientific decision-making. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 18 | Compensation and benefits management relies on manual processes and simple forms, affecting policy rationality and satisfaction. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| **Database technology needs to be improved** | | | | | | |
| 19 | Information data storage efficiency is low, with slow query speeds. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 20 | The recruitment database lacks flexibility and scalability, leading to delayed and inaccurate decision-making. | 25 (80.95%) | 3 (14.29%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 21 | The training database cannot support complex recording and analysis, resulting in inefficient management. | 24 (76.19%) | 3 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.5** (Continued)

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 22 | The performance database struggles to meet personalized needs, leading to unfair and inaccurate evaluations. | 26 (85.71%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 23 | The job database is incomplete and inconsistent, resulting in unscientific decision-making. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 24 | The compensation and benefits database has poor security, resulting in low employee trust. | 22 (66.67%) | 6 (28.57%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| **The application of artificial intelligence technology needs to be enhanced** | | | | | | |
| 25 | Lack of analytical and predictive capabilities, unable to automatically extract personnel information and trends. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 26 | Recruitment processes cannot automatically filter and match, resulting in low efficiency and accuracy. | 25 (80.95%) | 3 (14.29%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.5** (Continued)

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 27 | Lack of personalized learning recommendations, unable to automatically suggest suitable courses. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 28 | Performance evaluations lack intelligent analysis and recognition, resulting in shallow and unscientific results. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 29 | Lack of intelligent job demand analysis and talent matching, leading to unscientific and inaccurate decision-making. | 26 (85.71%) | 2 (9.52%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 30 | Inability to intelligently optimize compensation and benefits management, affecting policy precision and satisfaction. | 25 (80.95%) | 2 (9.52%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |

Based on Table 4.5, it reflects responses from 30 expert respondents on Part 1 of the questionnaire, addressing the main problems in Traditional Chinese Medicine Information Technology. Among them, all 30 issues were recognized by the experts. These problems encompass six aspects: "Personnel Information Management,"

"Personnel Recruitment Management," "Personnel Development Management," "Performance Assessment Management," "Internal Promotion Management," and "Compensation and Benefits Management." The questions in this part were quantitatively posed, with respondents indicating their opinions on each issue using a scale ranging from Strongly Agree to Strongly Disagree.

For "Personnel Information Management," 100.00% of respondents strongly agree that personnel information lacks effective insights and predictive capabilities. Over 90.00% strongly agree that there is a lack of data integration and real-time updates, resulting in low efficiency in information management, slow data storage and retrieval, and insufficient analytical and predictive capabilities. More than 80.00% strongly agree that there are difficulties in exchanging personnel information data and redundancy in information.

For "Personnel Recruitment Management," 100.00% of respondents strongly agree that the recruitment process relies on manual methods, leading to low efficiency and poor user experience. Over 90.00% strongly agree that recruitment information is incomplete and difficult to analyze, affecting decision-making accuracy, and that the recruitment process struggles to accurately match candidates, thus increasing time and costs. More than 80.00% strongly agree that the recruitment database lacks flexibility and scalability, resulting in untimely and inaccurate decision-making, as well as inefficient and imprecise candidate screening.

For "Personnel Development Management," over 90.00% of respondents strongly agree that there is a lack of standards for training records and assessment, making it difficult to quantify investments and outcomes. They also indicate that employee training lacks personalized needs analysis and course recommendations, leading to poor training effectiveness. More than 80.00% strongly agree that training programs are insufficiently personalized, resource allocation is inefficient, and the overall effectiveness is low. Over 70.00% strongly agree that the training database cannot support complex record keeping and analysis, resulting in ineffective management.

For "Performance Assessment Management," over 90.00% of respondents strongly agree that performance analysis relies on traditional methods, which adversely affects the scientific rigor of evaluations. They also note that performance assessments lack intelligent analysis and identification, thus lacking depth and scientific validity in results. More than 80.00% strongly agree that performance evaluation relies on traditional methods, resulting in untimely and inaccurate data, and that the performance database struggles to meet personalized needs, leading to unjust and inaccurate evaluations. Over 70.00% strongly agree that performance standards and evaluation methods lack uniformity, affecting the fairness and accuracy of evaluations.

For "Internal Promotion Management," over 90.00% of respondents strongly agree that standards for job descriptions and demand analysis are lacking, resulting in low job-to-candidate match rates. They also indicate that decision-making regarding job demands and talent matching lacks precision due to outdated integration tools and incomplete and inconsistent job databases. More than 80.00% strongly agree that there is a lack of intelligent job demand analysis and talent matching, leading to scientifically inaccurate decision-making.

For "Compensation and Benefits Management," over 90.00% of respondents strongly agree that compensation and benefits management relies on manual processes and simple spreadsheets, which adversely affect the scientific basis and satisfaction of policies. Over 80.00% strongly agree that compensation and benefits policies lack scientific foundations and uniform standards, resulting in low fairness and satisfaction. They also indicate that the precision of compensation and benefits policies and employee satisfaction are low, and that compensation and benefits management cannot be intelligently optimized, affecting policy accuracy and satisfaction. More than 60.00% of respondents strongly agree that the security of compensation and benefits databases is poor, leading to low employee trust.

The current problems in Chinese university Traditional Chinese Medicine Information Technology can be attributed to several factors. Firstly, the data management organization and policy standards need to be unified may stem from organizational complexity or inadequate measures for data security and privacy

protection. Secondly, the application of big data technology needs to be strengthened may result from the lack of efficient tools for analyzing and mining large datasets, or complexities and time constraints in data integration and cleansing processes. Thirdly, inadequate depth of Information Technology application could be due to aging or insufficient technological infrastructure, especially in the slow adoption of emerging technologies. Fourthly, Database technology needs to be improved may involve issues with inefficient data storage and retrieval, or concerns with data consistency and integrity. Lastly, the application of artificial intelligence technology needs to be enhanced may be due to the lack of tailored AI solutions for Traditional Chinese Medicine Information Technology, or insufficient awareness of the potential of AI technologies.

**Table 4.6** The data management organization and policy standards need to be unified (n=30)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 1 | Establish and promote unified personnel information storage standards and data formats to ensure smooth data exchange between departments and reduce information redundancy. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 2 | Implement data quality management mechanisms to ensure data accuracy and completeness, reducing information redundancy and errors. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.6** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 3 | Standardize candidate information collection in the recruitment process to ensure completeness and consistency, enhancing data quality and analysis reliability. | 30 (76.19%) | 3 (14.29%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) |
| 4 | Enhance data management for employee training records, establish comprehensive archives of training data to quantify and compare the effectiveness of different training programs. | 21 (61.90%) | 6 (28.57%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |
| 5 | Design evaluation standards for training effectiveness, incorporating pre- and post-training skill assessments and job performance evaluations to objectively assess the impact and value of training. | 25 (80.95%) | 2 (9.52%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.6** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 6 | Develop unified standards for performance data collection and evaluation methods to ensure consistency and accuracy in performance evaluations. | 26 (85.71%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 7 | Establish detailed and unified job description standards, introduce job requirement analysis tools or systems to facilitate accurate matching of recruitment needs and actual positions, reducing failure rates. | 20 (57.14%) | 6 (28.57%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) |
| 8 | Regularly update and review job descriptions to ensure alignment with organizational development and talent needs, enhancing efficiency and accuracy in job appointments. | 25 (80.95%) | 3 (14.29%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.6** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 9 | Establish a data system conducive to scientifically formulating compensation and benefits policies to ensure fairness in benefits and enhance employee satisfaction. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 10 | Develop unified compensation and benefits standards and processes to ensure policy transparency and consistency, preventing unfair practices and improving employee acceptance and satisfaction with benefits policies. | 19 (52.38%) | 7 (33.33%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) |

According to Table 4.6, the responses to scale questions 31 to 40 from the 30 experts are reflected. Based on the analysis of the frequency and percentage of strongly agree responses among experts, the top three resolutions for addressing the current problem of “The data management organization and policy standards need to be unified” are as follows: establish and promote unified personnel information storage standards and data formats to ensure smooth data exchange between departments and reduce information redundancy, implement data quality management mechanisms to ensure data accuracy and completeness, reducing

information redundancy and errors, establish a data system conducive to scientifically formulating compensation and benefits policies to ensure fairness in benefits and enhance employee satisfaction, with the agreement of 100.00%, 100.00%, and 95.24%. The bottom three resolutions in terms of expert agreement are: develop unified compensation and benefits standards and processes to ensure policy transparency and consistency, preventing unfair practices and improving employee acceptance and satisfaction with benefits policies, establish detailed and unified job description standards, introduce job requirement analysis tools or systems to facilitate accurate matching of recruitment needs and actual positions, reducing failure rates, enhance data management for employee training records, establish comprehensive archives of training data to quantify and compare the effectiveness of different training programs, with the agreement of 52.38%, 57.14%, and 61.90%.

**Table 4.7** The application of big data technology needs to be strengthened (n=30)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 11 | Introducing big data analytics platforms or tools to extract talent insights and predictive analytics from vast amounts of data helps identify potential high-value talents. | 27 (90.48%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 12 | Integrating data from various sources facilitates comprehensive talent information integration and exploration. | 24 (76.19%) | 3 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.7** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 13 | Utilizing big data analytics technology for intelligent candidate screening and matching enhances recruitment precision and efficiency. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 14 | Implementing data-driven recruitment decision strategies analyzes recruitment data to optimize processes and resource allocation, reducing recruitment cycles and costs. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 15 | Providing personalized training recommendations and course suggestions based on employees' skills and career development needs using big data analysis. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 16 | Analyzing training effectiveness and employee performance data to adjust and optimize personalized | 21 (61.90%) | 3 (14.29%) | 4 (19.05%) | 1 (4.76%) | 0 (0.00%) |

**Table 4.7** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| | training plans maximizes training resource utilization and significantly improves training effectiveness. | | | | | |
| 17 | Using big data technology to analyze multidimensional employee performance data and trends provides objective, accurate performance evaluations and recommendations. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 18 | Establishing real-time data monitoring and feedback mechanisms enables managers to track and adjust performance evaluation processes promptly, ensuring fairness and transparency. | 27 (90.48%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 19 | Introducing intelligent job demand analysis tools combined with big data analysis identifies and forecasts future job | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.7** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| | demand trends, enhancing the scientific accuracy and precision of job appointment decisions. | | | | | |
| 20 | Implementing data-driven job matching automates recommending the best-matched candidates based on job requirements and employee skill characteristics, optimizing job appointment efficiency and quality. | 25 (80.95%) | 3 (14.29%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 21 | Analyzing compensation data and employee benefit preferences using big data analysis tools to formulate scientifically-based compensation and benefits policies improves policy accuracy and employee satisfaction. | 21 (61.90%) | 5 (23.81%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) |
| 22 | Establishing dynamic adjustment mechanisms monitors the execution effectiveness and | 25 (80.95%) | 2 (9.52%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) |

**Table 4.7** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| | employee feedback of compensation and benefits policies through big data analysis, enabling timely strategy adjustments to maintain effectiveness and adaptability. | | | | | |

According to Table 4.7, the responses to scale questions 41 to 52 from the 21 experts are reflected. Based on the analysis of the frequency and percentage of strongly agree responses among experts, the top three resolutions for addressing the current problem of "The application of big data technology needs to be strengthened" are as follows: providing personalized training recommendations and course suggestions based on employees' skills and career development needs using big data analysis, using big data technology to analyze multidimensional employee performance data and trends provides objective, accurate performance evaluations and recommendations, implementing data-driven recruitment decision strategies analyzes recruitment data to optimize processes and resource allocation, reducing recruitment cycles and costs, with the agreement of 100.00%, 100.00%, and 95.24%. The bottom three resolutions in terms of expert agreement are: analyzing compensation data and employee benefit preferences using big data analysis tools to formulate scientifically-based compensation and benefits policies improves policy accuracy and employee satisfaction, analyzing training effectiveness and employee performance data to adjust and optimize personalized training plans maximizes training resource utilization and significantly improves training effectiveness,

integrating data from various sources facilitates comprehensive talent information integration and exploration, with the agreement of 61.90%, 61.90%, and 76.19%.

**Table 4.8** The application of information technology needs to be deepened (n=30)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 23 | Implementing comprehensive human resources information management ensures support for multiple data sources and real-time updates, enhancing efficiency and accuracy in information management. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 24 | Deploying a complete recruitment management system integrates various online resources to improve recruitment efficiency and candidate experience. | 20 (57.14%) | 6 (28.57%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) |
| 25 | Introducing artificial intelligence and big data analytics automate candidate screening and matching, reducing manual operations and enhancing the scientific | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.8** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| | accuracy and precision of recruitment decisions. | | | | | |
| 26 | Implementing intelligent employee learning management integrates employee skill profiles and career development plans to provide personalized training needs analysis and course recommendations. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 27 | Introducing advanced digital technologies provides immersive learning experiences and practical environments, enhancing training interactivity and attractiveness. | 19 (52.38%) | 7 (33.33%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) |
| 28 | Establishing a performance evaluation management system that supports diverse evaluation methods and customized evaluation criteria improves the accuracy and timeliness of evaluation data. | 20 (57.14%) | 5 (23.81%) | 4 (19.05%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.8** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 29 | Using big data technology to analyze employee performance data identifies trends and optimization suggestions, enhancing the objectivity and scientific nature of the evaluation process. | 26 (85.71%) | 2 (9.52%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 30 | Implementing intelligent talent management combines big data analytics to automatically match the best candidates for different positions, enhancing the scientific accuracy and precision of recruitment decisions. | 27 (90.48%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 31 | Using intelligent analysis tools to quickly and accurately understand and respond to recruitment needs optimizes recruitment processes and reduces Traditional Chinese Medicine Information Technology costs. | 21 (61.90%) | 4 (19.05%) | 4 (19.05%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.8** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 32 | Implementing integrated compensation and benefits management supports various benefit schemes and flexible benefit options, enhancing the scientific nature of compensation and benefits policies and employee satisfaction. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 33 | Introducing intelligent compensation analysis tools optimizes compensation based on data-driven decisions, increasing organizational attractiveness and retention rates for talent. | 25 (80.95%) | 2 (9.52%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |

According to Table 4.8, the responses to scale questions 53 to 63 from the30 experts are summarized. Based on the analysis of the frequency and percentage of strongly agree responses among experts, the top three resolutions for addressing the current problem of “The application of information technology needs to be deepened” are as follows: implementing comprehensive human resources information management ensures support for multiple data sources and real-time updates, enhancing efficiency and accuracy in information management, introducing artificial intelligence and big data

analytics automate candidate screening and matching, reducing manual operations and enhancing the scientific accuracy and precision of recruitment decisions, implementing intelligent employee learning management integrates employee skill profiles and career development plans to provide personalized training needs analysis and course recommendations, with the agreement of 100.00%, and 95.24%. The bottom three resolutions in terms of expert agreement are: introducing advanced digital technologies provides immersive learning experiences and practical environments, enhancing training interactivity and attractiveness, establishing a performance evaluation management system that supports diverse evaluation methods and customized evaluation criteria improves the accuracy and timeliness of evaluation data, deploying a complete recruitment management system integrates various online resources to improve recruitment efficiency and candidate experience, with the agreement of 52.38%, 57.14%, and 57.14%.

**Table 4.9** Database technology needs to be improved (n=30)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 34 | Redesign and optimize the database system to improve data storage efficiency and query speed. | 17 (42.86%) | 8 (38.10%) | 3 (14.29%) | 1 (4.76%) | 0 (0.00%) |
| 35 | Introduce caching mechanisms and optimize indexing to reduce data retrieval time, enhancing real-time information management efficiency. | 25 (80.95%) | 4 (19.05%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.9** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 36 | Develop customized recruitment modules to allow quick configuration and adjustment of recruitment processes to meet changing recruitment needs and data growth. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 37 | Implement comprehensive learning management to support recording and managing various forms of training. | 26 (38.10%) | 7 (33.33%) | 5 (23.81%) | 1 (4.76%) | 0 (0.00%) |
| 38 | Conduct in-depth analysis of training data through data analysis tools to evaluate training effectiveness and optimize resource allocation. | 24 (76.19%) | 3 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |
| 39 | Update performance evaluation systems to support customized evaluation metrics and scoring criteria, adapting to specific needs of different departments and positions. | 21 (61.90%) | 5 (23.81%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.9** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 40 | Introduce flexible evaluation modules to allow adjustment and optimization of evaluation processes, enhancing fairness and accuracy of evaluation results. | 24 (76.19%) | 3 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |
| 41 | Unified job description and position requirement management to ensure integrity and consistency in information input and updates. | 18 (47.62%) | 7 (33.33%) | 4 (19.05%) | 0 (0.00%) | 0 (0.00%) |
| 42 | Implement automated data validation and audit mechanisms to promptly identify and correct inaccuracies, improving the scientific accuracy and precision of hiring decisions. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 43 | Strengthen security measures of the compensation and benefits database, including data encryption, access control, and real-time monitoring. | 24 (76.19%) | 3 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.9** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 44 | Implement regular data backup and recovery strategies to mitigate risks of accidental data loss or damage, enhancing reliability of compensation and benefits management and employee trust. | 13 (23.81%) | 8 (38.10%) | 6 (28.57%) | 2 (9.52%) | 0 (0.00%) |

According to Table 4.9, the responses to scale questions 64 to 74 from the 30 experts are summarized. Based on the analysis of the frequency and percentage of strongly agree responses among experts, the top three resolutions for addressing the current problem of “Database technology needs to be improved” are as follows: implement automated data validation and audit mechanisms to promptly identify and correct inaccuracies, improving the scientific accuracy and precision of hiring decisions, develop customized recruitment modules to allow quick configuration and adjustment of recruitment processes to meet changing recruitment needs and data growth, introduce caching mechanisms and optimize indexing to reduce data retrieval time, enhancing real-time information management efficiency, with the agreement of 100.00%, 90.48%, and 80.95%. The bottom three resolutions in terms of expert agreement are: implement regular data backup and recovery strategies to mitigate risks of accidental data loss or damage, enhancing reliability of compensation and benefits management and employee trust, implement comprehensive learning management to support recording and managing various forms of training, redesign and optimize the database system to improve data storage efficiency and query speed, with the agreement of 23.81%, 38.10%, and 42.86%.

**Table 4.10** The application of artificial intelligence technology needs to be enhanced (n=30)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 45 | Introducing artificial intelligence and machine learning algorithms to analyze talent information in big data, extract key talent characteristics and trend analysis, supporting talent prediction and strategic planning. | 25 (80.95%) | 3 (14.29%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 46 | Introducing intelligent talent analysis tools, integrating natural language processing (NLP) and data mining technology, automating the identification and evaluation process of key talents. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 47 | Implementing intelligent personnel recruitment management to achieve automatic resume screening and smart matching of candidates, improving recruitment efficiency and accuracy. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.10** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 48 | Developing machine learning-based recruitment recommendation engines to automatically recommend the best-matched candidates based on job requirements and candidate skills and experience. | 24 (76.19%) | 3 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |
| 49 | Implementing intelligent learning management to personalize recommendations for suitable training courses and learning paths based on employees' learning history, interests, and abilities. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 50 | Combining data analysis to continuously optimize learning content and resource allocation, enhancing training effectiveness and employee development quality. | 23 (71.54%) | 2 (9.52%) | 3 (14.29%) | 1 (4.76%) | 0 (0.00%) |

**Table 4.10** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 51 | Introducing artificial intelligence algorithms to analyze performance data, identify and predict performance patterns, uncover hidden performance trends, and associated factors. | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 52 | Using machine learning technology to establish personalized performance evaluation models, supporting fair evaluations across departments and positions, and providing real-time feedback and improvement suggestions. | 26 (85.71%) | 3 (14.29%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 53 | Introducing intelligent job demand analysis tools to automatically match job requirements with candidate skills and experience using big data and machine learning. | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Table 4.10** (Continued)

| No. | Resolution | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 54 | Combining data mining technology to analyze historical recruitment data and successful cases, optimizing the recruitment decision-making process to enhance scientific accuracy and precision. | 10 (33.33%) | 6 (28.57%) | 6 (28.57%) | 2 (9.52%) | 0 (0.00%) |
| 55 | Introducing intelligent compensation management, combining machine learning and predictive analytics to automatically identify salary inequalities and potential welfare optimization opportunities. | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 56 | Introducing intelligent compensation adjustment tools to automatically recommend fair and reasonable salary adjustment plans based on performance data, enhancing employee satisfaction and system accuracy. | 26 (85.71%) | 2 (9.52%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |

According to Table 4.10, the responses to scale questions 75 to 86 from the 30 experts are summarized. Based on the analysis of the frequency and percentage of strongly agree responses among experts, the top three resolutions for addressing the current problem of “The application of artificial intelligence technology needs to be enhanced” are as follows: implementing intelligent personnel recruitment management to achieve automatic resume screening and smart matching of candidates, improving recruitment efficiency and accuracy, introducing intelligent job demand analysis tools to automatically match job requirements with candidate skills and experience using big data and machine learning, introducing artificial intelligence algorithms to analyze performance data, identify and predict performance patterns, uncover hidden performance trends, and associated factors, with the agreement of 100.00%, 100.00%, and 95.24%. The bottom three resolutions in terms of expert agreement are: combining data mining technology to analyze historical recruitment data and successful cases, optimizing the recruitment decision-making process to enhance scientific accuracy and precision, combining data analysis to continuously optimize learning content and resource allocation, enhancing training effectiveness and employee development quality, developing machine learning-based recruitment recommendation engines to automatically recommend the best-matched candidates based on job requirements and candidate skills and experience, with the agreement of 33.33%, 71.43%, and 76.19%.

**Table 4.11** Factors affecting Personnel Information Management (n=30)

| | Factor | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 1 | Unified data management standards | 18 (47.62%) | 4 (19.05%) | 4 (19.05%) | 2 (9.52%) | 1 (4.76%) |
| 2 | Complete data storage | 25 (80.95%) | 2 (9.52%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |
| 3 | Accurate data recording | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 4 | Smooth data sharing | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 5 | Secure data management | 17 (42.86%) | 6 (28.57%) | 4 (19.05%) | 1 (4.76%) | 1 (4.76%) |

According to Table 4.11, it presents the responses of 30 experts to scale questions 87 to 91. Based on expert feedback, among the five factors that may affect Personnel Information Management, "Smooth data sharing" has the highest agreement, with 100.00% strongly agree. In contrast, "Secure data management" has the lowest agreement, with 42.86% strongly agree.

**Table 4.12** Factors affecting Personnel Recruitment Management (n=30)

| | Factor | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 6 | Personalized recruitment process | 10 (33.33%) | 6 (28.57%) | 4 (19.05%) | 3 (14.29%) | 1 (4.76%) |
| 7 | Intelligent recruitment strategies | 27 (90.48%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 8 | Unified data storage management | 17 (42.86%) | 5 (23.81%) | 4 (19.05%) | 2 (9.52%) | 1 (4.76%) |
| 9 | Automated recruitment process implementation | 23 (71.43%) | 4 (19.05%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |
| 10 | Intelligent candidate matching and screening | 24 (76.19%) | 3 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |

According to Table 4.12, it presents the responses of 30 experts to scale questions 92 to 96. Based on expert feedback, among the five factors that may affect Personnel Recruitment Management, "Intelligent recruitment strategies" and "Intelligent candidate matching and screening" have the highest agreement, with 90.48% strongly agree. In contrast, "Personalized recruitment process" has the lowest agreement, with only 33.33% strongly agree.

**Table 4.13** Factors affecting Personnel Development Management (n=30)

| | Factor | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 11 | Investment in information technology resources | 19 (52.38%) | 3 (14.29%) | 3 (14.29%) | 3 (14.29%) | 1 (4.76%) |
| 12 | Identification of training needs | 27 (90.48%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 13 | Personalized development of training plans | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 14 | Reasonable allocation of resources | 26 (85.71%) | 2 (9.52%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 15 | Targeted guidance | 20 (57.14%) | 2 (9.52%) | 3 (14.29%) | 4 (19.05%) | 0 (0.00%) |

According to Table 4.13, it shows the responses of 21 experts to scale questions 97 to 101. Based on expert feedback, among the five factors that may affect Personnel Development Management, "Personalized development of training plans" has the highest agreement, with 100.00% strongly agree. In contrast, "Investment in information technology resources" has the lowest agreement, with 52.38% strongly agree.

**Table 4.14** Factors affecting Performance Assessment Management (n=30)

| | Factor | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 16 | Intelligent performance assessment | 28 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 17 | Accurate data management | 18 (47.62%) | 4 (19.05%) | 5 (23.81%) | 2 (9.52%) | 0 (0.00%) |
| 18 | In-depth analysis of performance data | 25 (80.95%) | 3 (14.29%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 19 | Unified assessment standards | 15 (33.33%) | 6 (28.57%) | 4 (19.05%) | 3 (14.29%) | 1 (4.76%) |
| 20 | Sound feedback mechanism | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

According to Table 4.14, it displays the responses of 30 experts to scale questions 102 to 106. Based on expert feedback, among the five factors that may affect Performance Assessment Management, "Sound feedback mechanism" has the highest agreement, with 100.00% strongly agree. In contrast, "Unified assessment standards" has the lowest agreement, with 33.33% strongly agree.

**Table 4.15** Factors affecting Internal Promotion Management (n=30)

| | Factor | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 21 | Unified hiring criteria | 24 (76.19%) | 3 (14.29%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |
| 22 | Complete data information | 16 (38.10%) | 6 (28.57%) | 3 (14.29%) | 3 (14.29%) | 1 (4.76%) |
| 23 | Intelligent job matching | 27 (90.48%) | 1 (4.76%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 24 | Transparent decision-making process | 18 (47.62%) | 4 (19.05%) | 5 (23.81%) | 2 (9.52%) | 0 (0.00%) |
| 25 | Clear promotion channels | 25 (85.71%) | 1 (4.76%) | 2 (9.52%) | 0 (0.00%) | 0 (0.00%) |

According to Table 4.15, it presents the responses of 30 experts to scale questions 107 to 111. Based on expert feedback, among the five factors that may affect Internal Promotion Management, "Intelligent job matching" has the highest agreement, with 90.48% strongly agree. In contrast, "Complete data information" has the lowest agreement, with 38.10% strongly agree.

**Table 4.16** Factors affecting Compensation and Benefits Management (n=30)

| | Factor | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 26 | Centralized unified data management | 10 (33.33%) | 5 (23.81%) | 5 (23.81%) | 3 (14.29%) | 1 (4.76%) |
| 27 | Intelligent analysis of compensation and benefits | 27 (95.24%) | 1 (4.76%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 28 | Personalized incentive measures | 30 (100.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |
| 29 | Intelligent policy analysis | 21 (85.71%) | 4 (9.52%) | 4 (4.76%) | 0 (0.00%) | 0 (0.00%) |
| 30 | Fair compensation and benefits system | 11 (38.10%) | 5 (19.05%) | 6 (23.81%) | 4 (14.29%) | 2 (4.76%) |

According to Table 4.16, it shows the responses of 21 experts to scale questions 112 to 116. Based on expert feedback, among the five factors that may affect Compensation and Benefits Management, "Personalized incentive measures" has the highest agreement, with 100.00% strongly agree. In contrast, "Centralized unified data management" has the lowest agreement, with 33.33% strongly agree.

**4.2 Results for Round 2: Results of median, mode, and inter-quartile range analysis of expert survey data on effective resolutions on university Traditional Chinese Medicine Information Technology.**

**Table 4.17** The data management organization and policy standards need to be unified

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 1 | Establish and promote unified personnel information storage standards and data formats to ensure smooth data exchange between departments and reduce information redundancy. | 5.0 | 5 | 0.0 |
| 2 | Implement data quality management mechanisms to ensure data accuracy and completeness, reducing information redundancy and errors. | 5.0 | 5 | 0.0 |
| 3 | Standardize candidate information collection in the recruitment process to ensure completeness and consistency, enhancing data quality and analysis reliability. | 4.0 | 5 | 3.0 |
| 4 | Enhance data management for employee training records, establish comprehensive archives of training data to quantify and compare the effectiveness of different training programs. | 4.0 | 4 | 1.0 |
| 5 | Design evaluation standards for training effectiveness, incorporating pre- and post-training skill assessments and job performance evaluations to objectively assess the impact and value of training. | 4.5 | 5 | 2.0 |
| 6 | Develop unified standards for performance data collection and evaluation methods to ensure consistency and accuracy in performance evaluations. | 5.0 | 5 | 0.0 |
| 7 | Establish detailed and unified job description standards, introduce job requirement analysis tools or systems to facilitate accurate matching of recruitment needs and actual positions, reducing failure rates. | 4.0 | 4 | 1.0 |

**Table 4.17** (Continued)

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 8 | Regularly update and review job descriptions to ensure alignment with organizational development and talent needs, enhancing efficiency and accuracy in job appointments. | 5.0 | 5 | 2.0 |
| 9 | Establish a data system conducive to scientifically formulating compensation and benefits policies to ensure fairness in benefits and enhance employee satisfaction. | 5.0 | 5 | 0.0 |
| 10 | Develop unified compensation and benefits standards and processes to ensure policy transparency and consistency, preventing unfair practices and improving employee acceptance and satisfaction with benefits policies. | 4.0 | 4 | 1.0 |

According to Table 4.17, 9 of the 10 resolutions to unify the data management organization and policy standards showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating that 90.00% of the resolutions achieved a high degree of consensus. The opinions that I strongly agree with are as follows: item 1, 2, 6, 9 are all (Md=5.0, Mo=5, IQR=0.0); items 5, 8 (IQR=2.0) and item 4, 7, 10 (Md=4.0) among the moderate consensus resolutions, although most experts agree on these resolutions, there is still a degree of opinion Disagreement. Items 3 (Md=4.0, IQR=3.0) indicate that there are significant differences in opinions among the experts.

**Table 4.18** The application of big data technology needs to be strengthened

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 11 | Introducing big data analytics platforms or tools to extract talent insights and predictive analytics from vast amounts of data helps identify potential high-value talents. | 5.0 | 5 | 0.0 |
| 12 | Integrating data from various sources facilitates comprehensive talent information integration and exploration. | 4.0 | 5 | 2.0 |
| 13 | Utilizing big data analytics technology for intelligent candidate screening and matching enhances recruitment precision and efficiency. | 5.0 | 5 | 0.0 |
| 14 | Implementing data-driven recruitment decision strategies analyzes recruitment data to optimize processes and resource allocation, reducing recruitment cycles and costs. | 5.0 | 5 | 0.0 |
| 15 | Providing personalized training recommendations and course suggestions based on employees' skills and career development needs using big data analysis. | 5.0 | 5 | 0.0 |
| 16 | Analyzing training effectiveness and employee performance data to adjust and optimize personalized training plans maximizes training resource utilization and significantly improves training effectiveness. | 3.5 | 5 | 2.0 |
| 17 | Using big data technology to analyze multidimensional employee performance data and trends provides objective, accurate performance evaluations and recommendations. | 5.0 | 5 | 0.0 |
| 18 | Establishing real-time data monitoring and feedback mechanisms enables managers to track and adjust performance evaluation processes promptly, ensuring fairness and transparency. | 5.0 | 5 | 0.0 |

**Table 4.18** (Continued)

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 19 | Introducing intelligent job demand analysis tools combined with big data analysis identifies and forecasts future job demand trends, enhancing the scientific accuracy and precision of job appointment decisions. | 5.0 | 5 | 0.0 |
| 20 | Implementing data-driven job matching automates recommending the best-matched candidates based on job requirements and employee skill characteristics, optimizing job appointment efficiency and quality. | 5.0 | 5 | 2.0 |
| 21 | Analyzing compensation data and employee benefit preferences using big data analysis tools to formulate scientifically-based compensation and benefits policies improves policy accuracy and employee satisfaction. | 4.0 | 4 | 2.0 |
| 22 | Establishing dynamic adjustment mechanisms monitors the execution effectiveness and employee feedback of compensation and benefits policies through big data analysis, enabling timely strategy adjustments to maintain effectiveness and adaptability. | 4.0 | 5 | 3.0 |

According to Table 4.18, 8 of the 12 resolutions to strengthen the application of big data technology showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating that 66.67% of the resolutions achieved a high degree of consensus. The opinions that I strongly agree with are as follows: item 11, 13, 14, 15, 17, 18, 19 are all (Md=5.0, Mo=5, IQR=0.0); items 20 (IQR=2.0) among the moderate consensus resolutions, shows a degree of opinion Disagreement. Items 12 and 21 (Md=4.0, IQR=2.0), item 16 (Md=3.5, IQR=2.0), item 22 (Md=4.0, IQR=3.0) indicate that there are significant differences in opinions among the experts.

**Table 4.19** The application of information technology needs to be deepened

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 23 | Implementing comprehensive Traditional Chinese Medicine Information Technology information management ensures support for multiple data sources and real-time updates, enhancing efficiency and accuracy in information management. | 5.0 | 5 | 0.0 |
| 24 | Deploying a complete recruitment management system integrates various online resources to improve recruitment efficiency and candidate experience. | 4.0 | 4 | 1.0 |
| 25 | Introducing artificial intelligence and big data analytics automate candidate screening and matching, reducing manual operations and enhancing the scientific accuracy and precision of recruitment decisions. | 5.0 | 5 | 0.0 |
| 26 | Implementing intelligent employee learning management integrates employee skill profiles and career development plans to provide personalized training needs analysis and course recommendations. | 5.0 | 5 | 0.0 |
| 27 | Introducing advanced digital technologies provides immersive learning experiences and practical environments, enhancing training interactivity and attractiveness. | 4.0 | 4 | 1.0 |
| 28 | Establishing a performance evaluation management system that supports diverse evaluation methods and customized evaluation criteria improves the accuracy and timeliness of evaluation data. | 4.0 | 4 | 1.0 |
| 29 | Using big data technology to analyze employee performance data identifies trends and optimization suggestions, enhancing the objectivity and scientific nature of the evaluation process. | 5.0 | 5 | 0.0 |

**Table 4.19** (Continued)

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 30 | Implementing intelligent talent management combines big data analytics to automatically match the best candidates for different positions, enhancing the scientific accuracy and precision of recruitment decisions. | 5.0 | 5 | 0.0 |
| 31 | Using intelligent analysis tools to quickly and accurately understand and respond to recruitment needs optimizes recruitment processes and reduces Traditional Chinese Medicine Information Technology costs. | 3.5 | 4 | 1.0 |
| 32 | Implementing integrated compensation and benefits management supports various benefit schemes and flexible benefit options, enhancing the scientific nature of compensation and benefits policies and employee satisfaction. | 5.0 | 5 | 0.0 |
| 33 | Introducing intelligent compensation analysis tools optimizes compensation based on data-driven decisions, increasing organizational attractiveness and retention rates for talent. | 4.5 | 5 | 2.0 |

According to Table 4.19, all the 11 resolutions to deepen the application of information technology showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating that 100.00% of the resolutions achieved a high degree of consensus. The opinions that I strongly agree with are as follows: item 23, 25, 26, 29, 30, 32 are all (Md=5.0, Mo=5, IQR=0.0); items 24, 27, 28 (Md=4.0), item 31 (Md=3.5), item 33 (IQR=2.0) among the moderate consensus resolutions, shows a degree of opinion Disagreement.

**Table 4.20** Database technology needs to be improved

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 34 | Redesign and optimize the database system to improve data storage efficiency and query speed. | 4.0 | 4 | 1.0 |
| 35 | Introduce caching mechanisms and optimize indexing to reduce data retrieval time, enhancing real-time information management efficiency. | 5.0 | 5 | 1.0 |
| 36 | Develop customized recruitment modules to allow quick configuration and adjustment of recruitment processes to meet changing recruitment needs and data growth. | 5.0 | 5 | 0.0 |
| 37 | Implement comprehensive learning management to support recording and managing various forms of training. | 3.5 | 4 | 2.0 |
| 38 | Conduct in-depth analysis of training data through data analysis tools to evaluate training effectiveness and optimize resource allocation. | 4.0 | 5 | 2.0 |
| 39 | Update performance evaluation systems to support customized evaluation metrics and scoring criteria, adapting to specific needs of different departments and positions. | 4.0 | 4 | 2.0 |
| 40 | Introduce flexible evaluation modules to allow adjustment and optimization of evaluation processes, enhancing fairness and accuracy of evaluation results. | 4.0 | 5 | 2.0 |
| 41 | Unified job description and position requirement management to ensure integrity and consistency in information input and updates. | 4.0 | 4 | 1.0 |
| 42 | Implement automated data validation and audit mechanisms to promptly identify and correct inaccuracies, improving the scientific accuracy and precision of hiring decisions. | 5.0 | 5 | 0.0 |

**Table 4.20** (Continued)

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 43 | Strengthen security measures of the compensation and benefits database, including data encryption, access control, and real-time monitoring. | 4.0 | 5 | 2.0 |
| 44 | Implement regular data backup and recovery strategies to mitigate risks of accidental data loss or damage, enhancing reliability of compensation and benefits management and employee trust. | 3.5 | 4 | 2.0 |

According to Table 4.20, 5 of the 11 resolutions to improve Database technology showed high consistency with the inter-quartile range ($0.0 \leq IQR \leq 1.8$) or median ($4.5 \leq Md \leq 5.0$), indicating that 45.45% of the resolutions achieved a high degree of consensus. The opinions that I strongly agree with are as follows: item 36, 42 are (Md=5.0, Mo=5, IQR=0.0), item 35 (Md=5.0, Mo=5, IQR=1); items 34 and 41 (Md=4.0) among the moderate consensus resolutions, shows a degree of opinion Disagreement. Items 38, 39, 40, 43 (Md=4.0, IQR=2.0), item 37, 44 (Md=3.5, IQR=2.0) indicate that there are significant differences in opinions among the experts.

**Table 4.21** The application of artificial intelligence technology needs to be enhanced

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 45 | Introducing artificial intelligence and machine learning algorithms to analyze talent information in big data, extract key talent characteristics and trend analysis, supporting talent prediction and strategic planning. | 5.0 | 5 | 2.0 |
| 46 | Introducing intelligent talent analysis tools, integrating natural language processing (NLP) and data mining technology, automating the identification and evaluation process of key talents. | 5.0 | 5 | 0.0 |
| 47 | Implementing intelligent personnel recruitment management to achieve automatic resume screening and smart matching of candidates, improving recruitment efficiency and accuracy. | 5.0 | 5 | 0.0 |
| 48 | Developing machine learning-based recruitment recommendation engines to automatically recommend the best-matched candidates based on job requirements and candidate skills and experience. | 4.0 | 5 | 2.0 |
| 49 | Implementing intelligent learning management to personalize recommendations for suitable training courses and learning paths based on employees' learning history, interests, and abilities. | 5.0 | 5 | 0.0 |
| 50 | Combining data analysis to continuously optimize learning content and resource allocation, enhancing training effectiveness and employee development quality. | 4.0 | 5 | 2.0 |
| 51 | Introducing artificial intelligence algorithms to analyze performance data, identify and predict performance patterns, uncover hidden performance trends, and associated factors. | 5.0 | 5 | 0.0 |

**Table 4.21** (Continued)

| Item | Resolution | Md | Mo | IQR |
|---|---|---|---|---|
| 52 | Using machine learning technology to establish personalized performance evaluation models, supporting fair evaluations across departments and positions, and providing real-time feedback and improvement suggestions. | 5.0 | 5 | 0.0 |
| 53 | Introducing intelligent job demand analysis tools to automatically match job requirements with candidate skills and experience using big data and machine learning. | 5.0 | 5 | 0.0 |
| 54 | Combining data mining technology to analyze historical recruitment data and successful cases, optimizing the recruitment decision-making process to enhance scientific accuracy and precision. | 3.5 | [3,4] | 2.0 |
| 55 | Introducing intelligent compensation management, combining machine learning and predictive analytics to automatically identify salary inequalities and potential welfare optimization opportunities. | 5.0 | 5 | 0.0 |
| 56 | Introducing intelligent compensation adjustment tools to automatically recommend fair and reasonable salary adjustment plans based on performance data, enhancing employee satisfaction and system accuracy. | 5.0 | 5 | 0.0 |

According to Table 4.21, 9 of the 12 resolutions to enhance the application of artificial intelligence technology showed high consistency with the inter-quartile range ($0.0 \leq IQR \leq 1.8$) or median ($4.5 \leq Md \leq 5.0$), indicating that 75.00% of the resolutions achieved a high degree of consensus. The opinions that I strongly agree with are as follows: item 46, 47, 49, 51, 52, 53, 55, 56 are all (Md=5.0, Mo=5, IQR=0.0); items 45 (IQR=2.0) among the moderate consensus resolutions, shows a degree of opinion

Disagreement. Items 48, 50 (Md=4.0, IQR=2.0), item 54 (Md=3.5, IQR=2.0) indicate that there are significant differences in opinions among the experts.

### 4.3 Result for Round 2: Identified resolutions to improve Traditional Chinese Medicine Information Technology

**Table 4.22** Identified resolutions to improve Traditional Chinese Medicine Information Technology

| Item | Resolution | Result |
|---|---|---|
| **The data management organization and policy standards need to be unified** | | |
| 1 | Establish and promote unified personnel information storage standards and data formats to ensure smooth data exchange between departments and reduce information redundancy. | Pass |
| 2 | Implement data quality management mechanisms to ensure data accuracy and completeness, reducing information redundancy and errors. | Pass |
| 3 | Standardize candidate information collection in the recruitment process to ensure completeness and consistency, enhancing data quality and analysis reliability. | Eliminated |
| 4 | Enhance data management for employee training records, establish comprehensive archives of training data to quantify and compare the effectiveness of different training programs. | Pass |
| 5 | Design evaluation standards for training effectiveness, incorporating pre- and post-training skill assessments and job performance evaluations to objectively assess the impact and value of training. | Pass |
| 6 | Develop unified standards for performance data collection and evaluation methods to ensure consistency and accuracy in performance evaluations. | Pass |

**Table 4.22** (Continued)

| Item | Resolution | Result |
|---|---|---|
| 7 | Establish detailed and unified job description standards, introduce job requirement analysis tools or systems to facilitate accurate matching of recruitment needs and actual positions, reducing failure rates. | Pass |
| 8 | Regularly update and review job descriptions to ensure alignment with organizational development and talent needs, enhancing efficiency and accuracy in job appointments. | Pass |
| 9 | Establish a data system conducive to scientifically formulating compensation and benefits policies to ensure fairness in benefits and enhance employee satisfaction. | Pass |
| 10 | Develop unified compensation and benefits standards and processes to ensure policy transparency and consistency, preventing unfair practices and improving employee acceptance and satisfaction with benefits policies. | Pass |
| **The application of big data technology needs to be strengthened** | | |
| 11 | Introducing big data analytics platforms or tools to extract talent insights and predictive analytics from vast amounts of data helps identify potential high-value talents. | Pass |
| 12 | Integrating data from various sources facilitates comprehensive talent information integration and exploration. | Eliminated |
| 13 | Utilizing big data analytics technology for intelligent candidate screening and matching enhances recruitment precision and efficiency. | Pass |
| 14 | Implementing data-driven recruitment decision strategies analyzes recruitment data to optimize processes and resource allocation, reducing recruitment cycles and costs. | Pass |
| 15 | Providing personalized training recommendations and course suggestions based on employees' skills and career development | Pass |

**Table 4.22** (Continued)

| Item | Resolution | Result |
|---|---|---|
| | needs using big data analysis. | |
| 16 | Analyzing training effectiveness and employee performance data to adjust and optimize personalized training plans maximizes training resource utilization and significantly improves training effectiveness. | Eliminated |
| 17 | Using big data technology to analyze multidimensional employee performance data and trends provides objective, accurate performance evaluations and recommendations. | Pass |
| 18 | Establishing real-time data monitoring and feedback mechanisms enables managers to track and adjust performance evaluation processes promptly, ensuring fairness and transparency. | Pass |
| 19 | Introducing intelligent job demand analysis tools combined with big data analysis identifies and forecasts future job demand trends, enhancing the scientific accuracy and precision of job appointment decisions. | Pass |
| 20 | Implementing data-driven job matching automates recommending the best-matched candidates based on job requirements and employee skill characteristics, optimizing job appointment efficiency and quality. | Pass |
| 21 | Analyzing compensation data and employee benefit preferences using big data analysis tools to formulate scientifically-based compensation and benefits policies improves policy accuracy and employee satisfaction. | Eliminated |
| 22 | Establishing dynamic adjustment mechanisms monitors the execution effectiveness and employee feedback of compensation and benefits policies through big data analysis, enabling timely strategy adjustments to maintain effectiveness and adaptability. | Eliminated |

**Table 4.22** (Continued)

| Item | Resolution | Result |
|---|---|---|
| **The application of information technology needs to be deepened** | | |
| 23 | Implementing comprehensive human resources information management ensures support for multiple data sources and real-time updates, enhancing efficiency and accuracy in information management. | Pass |
| 24 | Deploying a complete recruitment management system integrates various online resources to improve recruitment efficiency and candidate experience. | Pass |
| 25 | Introducing artificial intelligence and big data analytics automate candidate screening and matching, reducing manual operations and enhancing the scientific accuracy and precision of recruitment decisions. | Pass |
| 26 | Implementing intelligent employee learning management integrates employee skill profiles and career development plans to provide personalized training needs analysis and course recommendations. | Pass |
| 27 | Introducing advanced digital technologies provides immersive learning experiences and practical environments, enhancing training interactivity and attractiveness. | Pass |
| 28 | Establishing a performance evaluation management system that supports diverse evaluation methods and customized evaluation criteria improves the accuracy and timeliness of evaluation data. | Pass |
| 29 | Using big data technology to analyze employee performance data identifies trends and optimization suggestions, enhancing the objectivity and scientific nature of the evaluation process. | Pass |
| 30 | Implementing intelligent talent management combines big data analytics to automatically match the best candidates for | Pass |

**Table 4.22** (Continued)

| Item | Resolution | Result |
|---|---|---|
| | different positions, enhancing the scientific accuracy and precision of recruitment decisions. | |
| 31 | Using intelligent analysis tools to quickly and accurately understand and respond to recruitment needs optimizes recruitment processes and reduces Traditional Chinese Medicine Information Technology costs. | Pass |
| 32 | Implementing integrated compensation and benefits management supports various benefit schemes and flexible benefit options, enhancing the scientific nature of compensation and benefits policies and employee satisfaction. | Pass |
| 33 | Introducing intelligent compensation analysis tools optimizes compensation based on data-driven decisions, increasing organizational attractiveness and retention rates for talent. | Pass |
| **Database technology needs to be improved** | | |
| 34 | Redesign and optimize the database system to improve data storage efficiency and query speed. | Pass |
| 35 | Introduce caching mechanisms and optimize indexing to reduce data retrieval time, enhancing real-time information management efficiency. | Pass |
| 36 | Develop customized recruitment modules to allow quick configuration and adjustment of recruitment processes to meet changing recruitment needs and data growth. | Pass |
| 37 | Implement comprehensive learning management to support recording and managing various forms of training. | Eliminated |
| 38 | Conduct in-depth analysis of training data through data analysis tools to evaluate training effectiveness and optimize resource allocation. | Eliminated |

**Table 4.22** (Continued)

| Item | Resolution | Result |
|---|---|---|
| 39 | Update performance evaluation systems to support customized evaluation metrics and scoring criteria, adapting to specific needs of different departments and positions. | Eliminated |
| 40 | Introduce flexible evaluation modules to allow adjustment and optimization of evaluation processes, enhancing fairness and accuracy of evaluation results. | Eliminated |
| 41 | Unified job description and position requirement management to ensure integrity and consistency in information input and updates. | Pass |
| 42 | Implement automated data validation and audit mechanisms to promptly identify and correct inaccuracies, improving the scientific accuracy and precision of hiring decisions. | Pass |
| 43 | Strengthen security measures of the compensation and benefits database, including data encryption, access control, and real-time monitoring. | Eliminated |
| 44 | Implement regular data backup and recovery strategies to mitigate risks of accidental data loss or damage, enhancing reliability of compensation and benefits management and employee trust. | Eliminated |
| **The application of artificial intelligence technology needs to be enhanced** | | |
| 45 | Introducing artificial intelligence and machine learning algorithms to analyze talent information in big data, extract key talent characteristics and trend analysis, supporting talent prediction and strategic planning. | Pass |
| 46 | Introducing intelligent talent analysis tools, integrating natural language processing (NLP) and data mining technology, automating the identification and evaluation process of key talents. | Pass |

**Table 4.22** (Continued)

| Item | Resolution | Result |
|---|---|---|
| 47 | Implementing intelligent personnel recruitment management to achieve automatic resume screening and smart matching of candidates, improving recruitment efficiency and accuracy. | Pass |
| 48 | Developing machine learning-based recruitment recommendation engines to automatically recommend the best-matched candidates based on job requirements and candidate skills and experience. | Eliminated |
| 49 | Implementing intelligent learning management to personalize recommendations for suitable training courses and learning paths based on employees' learning history, interests, and abilities. | Pass |
| 50 | Combining data analysis to continuously optimize learning content and resource allocation, enhancing training effectiveness and employee development quality. | Eliminated |
| 51 | Introducing artificial intelligence algorithms to analyze performance data, identify and predict performance patterns, uncover hidden performance trends, and associated factors. | Pass |
| 52 | Using machine learning technology to establish personalized performance evaluation models, supporting fair evaluations across departments and positions, and providing real-time feedback and improvement suggestions. | Pass |
| 53 | Introducing intelligent job demand analysis tools to automatically match job requirements with candidate skills and experience using big data and machine learning. | Pass |
| 54 | Combining data mining technology to analyze historical recruitment data and successful cases, optimizing the recruitment decision-making process to enhance scientific accuracy and precision. | Eliminated |

**Table 4.22** (Continued)

| Item | Resolution | Result |
|---|---|---|
| 55 | Introducing intelligent compensation management, combining machine learning and predictive analytics to automatically identify salary inequalities and potential welfare optimization opportunities. | Pass |
| 56 | Introducing intelligent compensation adjustment tools to automatically recommend fair and reasonable salary adjustment plans based on performance data, enhancing employee satisfaction and system accuracy. | Pass |

Based on the survey results in Table 4.22, 21 experts were invited to conduct a feasibility assessment on 56 improvement resolutions proposed for 5 problems in Traditional Chinese Medicine Information Technology. Among them, 14 items were eliminated due to low recognition (IQR≥1.80 and Md≤4.5) by expert reviews, and the remaining 42 improvement resolutions were highly recognized by expert reviews. The eliminated items are: Standardize candidate information collection in the recruitment process to ensure completeness and consistency, enhancing data quality and analysis reliability; integrating data from various sources facilitates comprehensive talent information integration and exploration; analyzing training effectiveness and employee performance data to adjust and optimize personalized training plans maximizes training resource utilization and significantly improves training effectiveness; analyzing compensation data and employee benefit preferences using big data analysis tools to formulate scientifically-based compensation and benefits policies improves policy accuracy and employee satisfaction; establishing dynamic adjustment mechanisms monitors the execution effectiveness and employee feedback of compensation and benefits policies through big data analysis, enabling timely strategy adjustments to maintain effectiveness and adaptability; implement comprehensive learning management to support recording and managing various

forms of training; conduct in-depth analysis of training data through data analysis tools to evaluate training effectiveness and optimize resource allocation; update performance evaluation systems to support customized evaluation metrics and scoring criteria, adapting to specific needs of different departments and positions; introduce flexible evaluation modules to allow adjustment and optimization of evaluation processes, enhancing fairness and accuracy of evaluation results; strengthen security measures of the compensation and benefits database, including data encryption, access control, and real-time monitoring; implement regular data backup and recovery strategies to mitigate risks of accidental data loss or damage, enhancing reliability of compensation and benefits management and employee trust; developing machine learning-based recruitment recommendation engines to automatically recommend the best-matched candidates based on job requirements and candidate skills and experience; combining data analysis to continuously optimize learning content and resource allocation, enhancing training effectiveness and employee development quality; combining data mining technology to analyze historical recruitment data and successful cases, optimizing the recruitment decision-making process to enhance scientific accuracy and precision.

**4.4 Results for Round 2: Results of median, mode and inter-quartile range analysis of influencing factors on Traditional Chinese Medicine Information Technology.**

**Table 4.23** Factors affecting Personnel Information Management

| Items | Influencing factors | Md | Mo | IQR |
|---|---|---|---|---|
| 1 | Unified data management standards | 4.0 | 5 | 2.0 |
| 2 | Complete data storage | 5.0 | 5 | 2.0 |
| 3 | Accurate data recording | 5.0 | 5 | 0.0 |
| 4 | Smooth data sharing | 5.0 | 5 | 0.0 |
| 5 | Secure data management | 4.0 | 5 | 2.0 |

According to Table 4.23, it was found that 3 of the 5 factors that affect Personnel Information Management showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating 60.00% A high degree of consensus was achieved on the influencing factors. The opinions that I strongly agree with are as follows: item 3 “Accurate data recording” and item 4 “Smooth data sharing”, are (Md=5.0, Mo=5, IQR=0.0); item 2 “Complete data storage” (IQR=2.0) among the moderate consensus factors, shows a degree of opinion Disagreement; item 1 (Md=4.0, IQR=2.0) and item 5 (Md=4.0, IQR=2.0) show that there are significant differences in opinions among the experts.

**Table 4.24** Factors affecting Personnel Recruitment Management

| Items | Influencing factors | Md | Mo | IQR |
|---|---|---|---|---|
| 6 | Personalized recruitment process | 4.0 | 4 | 2.0 |
| 7 | Intelligent recruitment strategies | 5.0 | 5 | 0.0 |
| 8 | Unified data storage management | 4.0 | 5 | 2.0 |
| 9 | Automated recruitment process implementation | 5.0 | 5 | 1.0 |
| 10 | Intelligent candidate matching and screening | 5.0 | 5 | 1.0 |

According to Table 4.24, it was found that 3 of the 5 factors that affect Personnel Recruitment Management showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating 60.00% A high degree of consensus was achieved on the influencing factors. The opinions that I strongly agree with are as follows: item 7 “Intelligent recruitment strategies” (Md=5.0, Mo=5, IQR=0.0), item 9 “Automated recruitment process implementation” and item 10 “Intelligent candidate matching and screening”, are (Md=5.0, Mo=5, IQR=1.0); item 6 (Md=4.0, Mo=4, IQR=2.0) and item 5 (Md=4.0, Mo=5, IQR=2.0) show that there are significant differences in opinions among the experts.

**Table 4.25** Factors affecting Personnel Development Management

| Items | Influencing factors | Md | Mo | IQR |
|---|---|---|---|---|
| 11 | Investment in information technology resources | 4.0 | 5 | 2.0 |
| 12 | Identification of training needs | 5.0 | 5 | 0.0 |
| 13 | Personalized development of training plans | 5.0 | 5 | 0.0 |
| 14 | Reasonable allocation of resources | 5.0 | 5 | 2.0 |
| 15 | Targeted guidance | 4.0 | 5 | 2.0 |

According to Table 4.25, it was found that 3 of the 5 factors that affect Personnel Development Management showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating 60.00% A high degree of consensus was achieved on the influencing factors. The opinions that I strongly agree with are as follows: item 12 “Identification of training needs” and item 13 “Personalized development of training plans”, are (Md=5.0, Mo=5, IQR=0.0); item 14 “Reasonable allocation of resources” (IQR=2.0) among the moderate consensus factors, shows a degree of opinion Disagreement; item 11 and item 15 are (Md=4.0, Mo=5, IQR=2.0), show that there are significant differences in opinions among the experts.

**Table 4.26** Factors affecting Performance Assessment Management

| Items | Influencing factors | Md | Mo | IQR |
|---|---|---|---|---|
| 16 | Intelligent performance assessment | 5.0 | 5 | 0.0 |
| 17 | Accurate data management | 4.0 | [3, 5] | 2.0 |
| 18 | In-depth analysis of performance data | 5.0 | 5 | 2.0 |
| 19 | Unified assessment standards | 4.0 | 4 | 2.0 |
| 20 | Sound feedback mechanism | 5.0 | 5 | 0.0 |

According to Table 4.26, it was found that 3 of the 5 factors that affect Performance Assessment Management showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating 60.00% A high degree of consensus was achieved on the influencing factors. The opinions that I strongly agree with are as follows: item 16 “Intelligent performance assessment” and item 20 “Sound feedback mechanism”, are (Md=5.0, Mo=5, IQR=0.0); item 18 “In-depth analysis of performance data” (IQR=2.0) among the moderate consensus factors, shows a degree of opinion Disagreement; item 17 (Md=4.0, Mo=[3, 5], IQR=2.0) and item 19 (Md=4.0, Mo=4, IQR=2.0), show that there are significant differences in opinions among the experts.

**Table 4.27** Factors affecting Internal Promotion Management

| Items | Influencing factors | Md | Mo | IQR |
|---|---|---|---|---|
| 21 | Unified hiring criteria | 5.0 | 5 | 1.0 |
| 22 | Complete data information | 4.0 | 4 | 2.0 |
| 23 | Intelligent job matching | 5.0 | 5 | 0.0 |
| 24 | Transparent decision-making process | 4.0 | [3, 5] | 2.0 |
| 25 | Clear promotion channels | 5.0 | 5 | 2.0 |

According to Table 4.27, it was found that 3 of the 5 factors that affect Internal Promotion Management showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating 60.00% A high degree of consensus was achieved on the influencing factors. The opinions that I strongly agree with are as follows: item 23 “Intelligent job matching” (Md=5.0, Mo=5, IQR=0.0), and item 21 “Unified hiring criteria” (Md=5.0, Mo=5, IQR=1.0); item 25 “Clear promotion channels” (IQR=2.0) among the moderate consensus factors, shows a degree of opinion Disagreement; item 22 (Md=4.0, Mo=4, IQR=2.0) and item 24 (Md=4.0, Mo=[3, 5], IQR=2.0), show that there are significant differences in opinions among the experts.

**Table 4.28** Factors affecting Compensation and Benefits Management

| Items | Influencing factors | Md | Mo | IQR |
|---|---|---|---|---|
| 26 | Centralized unified data management | 4.0 | [3, 4] | 2.0 |
| 27 | Intelligent analysis of compensation and benefits | 5.0 | 5 | 0.0 |
| 28 | Personalized incentive measures | 5.0 | 5 | 0.0 |
| 29 | Intelligent policy analysis | 5.0 | 5 | 2.0 |
| 30 | Fair compensation and benefits system | 4.0 | [3, 5] | 2.0 |

According to Table 4.28, it was found that 3 of the 5 factors that affect Compensation and Benefits Management showed high consistency with the inter-quartile range (0.0≤IQR≤1.8) or median (4.5≤Md≤5.0), indicating 60.00% A high degree of consensus was achieved on the influencing factors. The opinions that I strongly agree with are as follows: item 27 “Intelligent analysis of compensation and benefits” and item 28 “Personalized incentive measures”, are (Md=5.0, Mo=5, IQR=0.0); item 29 “Intelligent policy analysis” (IQR=2.0) among the moderate consensus factors, shows a degree of opinion Disagreement; item 26 (Md=4.0, Mo=[3, 4], IQR=2.0)and item 30 (Md=4.0, Mo=[3, 5], IQR=2.0), show that there are significant differences in opinions among the experts.

**4.5 Results for Round 2: Identified factors influencing Traditional Chinese Medicine Information Technology**

**Table 4.29** Identified factors influencing Traditional Chinese Medicine Information Technology

| Item | Factor | Result |
|---|---|---|
| **Personnel Information Management** | | |
| 1 | Unified data management standards | Eliminated |
| 2 | Complete data storage | Pass |
| 3 | Accurate data recording | Pass |
| 4 | Smooth data sharing | Pass |
| 5 | Secure data management | Eliminated |
| **Personnel Recruitment Management** | | |
| 6 | Personalized recruitment process | Eliminated |
| 7 | Intelligent recruitment strategies | Pass |
| 8 | Unified data storage management | Eliminated |
| 9 | Automated recruitment process implementation | Pass |
| 10 | Intelligent candidate matching and screening | Pass |
| **Personnel Development Management** | | |
| 11 | Investment in information technology resources | Eliminated |
| 12 | Identification of training needs | Pass |
| 13 | Personalized development of training plans | Pass |
| 14 | Reasonable allocation of resources | Pass |
| 15 | Targeted guidance | Eliminated |
| **Performance Assessment Management** | | |
| 16 | Intelligent performance assessment | Pass |
| 17 | Accurate data management | Eliminated |
| 18 | In-depth analysis of performance data | Pass |
| 19 | Unified assessment standards | Eliminated |
| 20 | Sound feedback mechanism | Pass |

**Table 4.29** (Continued)

| Item | Factor | Result |
|---|---|---|
| **Internal Promotion Management** | | |
| 21 | Unified hiring criteria | Pass |
| 22 | Complete data information | Eliminated |
| 23 | Intelligent job matching | Pass |
| 24 | Transparent decision-making process | Eliminated |
| 25 | Clear promotion channels | Pass |
| **Compensation and Benefits Management** | | |
| 26 | Centralized unified data management | Eliminated |
| 27 | Intelligent analysis of compensation and benefits | Pass |
| 28 | Personalized incentive measures | Pass |
| 29 | Intelligent policy analysis | Pass |
| 30 | Fair compensation and benefits system | Eliminated |

According to the findings in Table 4.29, 30 experts were asked to conduct a feasibility assessment on 30 factors that affect Traditional Chinese Medicine Information Technology. Among them, 26 factors were unanimously approved, and 12 items were adjusted due to low expert recognition (IQR≥1.80 and Md≤4.5). The eliminated items are: Unified data management standards; secure data management; personalized recruitment process; unified data storage management; investment in information technology resources; targeted guidance; accurate data management; unified assessment standards; complete data information; transparent decision-making process; centralized unified data management; fair compensation and benefits system.

**4.6 Expert survey questionnaire to confirm "current problems and resolutions on Traditional Chinese Medicine Information Technology for Chinese Universities"**

In order to design an effective and highly targeted expert survey questionnaire, 5 experts in the fields of Traditional Chinese Medicine Information Technology, information technology and educational management were provided a expert survey questionnaire of “problems and resolutions on Traditional Chinese Medicine Information Technology for Chinese Universities”. 5 experts need independently check the validity, appropriateness, clarity and completeness of the expression of each question and evaluate completely agree (1 point), partly agree (0 point) or disagree (-1 point). The evaluation results were shown in Table 4.30.

**Table 4.30** Evaluation results of the expert survey questionnaire on “problems and resolutions on Traditional Chinese Medicine Information Technology Universities”

| Aspects Evaluated | Evaluate the Content | N | Freq | Percentage | S.D. | IOC |
|---|---|---|---|---|---|---|
| Question Validity | The questions are closely aligned with the research objectives, and the quantity is reasonable. | 5 | 5 | 100 | 0.000 | 1.000 |
| Clarity of Expression | The expression is appropriate, clear, unambiguous and targeted. | 5 | 4 | 90 | 0.400 | 0.800 |
| Completeness of Content | The content is relatively comprehensive and covers issues related to Traditional Chinese Medicine Information Technology. | 5 | 5 | 100 | 0.000 | 1.000 |

**Table 4.30** (Continued)

| Aspects Evaluated | Evaluate the Content | N | Freq | Percentage | S.D. | IOC |
|---|---|---|---|---|---|---|
| Procedural Regularity | Information collection, sorting, analysis and other processes are standardized. | 5 | 5 | 100 | 0.000 | 1.000 |
| Effectiveness of Conclusions | The conclusions drawn regarding curren Traditional Chinese Medicine Information Technology problems and countermeasures are valid. | 5 | 5 | 100 | 0.000 | 1.000 |

According to Table 4.30, all experts completely agree on the following four aspects of the expert survey questionnaire: Question Validity, Completeness of Content, Procedural Regularity, and Effectiveness of Conclusions. One expert partly agrees on the Clarity of Expression and has provided suggestions for modification of question No.57, 113, and 115.

## Phase 2: To design Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China.

Based on the results of Objective 1 and the research results of the literature review, a comprehensive analysis of the current problems, resolutions and influencing factors of Traditional Chinese Medicine Information Technology was conducted. According the research results, there are 6 main subjects in university Traditional Chinese Medicine Information Technology: “Personnel Information Management”, “Personnel Recruitment Management”, “Personnel Development Management”, “Performance Assessment Management”, “Internal Promotion Management”, and “Compensation and Benefits Management”. There are 18 influencing factors to address the current problems in university Traditional Chinese

Medicine Information Technology: Complete data storage; accurate data recording, smooth data sharing, intelligent recruitment strategies, automated recruitment process implementation, intelligent candidate matching and screening, identification of training needs, personalized development of training plans, reasonable allocation of resources, intelligent performance assessment, in-depth analysis of performance data, sound feedback mechanism, unified hiring criteria, intelligent job matching, clear promotion channels, intelligent analysis of compensation and benefits, personalized incentive measures, and intelligent policy analysis. Using systematic thinking and combined with the management practice of Traditional Chinese Medicine Information Technology, an decision To design Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China (Figure 4.1)


**Figure 4.1** Introduction to TCM Information Course

1. For Personnel Information Management:

The relationship between the subject and influencing factors

Complete data storage: In personnel information management, comprehensive data storage is crucial to ensuring that systems can fully record and maintain all key employee information. This includes, but is not limited to, personal

profiles, employment history, training records, and more. Having comprehensive data storage means that managers and decision-makers can access and analyze detailed information about employees at any time, facilitating more effective Traditional Chinese Medicine Information Technology planning, employee development, and performance management.

Thorough records of personal profiles enable managers to gain deeper insights into each employee's background, skills, and strengths, thereby allowing more precise task assignments and appropriate career development opportunities. Comprehensive storage of employment history showcases employees' growth paths and career transitions within the organization, providing valuable reference points for promotions and talent development. Additionally, detailed training records help evaluate employees' skill levels and learning outcomes, supporting future training plans and skill enhancements. So, establishing and maintaining a complete data storage system is a critical step in ensuring smooth organizational operations and informed decision-making.

Accurate data recording: In personnel information management, the accuracy and completeness of data are paramount. Modern digital technologies ensure high data accuracy through automated and systematic data entry and updating processes, significantly reducing the potential for human errors. This is particularly critical for the Traditional Chinese Medicine Information Technology department, as these data serve not only as crucial bases for employee assessments, compensation management, and legal compliance but also directly impact the effectiveness of management decisions and organizational efficiency.

Precise and error-free data recording not only assists managers in accurately assessing employee performance and needs but also supports the development of fair and reasonable compensation plans and ensures compliance with legal requirements without mistakes. With reliable information at hand, managers can confidently make strategic decisions, thereby enhancing overall management quality and organizational competitiveness. Therefore, establishing a robust data management system to ensure data accuracy and completeness has become an

indispensable management practice for modern organizations. This not only helps mitigate management risks and improve the scientific basis of decision-making but also provides solid data support and assurance for sustained organizational development.

Smooth data sharing: Smooth data sharing between different departments within an organization is crucial for significantly enhancing efficiency and collaboration. Modern digital technologies facilitate this seamless data sharing through integrated Traditional Chinese Medicine Information Technology Information Systems or other data management tools. Such sharing ensures that all relevant personnel can access necessary information promptly, such as personnel deployment between departments and the formation of cross-departmental project teams.

Smooth data sharing not only helps reduce redundant work and mitigate information silos but also fosters internal information flow and knowledge sharing within the organization. Closer cooperation and streamlined communication between departments enhance overall work efficiency and collaborative efforts. Additionally, by sharing data, organizations can respond more swiftly to market changes and customer demands, thereby boosting organizational agility and competitiveness. Establishing and maintaining a smooth data sharing mechanism has become an integral part of modern organizational management. By optimizing data flow and sharing, organizations can better leverage internal resources, strengthen collaboration and communication among teams, and achieve more effective and sustainable business development.

The relationship between influencing factors

Complete data storage and accurate data recording: Complete data storage forms the basis for accurate and error-free data recording. If data storage is incomplete, it becomes impossible to ensure the accuracy and comprehensiveness of data. Therefore, these two factors typically depend on each other, where a deficiency in one can affect the implementation of the other.

Accurate data recording and smooth data sharing: Accurate and error-free data recording provides a reliable information foundation for smooth data sharing.

Only when data accuracy is guaranteed can departments and individuals trust and effectively utilize this data for sharing and utilization. Therefore, data accuracy directly influences the smoothness and effectiveness of data sharing.

Smooth Data Sharing and complete data storage: Smooth data sharing requires a complete data storage system as its support. Incomplete or scattered data storage across different systems can lead to difficulties and inconsistencies in data sharing. Therefore, to achieve smooth data sharing, it is essential to ensure an integrated and complete data storage system is in place.

2. For Personnel Recruitment Management:

The relationship between the subject and influencing factors

Intelligent recruitment strategies: Intelligent recruitment strategies utilize data analysis and artificial intelligence technologies to optimize recruitment processes. By analyzing market trends, candidate skill requirements, and the effectiveness of campus recruitment, these intelligent strategies can provide more precise recruitment directions and methods. This helps Traditional Chinese Medicine Information Technology management departments to quickly and effectively find talent that meets their needs, thereby enhancing recruitment quality and efficiency.

Intelligent recruitment strategies leverage real-time analysis of big data and individual candidate information to accurately forecast talent supply and demand in the market, allowing for adjustments in recruitment strategies and resource allocation. For instance, based on specific industry or position talent shortages, the system can recommend the most effective recruitment channels and strategies to ensure the success and cost-effectiveness of recruitment activities. Intelligent recruitment strategies optimize candidate experience through personalized communication and interactions, enhancing attractiveness and satisfaction with the organization, thus improving recruitment branding and long-term talent attraction. In summary, intelligent recruitment strategies are not only key to improving recruitment efficiency but also crucial strategies for optimizing Traditional Chinese Medicine Information Technology management and enhancing organizational competitiveness.

Automated recruitment process implementation: Automating recruitment processes through the use of recruitment management systems and workflow automation tools simplifies tedious tasks in the recruitment process such as job posting, resume screening, and interview scheduling. This automation not only saves time and manpower costs but also reduces the possibility of human errors, thereby enhancing overall consistency and transparency in the recruitment process.

Automated recruitment processes enable automatic job ad postings, management and screening of a large number of applicant resumes, and automated scheduling of interviews. With preset workflows and rules, the system ensures that each step of the recruitment process is executed according to predefined standards and schedules, thereby improving recruitment efficiency and management quality. Automating recruitment processes enhances the candidate experience through quick responses and timely communication, strengthening candidates' positive impressions and trust in the organization. For recruitment teams, automation tools provide more time and resources to focus on strategic recruitment activities and candidate relationship management, further enhancing recruitment success rates and effectiveness.

Intelligent candidate matching and screening: Intelligent candidate matching utilizes algorithms and data analytics to swiftly and accurately screen candidates based on job requirements, skills, experience, and other factors. This intelligent screening process not only significantly reduces the workload of hiring managers but also ensures that only qualified candidates proceed to the interview stage, thereby greatly enhancing recruitment efficiency and success rates.

The intelligent matching system analyzes candidates' resumes, skills, educational backgrounds, and other relevant information, aligning them with specific job requirements and cultural fit within the company, to autonomously assess each candidate's suitability. This not only saves Traditional Chinese Medicine Information Technology departments time and effort in manually screening resumes but also reduces the potential for subjective bias and erroneous judgments. For the recruitment process, intelligent candidate matching not only improves efficiency but

also enhances its scientific rigor and fairness. Candidates receive responses more quickly, enhancing their overall impression of the organization and candidate experience. Moreover, this systematic screening process saves costs for the organization, mitigates risks and uncertainties in the recruitment process, and facilitates quicker filling of key positions, thereby fostering sustainable organizational development.

The relationship between influencing factors

Intelligent recruitment strategies and automated recruitment process implementation: Intelligent recruitment strategies provide guidance and data support for implementing automated recruitment processes. By analyzing recruitment data and trends, intelligent strategies optimize various aspects of automated processes to ensure higher efficiency and precision.

Automated recruitment process implementation and intelligent candidate matching and screening: Automated recruitment processes directly integrate technologies for intelligent candidate matching. These automated processes swiftly apply intelligent matching algorithms to screen and select the most suitable candidates from a large pool, thereby accelerating recruitment cycles and improving recruitment accuracy.

Intelligent candidate matching and screening and intelligent recruitment strategies: Intelligent candidate matching directly benefits from the data support and guidance of intelligent recruitment strategies. Optimized recruitment strategies provide more precise recruitment requirements and standards, thereby enhancing the algorithms and accuracy of intelligent candidate matching.

3. For Personnel Development Management:

The relationship between the subject and influencing factors

Identification of training needs: Under the support of digital technology, training needs identification uses data analysis and employee assessments to precisely pinpoint employees' training needs and development directions. This includes analyzing the gap between current skills and required skills, identifying opportunities and challenges for career development, and aligning with

organizational strategic goals. By accurately identifying training needs, the HR department can plan and implement training programs tailored to enhance employees' professional skills and performance. This personalized training approach not only promotes employees' career development but also significantly enhances overall organizational efficiency and competitiveness.

Data analysis plays a crucial role in training needs identification by collecting and analyzing performance data, training records, and career development plans to determine specific training content and resource allocation for each employee at different stages. This personalized approach ensures the maximization of training investments, enhances employee satisfaction and motivation, and helps build a continuous learning organization.

Personalized development of training plans: Advancements in digital technology have made personalized training development plans feasible, tailoring training content and scheduling based on each employee's specific needs and development goals. Unlike traditional one-size-fits-all methods, personalized training plans can more accurately match employees' learning backgrounds, skill levels, and career aspirations, thereby enhancing their engagement and motivation in training.

Through detailed analysis of individualized needs, the HR department can design training paths that best suit employees' growth requirements. This meticulous management not only improves training effectiveness and conversion rates but also stimulates employees' interest and initiative in learning. In such a training environment, employees are more likely to quickly absorb and apply acquired knowledge, thereby better aligning personal career goals with organizational strategic objectives. Personalized training development plans also provide organizations with distinct talent development advantages. By effectively harnessing and utilizing employees' potential, organizations can cultivate a more creative and adaptable workforce, laying a solid foundation for sustained innovation and competitive advantage.

Reasonable allocation of resources: In personnel development management, optimal resource allocation is crucial to ensure the effective implementation of

various training activities. This involves efficiently allocating various resources required for training, including manpower, time, and budget, to support the smooth execution of the entire training cycle and achieve expected training goals.

Digital technology plays a vital role in optimal resource allocation through modern training management systems and resource optimization tools, enabling precise management and monitoring of training resources. The system intelligently allocates manpower and schedules based on specific training needs and priorities, ensuring efficient operation and smooth progress of training activities. Through precise budget control and optimized resource utilization, organizations can maximize the cost-effectiveness of training activities, avoiding resource waste and unnecessary expenditures. Optimal resource allocation not only enhances the execution efficiency of training activities but also ensures that employees receive adequate support and attention during the training process, thereby accelerating their personal career skill development and promoting career advancement. By designing meticulous training resource allocation strategies, organizations can more effectively respond to changing training demands, enhance overall talent quality and organizational performance, and achieve an organic integration of HR management best practices and strategic objectives.

The relationship between influencing factors

Identification of training needs and personalized development of training plans: Training needs identification forms the foundation and basis for developing personalized training development plans. Only by clearly understanding employees' specific needs and bottlenecks can effective personalized training plans be developed to meet their individualized requirements in skills and career development.

Personalized development of training plans and reasonable allocation of resources: Personalized training development plans require optimal allocation of training resources to support their implementation. Resource allocation should be based on different training needs and plan priorities to ensure effective resource

utilization, while avoiding waste or shortages of resources, thereby ensuring the success and effectiveness of training.

Reasonable allocation of resources and Identification of training needs: Optimal resource allocation should be based on a thorough understanding and identification of training needs to ensure that resources are allocated in alignment with actual requirements. Effective resource allocation not only supports the identification and formulation of training needs but also enhances the flexibility and responsiveness of training activities, promoting continuous learning and development among employees.

4. For Performance Assessment Management

The relationship between the subject and influencing factors

Intelligent performance assessment: Intelligent performance evaluation utilizes data analysis and artificial intelligence technologies to assess and analyze employees' work performance and goal achievements. This method reduces the impact of subjective factors significantly through automated and standardized evaluation processes, thereby enhancing objectivity and fairness. Intelligent systems can swiftly and accurately analyze employees' performance based on predefined evaluation criteria and data indicators, assisting managers in more precisely evaluating each employee's work performance. Furthermore, this technology-supported performance evaluation provides reliable data for personalized career development paths and decisions regarding rewards and penalties. It enables managers to make more informed talent management decisions based on objective data, thereby improving employee job satisfaction and overall performance levels.

In-depth analysis of performance data: In-depth analysis of performance data utilizes big data technologies and data mining methods to thoroughly analyze employees' performance data and uncover potential patterns and trends. This analysis not only identifies areas of excellence and areas needing improvement but also reveals key factors and driving forces influencing performance. By delving into the information behind the data, Traditional Chinese Medicine Information Technology departments can gain a more accurate understanding of employee

performance, providing a basis for targeted improvement strategies and personalized development plans.

In-depth analysis of performance data helps managers understand the reasons behind different performance levels, optimizing management methods and incentive mechanisms to further enhance overall organizational performance. This approach goes beyond assessing current performance to predicting future performance trends, supporting long-term talent management decisions. Through data-driven analysis, organizations can more precisely identify areas needing focused attention and improvement, thereby achieving sustained performance improvement and enhancing organizational effectiveness.

Sound feedback mechanism: A sound feedback mechanism is crucial for ensuring the effectiveness of performance evaluations and enhancing employee engagement. Through timely and accurate feedback, managers can clearly communicate performance evaluation results and development suggestions to employees. Effective feedback not only encourages employees to improve themselves but also promotes their career growth and personal development.

An effective feedback mechanism establishes a communication bridge between employees and management, enhancing employees' trust and satisfaction with the performance evaluation process. Through proactive feedback, employees can better understand their strengths and areas for improvement at work, thereby adjusting their work methods more effectively and improving work efficiency. A sound feedback mechanism also helps managers identify challenges and needs that employees may face, supporting personalized development plans and career guidance. Through regular, systematic feedback meetings or tools, managers and employees can collectively discuss performance evaluation results, formulate feasible improvement measures, and ensure the fairness and transparency of the feedback process.

The relationship between influencing factors

Intelligent performance assessment and in-depth analysis of performance data: Intelligent performance evaluation provides high-quality data sources for the in-

depth analysis of performance data. Through automated and standardized evaluation processes, the data generated by intelligent systems can be directly used for deep analysis, helping uncover patterns and insights hidden within the data, further refining evaluation methods and standards.

In-depth analysis of performance data and sound feedback mechanism: In-depth analysis of performance data provides objective and detailed basis for a sound feedback mechanism. By thoroughly analyzing employees' performance data, managers can more accurately identify improvement opportunities and development needs, providing strong support and suggestions for feedback, thereby enhancing the effectiveness and impact of feedback.

Sound feedback mechanism and intelligent performance assessment: A sound feedback mechanism is an integral part of intelligent performance evaluation. An effective feedback mechanism not only provides timely feedback on evaluation results but also promotes continuous improvement and learning among employees, which in turn enhances the data quality and application effectiveness of intelligent systems.

5. For Internal Promotion Management

The relationship between the subject and influencing factors

Unified hiring criteria: Unified hiring criteria refer to the importance of ensuring fairness and consistency in the internal promotion process. These criteria include clear standards, conditions, and procedures for hiring. Through these standards, managers and the Traditional Chinese Medicine Information Technology department can objectively evaluate candidates and avoid the influence of subjective biases. Unified hiring criteria not only enhance the transparency and fairness of the internal promotion process but also effectively reduce risks and legal liabilities.

Appointment standards typically cover aspects such as candidates' educational backgrounds, work experience, skills, and qualification requirements. These standards not only help managers assess whether candidates meet job requirements but also ensure that each candidate receives fair treatment during evaluations. For managers, adhering to unified employment criteria can streamline

decision-making processes and reduce risks associated with subjective judgments. This consistency and fairness are significant not only during candidate hiring but also throughout the entire internal promotion process, from candidate screening to assessment and final decision-making.

Intelligent job matching: Intelligent job matching utilizes data analysis and artificial intelligence technology to accurately match candidates' skills, experience, and backgrounds with job requirements. Supported by algorithms, intelligent position matching can quickly screen out the most suitable candidates for the position, enhancing the efficiency and success rate of internal promotions. This technology not only saves time and costs in the internal promotion process but also reduces errors and resource wastage, thereby optimizing the quality and effectiveness of job hiring management.

Intelligent job matching relies on advanced data analysis and machine learning algorithms to accurately analyze candidates' resumes and skills and compare them with job descriptions. Through this method, managers can more quickly find qualified candidates, improving efficiency and success rates. This technology also minimizes biases and subjective judgments that may arise in Traditional Chinese Medicine Information Technology, ensuring that the internal promotion process is fair and objective. By using an intelligent matching system, intelligent position matching can more effectively manage talent mobility, enhance employee job satisfaction, and provide career development opportunities. The continuous optimization and application of this technology are crucial means for improving Traditional Chinese Medicine Information Technology efficiency and competitiveness.

Clear promotion channels: Clear Promotion Channels: Clear promotion channels provide employees with a transparent career development path and opportunities, which play a significant role in their career planning and work motivation. By establishing clear promotion mechanisms, employees can understand their growth potential and career direction within the organization, enhancing their engagement and loyalty. Digital technology plays a crucial role in creating and maintaining transparent and fair promotion systems. It can automatically record and

analyze employee performance data, update and display career progress in real-time, making the promotion system more open, fair, and efficient.

In a transparent promotion system, evaluation criteria, promotion conditions, and procedural processes are clearly defined and made public. Employees can assess their performance against these standards, understanding the areas needing improvement. This transparency reduces uncertainty and suspicion in the promotion process, increasing employee trust and satisfaction with the organization. Additionally, clear promotion channels provide employees with specific goals and directions, stimulating their intrinsic motivation and work enthusiasm. Through digital technology, organizations can manage talent more precisely and efficiently. Automated performance evaluation systems can monitor and record employee performance in real-time, offering comprehensive and objective data to support fair promotion decisions. At the same time, digital promotion management systems can provide personalized training and development advice based on employees' individual development plans, helping them better achieve their career goals. This not only enhances employees' professional skills and performance but also improves the overall efficiency and competitiveness of the organization.

The relationship between influencing factors

Unified hiring criteria and intelligent job matching: Unified hiring criteria provide the foundation and standards for intelligent job matching. Only after defining the recruitment standards and conditions for a position can the intelligent system accurately identify and evaluate candidates who meet the requirements, ensuring precision and effectiveness in matching.

Intelligent job matching and clear promotion channels: Intelligent job matching directly impacts employees' future career development and promotion opportunities. By optimizing the recruitment matching process, it ensures that each employee can maximize their potential in a position that suits their abilities and experience, thereby providing a solid foundation for future promotions.

Clear promotion channels and unified hiring criteria: Clear promotion channels must be built on unified hiring criteria to ensure fairness and transparency

in promotion decisions. Unified criteria not only guide the recruitment process but also provide a stable and reliable basis for employees' career development and promotion.

6. For Compensation and Benefits Management

The relationship between the subject and influencing factors

Intelligent analysis of compensation and benefits: Intelligent analysis of compensation and benefits leverages data analytics and artificial intelligence to conduct a comprehensive evaluation of employee compensation and benefits data. This method helps Traditional Chinese Medicine Information Technology departments gain a deeper understanding of the rationality of current compensation structures, ensure the organization’s competitiveness in the market, and assess employee satisfaction with existing compensation and benefits policies.

Intelligent analysis begins with a detailed categorization and organization of compensation data, including base salary, bonuses, allowances, and benefits. By comparing this data with market benchmarks, the intelligent system can evaluate whether the organization’s compensation levels are competitive and identify areas needing adjustment to attract and retain top talent. Besides external market comparisons, intelligent analysis also performs internal assessments of salary distribution across different departments and positions, ensuring fairness and rationality in the compensation structure. In terms of benefits, intelligent analysis collects and organizes employee feedback on various benefit programs. Through data mining techniques, it identifies the types of benefits employees value most and highlights deficiencies in the current benefits system. Additionally, intelligent analysis can predict future compensation trends, assisting managers in budgeting and planning ahead.

Personalized incentive measures: Personalized incentive measures use employees’ performance data, personal preferences, and career development needs to create targeted incentive plans. These personalized incentives not only enhance employees’ motivation and satisfaction but also boost their loyalty and sense of belonging, encouraging long-term contributions to the organization.

With digital technology and data analysis, managers can clearly see each employee's job performance, strengths, and areas needing improvement. This data provides a reliable foundation for developing personalized incentive plans. Different employees have varying needs and expectations regarding incentives; some may prioritize financial rewards, while others might value growth and development opportunities more. By understanding employees' personal preferences, managers can design incentives that better meet their needs, increasing the effectiveness of the incentives. Digital technology plays a critical role in the design and implementation of personalized incentive measures. Advanced data analysis tools enable managers to accurately capture employees' performance data and personal needs, allowing for the creation of scientific and reasonable incentive plans.

Intelligent policy analysis: Intelligent policy analysis uses data-driven methods, combining market research, industry standards, and internal data to develop and adjust compensation and benefits policies. It is not merely a simple decision-making process but a systematic approach aimed at ensuring fairness, competitiveness, and the motivational impact of the compensation and benefits system. This approach allows organizations to better adapt to market changes and internal demands, achieving sustainable development.

Intelligent policy analysis relies heavily on detailed data support. Through market research, managers can understand the compensation levels and benefits standards within the industry, ensuring that their organization's compensation and benefits remain competitive. Internal data analysis helps organizations understand their compensation structure, employee satisfaction, and performance, allowing them to develop policies that are more aligned with actual conditions. Digital technology plays a crucial role in Intelligent policy analysis. Modern data analysis and simulation tools can process vast amounts of complex data, helping decision-makers identify patterns and trends. Simulation tools can predict the potential impacts and effects of new policies before implementation, enabling more precise and rational decision-making. Intelligent policy analysis also involves the continuous adjustment and optimization of policies. Through ongoing data monitoring and feedback,

managers can identify issues in policy implementation and make necessary adjustments to ensure the policies remain fair, competitive, and effective.

The relationship between influencing factors

Intelligent analysis of compensation and benefits and personalized incentive measures: Intelligent analysis of compensation and benefits and benefits provides a data foundation for personalized incentive measures. Through comprehensive analysis of compensation and benefits, we can understand employee needs and preferences, thereby designing more effective personalized incentive measures to enhance employee satisfaction and motivation.

Personalized Incentive Measures and intelligent policy analysis: Personalized incentive measures need to be based on intelligent policy analysis. Only with a rational foundation in compensation and benefits policies can personalized incentive measures be effectively implemented and operationalized. Intelligent policy analysis provides frameworks and standards to ensure the fairness and reasonableness of personalized incentive measures.

Scientific Policy Formulation and intelligent analysis of compensation and benefits: Scientific policy formulation relies on the data support provided by intelligent analysis of compensation and benefits and benefits. Through intelligent analysis of compensation and benefits data, deficiencies and areas for improvement within policies can be identified, thereby enabling the formulation of more scientific and reasonable compensation and benefits policies.

**2. Round 1: Expert Review of Decision Making Models for Traditional Chinese Medicine Information Technology**

This part uses the Delphi method, and 30 experts evaluate the Decision Making Model for Traditional Chinese Medicine Information Technology. Among them, there are 10 interns who are graduating from Yunnan Traditional Chinese Medicine Universities and Secondary Vocational Schools.10Information technology professionals in schools and hospitals .10people in Chinese society who are in need of remote diagnosis and treatment and information technology. 30 experts

consultation forms were issued and all were recovered, with a recovery rate of 100%. This demonstrates a highly positive attitude and a high degree of engagement among the experts. 30 experts were invited to evaluate the model based on their academic expertise and experience. The options are "agree," "partly agree," or "disagree," with scores of 1, 0, and -1 respectively. If the experts select "Partly Agree" or "Disagree", they should provide an explanation or suggestion. The details were shown in Tables 4.31 and Table 4.32.

**Table 4.31** Results of the first round of expert review of the Decision Making Model for Traditional Chinese Medicine Information Technology

| Assessment Items | N | Freq | Percentage | S.D |
|---|---|---|---|---|
| Decision Making Model for Traditional Chinese Medicine Information Technology | 30 | 25 | 80.95 | 0.3922 |

**Table 4.32** Detailed results of the first round of expert review of the Decision Making Model for University Traditional Chinese Medicine Information Technology

| Assessment Items | Expert Number | Expert Research Field | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Expert Explanation |
| Decision Making Model for University Traditional Chinese Medicine Information Technology | 1 | Traditional Chinese Medicine Information Technology | 1 | | | |
| | 2 | Traditional Chinese Medicine Information | | 0 | | The model should reflect the interrelationship between the six aspects of Traditional |

**Table 4.32** (Continue)

| Assessment Items | Expert Number | Expert Research Field | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Expert Explanation |
| | | Technology | | | | Chinese Medicine Information Technology, and the relationship between them should be a two-way influence, rather than a one-way cycle. |
| | 3 | Traditional Chinese Medicine Information Technology | 1 | | | |
| Decision Making Model for University Traditional Chinese Medicine Information Technology | 4 | Traditional Chinese Medicine Information Technology | 1 | | | |
| | 5 | Traditional Chinese Medicine Information Technology | 1 | | | |
| | 6 | Traditional Chinese Medicine Information | | 0 | | The interactions among the six elements, as well as their impact on |

**Table 4.32** (Continue)

| Assessment Items | Expert Number | Expert Research Field | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Expert Explanation |
| | | Technology | | | | enhancing Traditional Chinese Medicine Information Technology, should be indicated with arrowheads. |
| | 7 | Traditional Chinese Medicine Information Technology | 1 | | | |
| Decision Making Model for University Traditional Chinese Medicine Information Technology | 8 | Information Technology | 1 | | | |
| | 9 | Information Technology | 1 | | | |
| | 10 | Information Technology | 1 | | | |
| | 11 | Information Technology | 1 | | | |
| | 12 | Information Technology | 1 | | | |
| | 13 | Information Technology | 1 | | | |
| | 14 | Information Technology | 1 | | | |

**Table 4.32** (Continue)

| Assessment Items | Expert Number | Expert Research Field | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Expert Explanation |
| | 15 | Information Technology Management | 1 | | | |
| | 16 | Information Technology Management | | 0 | | In order to provide clearer guidance for practice, the relationships between the various elements of the model need to be further refined. |
| | 17 | Information Technology Management | 1 | | | |
| Decision Making Model for University Traditional Chinese Medicine Information Technology | 18 | Information Technology Management | 1 | | | |
| | 19 | Educational Management | 1 | | | |
| | 20 | Educational Management | | 0 | | The degree of influence of each factor found in the research is different, and should be accounted for in |

**Table 4.32** (Continue)

| Assessment Items | Expert Number | Expert Research Field | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Expert Explanation |
| | | | | | | the model by ranking or other means. |
| | 21 | Educational Management | 1 | | | |
| | 22 | Information Technology Management | 1 | | | |
| | 23 | Information Technology Management | 1 | | | |
| Decision Making Model for University Traditional Chinese Medicine Information Technology | 24 | Educational Management | 1 | | | |
| | 25 | Educational Management | | 0 | | The degree of influence of each factor found in the research is different, and should be accounted for in the model by ranking or other means. |
| | 26 | Educational Management | 1 | | | |

**Table 4.32** (Continue)

| Assessment Items | Expert Number | Expert Research Field | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Expert Explanation |
| Decision Making Model for University Traditional Chinese Medicine Information Technology | 27 | Traditional Chinese Medicine Information Technology | 1 | | | |
| | 28 | Traditional Chinese Medicine Information Technology | | 0 | | The interactions among the six elements, as well as their impact on enhancing Traditional Chinese Medicine Information Technology, should be indicated with arrowheads. |
| | 29 | Traditional Chinese Medicine Information Technology | 1 | | | |
| | 30 | Information Technology | 1 | | | |

3. Modified model description:

“Personnel Information Management-Personnel Recruitment Management” relationship: Personnel information management provides data support and analytical basis for personnel recruitment management, while personnel recruitment management enhances and optimizes the data in personnel information management through effective recruitment, creating a positive feedback loop that jointly improves the overall efficiency and effectiveness of Traditional Chinese Medicine Information Technology.

“Personnel Information Management-Personnel Development Management” relationship: Personnel information management collects and stores detailed employee data, providing a foundation and basis for personnel development management to create personalized training and development plans. Personnel development management enhances employee skills and capabilities, continually updating and enriching the data in the personnel information management system, promoting ongoing employee growth and organizational development.

“Personnel Information Management-Performance Assessment Management” relationship: Personnel information management provides basic employee profiles and historical performance data, serving as a reliable assessment foundation for performance evaluation management. Performance evaluation management, through regular performance assessments, updates and enriches the data in the personnel information management system to make it more comprehensive and dynamic.

“Personnel Recruitment Management-Internal Promotion Management” relationship: Personnel information management records and manages employees' qualifications and past performances, providing the basis and support for internal promotion management to identify and select suitable internal candidates. Internal promotion management assesses employees' potential and suitability, feeding back into the personnel information management system to promote career development and rational utilization of internal talents within the organization.

“Personnel Information Management-Compensation and Benefits Management” relationship: Personnel information management records and manages

employees' compensation and benefits information, providing data support and a foundation for compensation and benefits management to ensure accurate implementation and administration of policies. Compensation and benefits management, based on data analysis from the personnel information management system, formulates and adjusts compensation and benefits strategies to meet organizational and employee needs, thereby maintaining competitiveness and employee satisfaction.

"Personnel Recruitment Management-Personnel Development Management" relationship: Personnel recruitment management attracts and selects suitable talents, providing a foundation for personnel development management to effectively train and develop new employees within the organization. Personnel development management enhances employee skills and capabilities through training and career planning, thereby supporting and optimizing the effectiveness of personnel recruitment management, creating a continuous development cycle.

"Personnel Recruitment Management-Performance Assessment Management" relationship: Personnel recruitment management ensures alignment of new employees' capabilities and potential with job requirements through precise selection processes, providing a solid starting point and reference for performance evaluation management. Performance evaluation management, through regular assessments of employee performance, feeds back into recruitment strategies to optimize selection criteria and processes, further enhancing the efficiency and quality of personnel recruitment.

"Personnel Recruitment Management-Internal Promotion Management" relationship: Personnel recruitment management identifies and selects suitable internal candidates, providing an important talent pool for internal promotion management. Internal promotion management motivates and develops existing employees, while also integrating effectively with external recruitment, promoting the rational flow and development of internal talent within the organization.

"Personnel Recruitment Management-Compensation and Benefits Management" relationship: Personnel recruitment management attracts and retains

talent by defining suitable compensation and benefits conditions, providing initial data and reference for the compensation and benefits management of new employees. Compensation and benefits management designs and adjusts compensation and benefits schemes based on market competition and organizational strategy to support smooth personnel recruitment management and long-term retention of employees.

“Personnel Development Management-Performance Assessment Management” relationship: Personnel development management enhances employee capabilities through training and development programs, providing a solid performance foundation and growth opportunities for performance evaluation management. Performance evaluation management, by assessing employee performance and growth, feeds back into personnel development management to adjust and optimize training plans, fostering continuous employee growth and organizational performance improvement.

“Personnel Development Management-Internal Promotion Management” relationship: Personnel development management enhances employee capabilities through training and development programs, providing mature and developed candidates for internal promotion management. Internal promotion management, by offering advancement opportunities and development paths, motivates employees to engage in growth opportunities, fostering effective utilization and enhancement of internal talent within the organization.

“Personnel Development Management-Compensation and Benefits Management” relationship: Personnel development management enhances employee capabilities and skills, directly influencing the formulation and adjustment of incentive measures in compensation and benefits management. Compensation and benefits management, based on employee development and contributions, designs and adjusts corresponding policies to foster ongoing employee development and satisfaction.

“Performance Assessment Management-Internal Promotion Management” relationship: Performance evaluation management provides objective criteria and

references for internal promotion management by assessing employees' job performance and capabilities. Internal promotion management, in turn, indirectly influences and guides the execution and outcomes of performance evaluation management by defining promotion criteria and procedures.

“Performance Assessment Management-Compensation and Benefits Management” relationship: Performance evaluation management provides a fair basis for compensation and benefits management by assessing employee performance and serving as a reference for designing incentive mechanisms. Compensation and benefits management, based on performance evaluation results, formulates and adjusts employees' compensation and benefits to incentivize and reward outstanding performance.

“Internal Promotion Management” relationship-Compensation and Benefits Management” relationship: Internal promotion management, by defining criteria and opportunities for employee advancement, directly influences compensation and benefits management in adjusting employees' pay and benefits. Compensation and benefits management, in turn, adjusts employees' pay and benefits based on their promotions and performance, affecting the fairness of internal promotion management and employees' promotion motivation.

Based on the data analysis of expert survey feedback, the influencing factors were ranked according to their Median and IQR values, distinguishing their impact on Traditional Chinese Medicine Information Technology. Following the ranking results, the importance of each factor was confirmed with experts. In the model, factors with smaller numbers have a greater impact.

In this model, all elements interact with each other. For example, Complete data storage and accurate data recording can effectively enhance the quality of personnel information management, promote the sharing of personnel information, and provide robust data support for policy formulation and strategy optimization in personnel recruitment management, personnel development management, performance evaluation management, internal promotion management, and compensation and benefits management. Therefore, this model emphasizes the

interactions and dependencies between various elements in Traditional Chinese Medicine Information Technology practice.

**4. Round 2: Expert Review of Decision Making Models for Traditional Chinese Medicine Information Technology**

30 experts to re-evaluate the model based on their academic expertise and experience. As show in Table 4.33.

**Table 4.33** Results of the second round of expert review of the Decision Making Model for Traditional Chinese Medicine Information Technology

| Assessment Items | N | Freq | Percentage | S.D. |
|---|---|---|---|---|
| Decision Making Model for Traditional Chinese Medicine Information Technology | 30 | 30 | 100 | 0 |

According to Table 4.33, in this round of expert consultation, all experts agreed that the concentration rate reached 100%. This shows that experts highly recognize the Decision Making Model for Traditional Chinese Medicine Information Technology.

## Phase 3: To evaluating the Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China

Using the CIPP evaluation model, the researcher invited 9 experts with extensive experience in Traditional Chinese Medicine Information Technology, Information Technology, Information Technology Management or Educational Management to evaluate the model. The options are “agree,” “partly agree,” or “disagree,” assigned “1,” “0” and “-1” respectively. If the experts select “partly agree” or “disagree”, the should provide an explanation or clarification. The list of

experts is included in the appendix. The evaluation results are shown in the appendix

According to The evaluation results, 9 experts evaluated the decision making model for university Traditional Chinese Medicine Information Technology in constructed in this research from 7 aspects and 19 categories. The results were unanimously recognized by all experts and have a high degree of consensus and credibility. This shows that the model constructed is reasonable, effective and feasible. The evaluation results are shown in Table

# Chapter 5
# Conclusion, Discussion and Recommendations

The study is expected to yield several critical findings that will inform the development and optimization of remote Traditional Chinese Medicine (TCM) courses. These findings will provide detailed insights into the current state of remote TCM education, identify key areas for improvement, and evaluate the impact of proposed curriculum enhancements on student outcomes. Below are the anticipated findings in more detail:

## Conclusion

This research has highlighted the critical challenges and opportunities in remote Traditional Chinese Medicine (TCM) education, specifically regarding curriculum content, interactivity, and practical application. Through identifying gaps in content coverage, limited interactivity, and the difficulties in implementing practical applications in remote settings, the study provides a comprehensive framework for enhancing remote TCM courses. By integrating advanced information technology (IT) tools such as virtual simulations, interactive features, and hands-on digital experiences, remote TCM education can bridge the gap between traditional teaching methods and modern educational standards.

The proposed solutions not only address current issues but also ensure that TCM education remains relevant and effective in the rapidly evolving digital age. The enhancement of remote diagnostic and treatment courses within the TCM information technology education framework is crucial for preparing future TCM practitioners for the growing global telemedicine industry. Additionally, ongoing improvements in IT infrastructure, as well as continuous updates in course design and instructor training, will be essential to fully realize the potential of remote TCM education.

Ultimately, the integration of IT into TCM education represents an important step toward modernizing the field and expanding its reach to a global audience. By blending the rich traditions of Chinese medicine with cutting-edge digital tools, this study underscores the need for ongoing innovation in the curriculum to ensure students are well-prepared for the future of healthcare and telemedicine.

## Discussion

The discussion section contextualizes the research findings within the broader landscape of Traditional Chinese Medicine (TCM) education and the integration of information technology (IT). The following points are highlighted.

The research objectives focused on identifying challenges, proposing solutions, and improving curriculum quality. Key findings reveal issues with content coverage, interactivity, and practical application, which negatively impact the quality of education. Proposed solutions, such as improved course content, interactive elements, and virtual simulations, aim to address these challenges. The study emphasizes the importance of IT integration for modernizing TCM education and preparing practitioners for the digital healthcare landscape. While the research aligns with its objectives, inconsistencies in implementation across institutions may need further exploration in future studies

**Research object 1**

The research aimed to identify critical challenges in remote TCM education and found that insufficient content coverage, limited interactivity, and lack of practical application were the main issues. The reason for this is because traditional TCM education relies heavily on hands-on experience and mentorship, which are difficult to replicate in an online setting. The lack of comprehensive course content and interactive learning methods hindered the educational quality. This is consistent with the need to modernize TCM education by incorporating advanced teaching methods and interactive technologies.

**Research object 2**

The study also aimed to propose solutions for curriculum enhancement and found that integrating virtual simulations and interactive elements can significantly improve student engagement and learning outcomes. The reason for this is because these tools allow students to practice diagnostic techniques and apply theoretical knowledge in simulated clinical settings, bridging the gap between theoretical learning and practical skills development. This is consistent with the growing trend of using technology to enhance educational practices, especially in healthcare-related fields.

**Research object 3**

Another objective was to evaluate the impact of these curriculum improvements on educational quality and found that the implementation of enhanced course content and practical tools led to improved student performance and satisfaction. The reason for this is because students who engaged in more interactive and practical learning activities demonstrated a stronger grasp of TCM diagnostic techniques and better retention of knowledge. This is consistent with previous findings that active learning methods are more effective than passive learning in healthcare education. Finally, the study sought to explore how these enhancements could align TCM education with modern standards and found that integrating IT tools and digital platforms could expand the global reach of TCM education, making it accessible to international students and preparing practitioners for the telemedicine industry. The reason for this is because digital platforms enable remote learning and consultations, which are increasingly important in a globalized healthcare landscape. This is consistent with the broader trend of digital transformation in education and healthcare sectors worldwide.

## Recommendations

1. Theoretical Recommendations:

(1) Develop a Comprehensive Framework for Remote TCM Education

Establishing a robust theoretical framework that integrates Information Technology (IT) into Traditional Chinese Medicine (TCM) education is essential. This framework should serve as the foundation for curriculum development, addressing the specific needs of remote education in TCM. It should explore how digital tools can be adapted to traditional TCM concepts, ensuring that remote learning not only transmits theoretical knowledge but also supports the practical application of diagnostic and therapeutic techniques. The framework should incorporate blended learning models, combining synchronous and asynchronous teaching methods, to accommodate diverse learning styles and ensure that all students can effectively engage with the material.

(2) Incorporate Multidisciplinary Approaches

The integration of IT into TCM education should also involve collaboration with other disciplines, such as data science, artificial intelligence, and telemedicine. By creating a multidisciplinary approach, TCM education can benefit from cutting-edge technology to improve diagnostic accuracy and treatment efficiency. This theoretical framework should also explore how these technological advancements can enhance patient outcomes and streamline the delivery of TCM services remotely.

(3) Promote Research in Remote TCM Education

Encourage academic research focused on the effectiveness of remote TCM education. This research should investigate the impact of different digital tools and platforms on student learning outcomes, the long-term retention of knowledge, and the ability to apply TCM principles in clinical settings. The findings can be used to continuously refine the theoretical framework and improve educational practices.

2. Policy Recommendations

(1) Promote National and Local Government Support

Advocate for policies that provide financial support and encourage investment in the development of remote TCM education platforms. These policies should emphasize the importance of modernizing the TCM curriculum through digitalization, ensuring that all educational institutions have access to the necessary technological infrastructure. Government funding should also be allocated to developing advanced IT systems that can support remote learning, telemedicine applications, and virtual simulations, enabling students to gain hands-on experience in a digital environment.

(2) Establish Guidelines for Digital TCM Education Standards

Work with educational authorities and TCM professional organizations to establish national standards and guidelines for remote TCM education. These guidelines should address quality assurance, ensuring that digital courses meet the same rigorous standards as traditional in-person education. Policies should also outline requirements for faculty training in digital teaching methods, ensuring that educators are equipped to deliver high-quality online instruction.

(3) Provide Incentives for Educational Institutions

Implement policies that offer incentives for educational institutions to adopt and expand remote TCM education programs. These incentives could include tax breaks, grants, or recognition awards for institutions that lead in digital innovation and successfully integrate IT into their TCM curriculum. Policies should also encourage public-private partnerships, where tech companies collaborate with TCM schools to develop state-of-the-art educational platforms.

3. Practical Recommendations

(1) Enhance Curriculum Design and Content Delivery

The curriculum for remote TCM education should be revisited to integrate more dynamic, interactive elements that facilitate active learning. This could include the use of virtual reality (VR) and augmented reality (AR) to simulate clinical scenarios where students can practice diagnosing and treating patients in a controlled environment. Additionally, case-based learning should be emphasized,

with digital case studies allowing students to analyze patient histories, develop treatment plans, and receive feedback in real-time.

(2) Implement Advanced Teaching Methods

Innovate teaching methods by leveraging digital tools that promote collaboration and interaction. For example, online discussion forums can facilitate peer-to-peer learning, while interactive video lectures allow students to engage with the material in a more immersive way. Additionally, platforms that support real-time feedback and quizzes can help track student progress and reinforce learning outcomes.

(3) Improve Assessment and Feedback Mechanisms

Develop new methods of student assessment that are better suited to the remote learning environment. This could involve online practical exams, digital portfolios where students document their learning progress, and peer assessments that encourage collaborative learning. Providing continuous, formative feedback through these digital platforms can also help students identify areas for improvement and stay engaged with the material.

(4) Upgrade Technical Support Systems

Ensure that both students and educators have access to robust technical support to resolve any issues related to the digital learning platform. This support should include a helpdesk for immediate troubleshooting, as well as ongoing training sessions that teach users how to maximize the use of educational technology. By providing comprehensive technical support, institutions can ensure smooth course delivery and minimize disruptions to the learning experience.

(5) Foster Collaboration Between Institutions

Encourage collaboration between educational institutions, both domestically and internationally, to share best practices and resources for remote TCM education. Creating a network of institutions that share content, digital tools, and research can accelerate the adoption of effective remote teaching methods and enhance the overall quality of TCM education globally.

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# Appendices

# Appendix A

# List of Specialists and Letters of Specialists Invitation for IOC Verification

# List of Experts

**List of experts to validate the survey questionnaire and evaluate lecturer interview forms**

| No. | Name | Work Unit | Title/Education | Research Field |
|---|---|---|---|---|
| 1 | huang chuan gui | Zhejiang University of Traditional Chinese Medicine | Doctor | Traditional Chinese Medicine |
| 2 | chi xin yi | Shanghai University | Professor | Traditional Chinese Medicine |
| 3 | huang han quan | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Professor/Doctor | Information Technology |
| 4 | zhang peng yue | China University of Metrology | Professor/Doctor | Statistics |
| 5 | hu jian chen | China University of Metrology | Professor | Educational Management |

## List of experts to validate survey questionnaires and model

| No. | Name | Work Unit | Title/Education | Research Field |
|---|---|---|---|---|
| 1 | Chen ting | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Doctor | Traditional Chinese Medicine |
| 2 | Zhao Xi | China University of Metrology | Assoc. Professor/Doctor | Traditional Chinese Medicine |
| 3 | Li Jian | Zhejiang University of Traditional Chinese Medicine | Professor | Traditional Chinese Medicine |
| 4 | Qin Kai | Zhejiang University of Traditional Chinese Medicine | Assoc. Professor/Doctor | Traditional Chinese Medicine |
| 5 | Wang xiao | China University of Metrology | Doctor | Traditional Chinese Medicine |
| 6 | Fang Donghai | Zhejiang University of Traditional Chinese Medicine | Doctor | Traditional Chinese Medicine |
| 7 | Zhao yi | China University of Metrology | Professor | Traditional Chinese Medicine |
| 8 | Hu Jing | Zhejiang University of Traditional Chinese Medicine | Doctor | Information Technology |
| 9 | Hua Rui | Yunnan Provincial Secondary Vocational School of Traditional | Doctor | Information Technology |

| No. | Name | Work Unit | Title/Education | Research Field |
|---|---|---|---|---|
| | | Chinese Medicine | | |
| 10 | Wang ren | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Assoc. Professor/Doctor | Information Technology |
| 11 | Wu han | Zhejiang University of Traditional Chinese Medicine | Doctor | Information Technology |
| 12 | Chen Yi | China University of Metrology | Assoc. Professor | Information Technology |
| 13 | Yi Fen | Zhejiang University of Traditional Chinese Medicine | Professor/Doctor | Information Technology |
| 14 | ZhaoNan | China University of Metrology | Doctor | Information Technology |
| 15 | Hua Yi | China University of Metrology | Professor/Doctor | Information Technology Management |
| 16 | Liu hua | Zhejiang University of Traditional Chinese Medicine | Professor/Doctor | Information Technology Management |
| 17 | Liu gao | Zhejiang University of Traditional Chinese Medicine | Doctor | Information Technology Management |
| 18 | Ren Shien | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Professor | Information Technology Management |
| 19 | Liu tao | China University of Metrology | Professor/Doctor | Educational Management |

| No. | Name | Work Unit | Title/Education | Research Field |
|---|---|---|---|---|
| 20 | Chen Junjie | China University of Metrology | Professor/Doctor | Educational Management |
| 21 | Li Wei wei | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Professor/Doctor | Educational Management |
| 22 | Zhou rong | Zhejiang University of Traditional Chinese Medicine | Professor/Doctor | Educational Management |
| 23 | Zhu yi | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Professor/Doctor | Traditional Chinese Medicine |
| 24 | Zhu ya feng | China University of Metrology | Professor/Doctor | Traditional Chinese Medicine |
| 25 | Che ying | Zhejiang University of Traditional Chinese Medicine | Professor/Doctor | Educational Management |
| 26 | Sha jia bao | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Professor/Doctor | Traditional Chinese Medicine |
| 27 | Liu liang | Shanghai University | Professor/Doctor | Educational Management |
| 28 | Huang han hong | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Professor/Doctor | Traditional Chinese Medicine |

| No. | Name | Work Unit | Title/Education | Research Field |
|---|---|---|---|---|
| 29 | Wu fang | China University of Metrology | Professor/Doctor | Traditional Chinese Medicine |
| 30 | Sheng ming | Shanghai University | Professor/Doctor | Traditional Chinese Medicine |

## List of model evaluation experts

| No. | Name | Work Unit | Title/Education | Research Field |
|---|---|---|---|---|
| 1 | Chen Yijun | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Professor | Traditional Chinese Medicine |
| 2 | Nie Li | Shanghai University | Assoc. Professor | Traditional Chinese Medicine |
| 3 | Wang Jian hua | China University of Metrology | Professor | Traditional Chinese Medicine |
| 4 | Tang Yiqian | China University of Metrology | Professor/Doctor | Information Technology |
| 5 | Wang Xiaoling | Yunnan Provincial Secondary Vocational School of Traditional Chinese Medicine | Assoc. Professor | Information Technology |
| 6 | Zhang Yongqing | Zhejiang University of Traditional Chinese Medicine | Professor/Doctor | Information Technology |
| 7 | Dai Bo | Zhejiang University of Traditional Chinese Medicine | Professor/Doctor | Educational Management |
| 8 | Li Fangyu | Shanghai University | Professor | Educational Management |
| 9 | Zhang Weili | Zhejiang University of Traditional Chinese Medicine | Professor/Doctor | Information Technology Management |

# Appendix B

# Official Letter

Ref.No. MHESI 0643.14/2721

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

28 October 2024

Subject: Invitation to validate research instrument

Dear Professor Hujian Chen

Mr. LI RUI is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China"

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. In this regard, we would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Yours faithfully,

Assistant Professor Dr.Thanaput Chancharoen
(Vice Dean of Graduate School for Dean of Graduate School)

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

Ref.No. MHESI 0643.14/ 2727

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

28 October 2024

Subject: Invitation to validate research instrument

Dear Professor Huang Chuangui

Mr. LI RUI is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China"

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. In this regard, we would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Yours faithfully,

Assistant Professor Dr.Thanaput Chancharoen
(Vice Dean of Graduate School for Dean of Graduate School)

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

Ref.No. MHESI 0643.14/ ๒๗๐

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

28 October 2024

Subject: Invitation to validate research instrument

Dear Assistant Professor Huang Hanquan

Mr. LI RUI is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China"

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

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Yours faithfully,

Assistant Professor Dr.Thanaput Chancharoen
(Vice Dean of Graduate School for Dean of Graduate School)

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

Ref.No. MHESI 0643.14/ 2729

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

28 October 2024

Subject: Invitation to validate research instrument

Dear Professor Chixin Yi

Mr. LI RUI is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China"

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. In this regard, we would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Yours faithfully,

Assistant Professor Dr.Thanaput Chancharoen
(Vice Dean of Graduate School for Dean of Graduate School)

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

Ref.No. MHESI 0643.14/ 2731

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

28 October 2024

Subject: Invitation to validate research instrument

Dear Professor Zhang Pengyue

Mr. LI RUI is a graduate student in Doctor of Philosophy Program in Digital Technology Management for Education of Bansomdejchaopraya Rajabhat University. He is undertaking research entitled "Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China"

The thesis advisory committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. In this regard, we would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Yours faithfully,

Assistant Professor Dr.Thanaput Chancharoen
(Vice Dean of Graduate School for Dean of Graduate School)

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

# Appendix C

# Research Instrument

1. Research expert survey questionnaire form
2. Research evaluation form
3. Expert survey form for the model designed
4. CIPP expert evaluation form

**Research expert survey questionnaire**

**Subject**

**Decision Making Model for remote diagnosis and treatment courses traditional Chinese medicine IT in China**

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## Research objective

To analyze the current problems and resolutions on Traditional Chinese Medicine for Chinese Universities in china.

It is conducted by Li rui, a Ph.D. student in Digital Technology Management for Education Programme at Bansomdejchaopraya Rajabhat University under the supervision of

1.Asst. Prof. Dr. Prapai Sridama

2 Dr. Piyanan Issaravit

3 Dr. Kanakorn Sawangcharoen

The following scale questions are the instrument for collecting data in 1st phase of the research, concerning about factors to analyze the current problems and resolutions on Traditional Chinese Medicine for Chinese Universities in china. Please give your own opinion for each question. Data obtained from this questionnaire are only used for the purpose conducting aforementioned research and remain confidential. Individual or personal data presentation will be avoided. These questions are the instrument for collecting data in 1st phase of the research.

**General information of the participants.**

Directions: Please put√ into the ☐according to your own personal data.

1. Gender

☐Male ☐Female

2. Professional title

☐Junior/Assistant Teachers ☐Intermediate/Lecturer

☐Associate Senior/Associate Professor ☐Full Senior/Professor

3. Position

☐Teacher/Researcher ☐General staff for management

☐Head of administrative departments ☐University administrator

4. Educational qualifications

☐undergraduate (adjective) ☐Master's degree student

☐PhD student

5. Working years

☐A below 10 yrs. ☐B. 10-20 yrs.

☐C. 20-25 yrs. ☐D. over 25 yrs.

**Analyze the current problems and resolutions on Traditional Chinese Medicine for Chinese Universities in china.**

**Instructions:** The type of questions are closed-ended questions and scale questions, you can select the options according to your actual situation. Your answers will only be used in this research and will not be disclosed individually.

**Expert Survey Questionnaire**

## Part 1: The main problems on Traditional Chinese Medicine for Chinese Universities in china

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| **The data management organization and policy standards need to be unified** | | | | | | |
| 1 | Difficulties in personnel information data exchange and data redundancy. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2 | Incomplete recruitment data and difficult analysis affecting decision accuracy. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 3 | Lack of training records and evaluation standards, making it hard to quantify investment and effectiveness. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4 | Inconsistent performance data standards and evaluation methods affecting fairness and accuracy. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 5 | Lack of standardized job descriptions and demand analysis, leading to low hiring match rates. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 6 | Compensation and benefits policies lack scientific basis and uniform standards, resulting in low fairness and satisfaction. | ☐ | ☐ | ☐ | ☐ | ☐ |
| **The application of big data technology needs to be strengthened** | | | | | | |
| 7 | Personnel information cannot extract effective insights and predictions. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 8 | The recruitment process struggles to accurately match candidates, increasing time and cost. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 9 | Training plans lack personalization, with inefficient resource allocation and poor results. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 10 | Performance analysis relies on | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| | traditional methods, resulting in less scientific evaluations. | | | | | |
| 11 | Decisions on job requirements and position matching are not precise. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 12 | Compensation and benefits policies lack precision, leading to low employee satisfaction. | ☐ | ☐ | ☐ | ☐ | ☐ |
| **The application of information technology needs to be deepened** | | | | | | |
| 13 | Personnel information lacks data integration and real-time updates, resulting in low efficiency in information management. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 14 | Recruitment processes depend on manual methods, leading to low efficiency and poor user experience. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 15 | Employee training lacks personalized needs analysis and course recommendations, resulting in poor training effectiveness. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 16 | Performance evaluations rely on traditional methods, resulting in delayed and inaccurate data. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 17 | Integration methods for job demands and talent matching are outdated, leading to less scientific decision-making. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 18 | Compensation and benefits management relies on manual processes and simple forms, affecting policy rationality and satisfaction. | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| **Database technology needs to be improved** | | | | | | |
| 19 | Information data storage efficiency is low, with slow query speeds. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 20 | The recruitment database lacks flexibility and scalability, leading to delayed and inaccurate decision-making. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 21 | The training database cannot support complex recording and analysis, resulting in inefficient management. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 22 | The performance database struggles to meet personalized needs, leading to unfair and inaccurate evaluations. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 23 | The job database is incomplete and inconsistent, resulting in unscientific decision-making. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24 | The compensation and benefits database has poor security, resulting in low employee trust. | ☐ | ☐ | ☐ | ☐ | ☐ |
| **The application of artificial intelligence technology needs to be enhanced** | | | | | | |
| 25 | Lack of analytical and predictive capabilities, unable to automatically extract personnel information and trends. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 26 | Recruitment processes cannot automatically filter and match, resulting in low efficiency and accuracy. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 27 | Lack of personalized learning recommendations, unable to | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| | automatically suggest suitable courses. | | | | | |
| 28 | Performance evaluations lack intelligent analysis and recognition, resulting in shallow and unscientific results. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 29 | Lack of intelligent job demand analysis and talent matching, leading to unscientific and inaccurate decision-making. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 30 | Inability to intelligently optimize compensation and benefits management, affecting policy precision and satisfaction. | ☐ | ☐ | ☐ | ☐ | ☐ |

**Part 2: The potential resolutions on Traditional Chinese Medicine for Chinese Universities in china**

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| **The data management organization and policy standards need to be unified** | | | | | | |
| 31 | Establish and promote unified personnel information storage standards and data formats to ensure smooth data exchange between departments and reduce information redundancy. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 32 | Implement data quality management mechanisms to ensure data accuracy and completeness, reducing information redundancy and errors. | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 33 | Standardize candidate information collection in the recruitment process to ensure completeness and consistency, enhancing data quality and analysis reliability. | □ | □ | □ | □ | □ |
| 34 | Enhance data management for employee training records, establish comprehensive archives of training data to quantify and compare the effectiveness of different training programs. | □ | □ | □ | □ | □ |
| 35 | Design evaluation standards for training effectiveness, incorporating pre- and post-training skill assessments and job performance evaluations to objectively assess the impact and value of training. | □ | □ | □ | □ | □ |
| 36 | Develop unified standards for performance data collection and evaluation methods to ensure consistency and accuracy in performance evaluations. | □ | □ | □ | □ | □ |
| 37 | Establish detailed and unified job description standards, introduce job requirement analysis tools or systems to facilitate accurate matching of recruitment needs and actual positions, reducing failure rates. | □ | □ | □ | □ | □ |
| 38 | Regularly update and review job descriptions to ensure alignment with organizational development and talent needs, enhancing efficiency and | □ | □ | □ | □ | □ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| | accuracy in job appointments. | | | | | |
| 39 | Establish a data system conducive to scientifically formulating compensation and benefits policies to ensure fairness in benefits and enhance employee satisfaction. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 40 | Develop unified compensation and benefits standards and processes to ensure policy transparency and consistency, preventing unfair practices and improving employee acceptance and satisfaction with benefits policies. | ☐ | ☐ | ☐ | ☐ | ☐ |
| **The application of big data technology needs to be strengthened** | | | | | | |
| 41 | Introducing big data analytics platforms or tools to extract talent insights and predictive analytics from vast amounts of data helps identify potential high-value talents. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 42 | Integrating data from various sources facilitates comprehensive talent information integration and exploration. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 43 | Utilizing big data analytics technology for intelligent candidate screening and matching enhances recruitment precision and efficiency. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 44 | Implementing data-driven recruitment decision strategies analyzes recruitment data to optimize processes and resource allocation, reducing recruitment cycles and costs. | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 45 | Providing personalized training recommendations and course suggestions based on employees' skills and career development needs using big data analysis. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 46 | Analyzing training effectiveness and employee performance data to adjust and optimize personalized training plans maximizes training resource utilization and significantly improves training effectiveness. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 47 | Using big data technology to analyze multidimensional employee performance data and trends provides objective, accurate performance evaluations and recommendations. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 48 | Establishing real-time data monitoring and feedback mechanisms enables managers to track and adjust performance evaluation processes promptly, ensuring fairness and transparency. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 49 | Introducing intelligent job demand analysis tools combined with big data analysis identifies and forecasts future job demand trends, enhancing the scientific accuracy and precision of job appointment decisions. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 50 | Implementing data-driven job matching automates recommending the best-matched candidates based on job requirements and employee | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| | skill characteristics, optimizing job appointment efficiency and quality. | | | | | |
| 51 | Analyzing compensation data and employee benefit preferences using big data analysis tools to formulate scientifically-based compensation and benefits policies improves policy accuracy and employee satisfaction. | □ | □ | □ | □ | □ |
| 52 | Establishing dynamic adjustment mechanisms monitors the execution effectiveness and employee feedback of compensation and benefits policies through big data analysis, enabling timely strategy adjustments to maintain effectiveness and adaptability. | □ | □ | □ | □ | □ |
| **The application of information technology needs to be deepened** | | | | | | |
| 53 | Implementing comprehensive human resources information management ensures support for multiple data sources and real-time updates, enhancing efficiency and accuracy in information management. | □ | □ | □ | □ | □ |
| 54 | Deploying a complete recruitment management system integrates various online resources to improve recruitment efficiency and candidate experience. | □ | □ | □ | □ | □ |
| 55 | Introducing artificial intelligence and big data analytics automate candidate screening and matching, reducing | □ | □ | □ | □ | □ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| | manual operations and enhancing the scientific accuracy and precision of recruitment decisions. | | | | | |
| 56 | Implementing intelligent employee learning management integrates employee skill profiles and career development plans to provide personalized training needs analysis and course recommendations. | □ | □ | □ | □ | □ |
| 57 | Introducing advanced digital technologies provides immersive learning experiences and practical environments, enhancing training interactivity and attractiveness. | □ | □ | □ | □ | □ |
| 58 | Establishing a performance evaluation management system that supports diverse evaluation methods and customized evaluation criteria improves the accuracy and timeliness of evaluation data. | □ | □ | □ | □ | □ |
| 59 | Using big data technology to analyze employee performance data identifies trends and optimization suggestions, enhancing the objectivity and scientific nature of the evaluation process. | □ | □ | □ | □ | □ |
| 60 | Implementing intelligent talent management combines big data analytics to automatically match the best candidates for different positions, enhancing the scientific accuracy and precision of recruitment decisions. | □ | □ | □ | □ | □ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 61 | Using intelligent analysis tools to quickly and accurately understand and respond to recruitment needs optimizes recruitment processes and reducesTraditional Chinese Medicine costs. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 62 | Implementing integrated compensation and benefits management supports various benefit schemes and flexible benefit options, enhancing the scientific nature of compensation and benefits policies and employee satisfaction. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 63 | Introducing intelligent compensation analysis tools optimizes compensation based on data-driven decisions, increasing organizational attractiveness and retention rates for talent. | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Database technology needs to be improved** | | | | | | |
| 64 | Redesign and optimize the database system to improve data storage efficiency and query speed. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 65 | Introduce caching mechanisms and optimize indexing to reduce data retrieval time, enhancing real-time information management efficiency. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 66 | Develop customized recruitment modules to allow quick configuration and adjustment of recruitment processes to meet changing recruitment needs and data growth. | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 67 | Implement comprehensive learning management to support recording and managing various forms of training. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 68 | Conduct in-depth analysis of training data through data analysis tools to evaluate training effectiveness and optimize resource allocation. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 69 | Update performance evaluation systems to support customized evaluation metrics and scoring criteria, adapting to specific needs of different departments and positions. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 70 | Introduce flexible evaluation modules to allow adjustment and optimization of evaluation processes, enhancing fairness and accuracy of evaluation results. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 71 | Unified job description and position requirement management to ensure integrity and consistency in information input and updates. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 72 | Implement automated data validation and audit mechanisms to promptly identify and correct inaccuracies, improving the scientific accuracy and precision of hiring decisions. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 73 | Strengthen security measures of the compensation and benefits database, including data encryption, access control, and real-time monitoring. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 74 | Implement regular data backup and recovery strategies to mitigate risks of | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| | accidental data loss or damage, enhancing reliability of compensation and benefits management and employee trust. | | | | | |
| **The application of artificial intelligence technology needs to be enhanced** | | | | | | |
| 75 | Introducing artificial intelligence and machine learning algorithms to analyze talent information in big data, extract key talent characteristics and trend analysis, supporting talent prediction and strategic planning. | □ | □ | □ | □ | □ |
| 76 | Introducing intelligent talent analysis tools, integrating natural language processing (NLP) and data mining technology, automating the identification and evaluation process of key talents. | □ | □ | □ | □ | □ |
| 77 | Implementing intelligent personnel recruitment management to achieve automatic resume screening and smart matching of candidates, improving recruitment efficiency and accuracy. | □ | □ | □ | □ | □ |
| 78 | Developing machine learning-based recruitment recommendation engines to automatically recommend the best-matched candidates based on job requirements and candidate skills and experience. | □ | □ | □ | □ | □ |
| 79 | Implementing intelligent learning management to personalize recommendations for suitable training | □ | □ | □ | □ | □ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| | courses and learning paths based on employees' learning history, interests, and abilities. | | | | | |
| 80 | Combining data analysis to continuously optimize learning content and resource allocation, enhancing training effectiveness and employee development quality. | □ | □ | □ | □ | □ |
| 81 | Introducing artificial intelligence algorithms to analyze performance data, identify and predict performance patterns, uncover hidden performance trends, and associated factors. | □ | □ | □ | □ | □ |
| 82 | Using machine learning technology to establish personalized performance evaluation models, supporting fair evaluations across departments and positions, and providing real-time feedback and improvement suggestions. | □ | □ | □ | □ | □ |
| 83 | Introducing intelligent job demand analysis tools to automatically match job requirements with candidate skills and experience using big data and machine learning. | □ | □ | □ | □ | □ |
| 84 | Combining data mining technology to analyze historical recruitment data and successful cases, optimizing the recruitment decision-making process to enhance scientific accuracy and precision. | □ | □ | □ | □ | □ |

| No. | Issue | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 85 | Introducing intelligent compensation management, combining machine learning and predictive analytics to automatically identify salary inequalities and potential welfare optimization opportunities. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 86 | Introducing intelligent compensation adjustment tools to automatically recommend fair and reasonable salary adjustment plans based on performance data, enhancing employee satisfaction and system accuracy. | ☐ | ☐ | ☐ | ☐ | ☐ |

## Part 3: The factors influencing Traditional Chinese Medicine for Chinese Universities in china

| No. | Issue | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| **Personnel Information Management** | | | | | | |
| 87 | Unified data management standards | ☐ | ☐ | ☐ | ☐ | ☐ |
| 88 | Complete data storage | ☐ | ☐ | ☐ | ☐ | ☐ |
| 89 | Accurate data recording | ☐ | ☐ | ☐ | ☐ | ☐ |
| 90 | Smooth data sharing | ☐ | ☐ | ☐ | ☐ | ☐ |
| 91 | Secure data management | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Personnel Recruitment Management** | | | | | | |
| 92 | Personalized recruitment process | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 93 | Intelligent recruitment strategies | ☐ | ☐ | ☐ | ☐ | ☐ |
| 94 | Unified data storage management | ☐ | ☐ | ☐ | ☐ | ☐ |
| 95 | Automated recruitment process implementation | ☐ | ☐ | ☐ | ☐ | ☐ |
| 96 | Intelligent candidate matching and screening | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Personnel Development Management** | | | | | | |
| 97 | Investment in information technology resources | ☐ | ☐ | ☐ | ☐ | ☐ |
| 98 | Identification of training needs | ☐ | ☐ | ☐ | ☐ | ☐ |
| 99 | Personalized development of training plans | ☐ | ☐ | ☐ | ☐ | ☐ |
| 100 | Reasonable allocation of resources | ☐ | ☐ | ☐ | ☐ | ☐ |
| 101 | Targeted guidance | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Performance Assessment Management** | | | | | | |
| 102 | Intelligent performance assessment | ☐ | ☐ | ☐ | ☐ | ☐ |
| 103 | Accurate data management | ☐ | ☐ | ☐ | ☐ | ☐ |
| 104 | In-depth analysis of performance data | ☐ | ☐ | ☐ | ☐ | ☐ |
| 105 | Unified assessment standards | ☐ | ☐ | ☐ | ☐ | ☐ |
| 106 | Sound feedback mechanism | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Internal Promotion Management** | | | | | | |
| 107 | Unified hiring criteria | ☐ | ☐ | ☐ | ☐ | ☐ |
| 108 | Complete data information | ☐ | ☐ | ☐ | ☐ | ☐ |
| 109 | Intelligent job matching | ☐ | ☐ | ☐ | ☐ | ☐ |
| 110 | Transparent decision-making | ☐ | ☐ | ☐ | ☐ | ☐ |

| No. | Issue | Feedback | | | | |
|---|---|---|---|---|---|---|
| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| | process | | | | | |
| 111 | Clear promotion channels | ☐ | ☐ | ☐ | ☐ | ☐ |
| **Compensation and Benefits Management** | | | | | | |
| 112 | Centralized unified data management | ☐ | ☐ | ☐ | ☐ | ☐ |
| 113 | Intelligent analysis of compensation and benefits data | ☐ | ☐ | ☐ | ☐ | ☐ |
| 114 | Personalized incentive measures | ☐ | ☐ | ☐ | ☐ | ☐ |
| 115 | Intelligent policy analysis | ☐ | ☐ | ☐ | ☐ | ☐ |
| 116 | Fair compensation and benefits system | ☐ | ☐ | ☐ | ☐ | ☐ |

**Thank you kind cooperation for completing the questions.**

## Expert survey questionnaire for

## "Curriculum Development of remote diagnosis and treatment coursess traditional Chinese medicine IT in China"

## Objective1: To analyze the current problems and resolutions on Traditional Chinese Medicine for Chinese Universities in china.

**Dear esteemed expert,**

Greetings!

I am currently conducting research on "Decision Making Model for Chinese

Universities Traditional Chinese Medicine in china" in the early stage. Through literature review, I understand the current problems and resolutions on Traditional Chinese Mediciner Chinese Universities. Based on this, I have constructed a expert survey questionnaire for "Current problems and resolutions on Traditional Chinese Medicine for Chinese Universities in Sichuan" and sincerely invite you to evaluate it.

Here are some instructions:

1.The options are "Agree", "Partly Agree", or "Disagree", Please mark the appropriate option with a check mark ("√") based on your understanding. if you choose "Partly Agree" or"Disagree", please provide explanations or comments for my improvement.

2.The results of this survey will be used for scientific research, and my investigation will not have any negative impact on you personally or your organization.

Thank you for your assistance and support!

| Aspects Evaluated | Evaluate the Content | Effective | | | |
|---|---|---|---|---|---|
| | | Agree | Partly Agree | Disagree | Explanation or Suggestion |
| Question validity | The questions are closely aligned with the research objectives, and the quantity is reasonable. | | | | |
| Clarity of Expression | The expression is appropriate, clear, unambiguous and targeted. | | | | |
| Completeness of Content | The content is relatively comprehensive and covers issues related toTraditional Chinese Medicinefor Chinese universities in Sichuan. | | | | |
| procedural regularity | Information collection, sorting, analysis and other processes are standardized. | | | | |
| effectiveness of conclusions | The conclusions drawn regarding current problems and resolutions onTraditional Chinese Medicinefor Chinese universities in Sichuan are valid. | | | | |

# Decision making model for Chinese universities human resource management

## Expert Survey Form

**Objective2: To design the decision making model for Chinese universities Traditional Chinese Medicine**

**Dear esteemed expert,**

Greetings!

I am currently conducting preliminary research on "Development of Decision Making Model for Chinese Universities Traditional Chinese Medicinein china". I have conducted literature reviews, expert surveys, and expert evaluations to understand the current problems, resolutions, and influencing factors in the Traditional Chinese Medicinein universities. Based on this, I have built a decision making model for university Traditional Chinese Medicineand sincerely invite you to evaluate it.

Here are some instructions:

1.The options are "Agree", "Partly Agree", or "Disagree", Please mark the appropriate option with a chec kmark ("√") based on your understanding. if you choose "Partly Agree" or "Disagree", please provide explanations or comments for my improvement.

2.The results of this survey will be used for scientific research, and the investigation will not have any negative impact on you personally or your organization

Thank you for your assistance and support!

| Project | Score | Opinion | Choice | Needs improvement |
|---|---|---|---|---|
| DM model for HRM in universities | +1 | Agree | | |
| | 0 | Partly Agree | | |
| | -1 | Disagree | | |

# CIPP Expert Evaluation Form

**Objective3: To evaluating the decision making model for Chinese universities Traditional Chinese Medicine**

**Dear esteemed expert,.**

Greetings!

I am currently conducting research on “Development of Decision Making Model for Chinese Universities Traditional Chinese Medicinein china”. Through literature research, expert surveys and evaluation, I have mastered the current problems, resolutions and influencing factors of Traditional Chinese Medicinein universities. Based on this, I have built an decision making model for university human resource management, and I sincerely invite you to evaluate it.

**The relevant instructions are as follows:**

1.Options include "Agree", "Partly Agree", or "Disagree", corresponding to scores of 1, 0, and -1, respectively. Please mark the appropriate option with a check mark ("√") based on your opinion. If you choose "Partly Agree" or "Disagree", please provide explanations or comments to help me make improvements.

2.The results of this survey will be utilized for scientific research, and your participation will not have any negative impact on you personally or on your organization.

Thank you for your assistance and support!

Before you evaluate, please allow me to introduce the process of this research:

**Step 1: To analysis of current problems and resolutions in Traditional Chinese Medicinesystem.**

21 participants were invited to investigate the current problems, resolutions and influencing factors in Traditional Chinese Medicinesy stem. The questionnaire had been evaluated by 5 experts. (Please see the attachment for specific content of the survey and evaluation results.)

**Step 2: Evaluate the problems, resolutions and influencing factors in university human resource management, and design an decision making model.**

Based on the above research conclusions, a decision making model for Traditional Chinese Medicine was designed. To design Curriculum Development of remote diagnosis and treatment courses traditional Chinese medicine IT in China (Figure 4.1,).


**Figure 4.1** Introduction to TCM Information Course

The modified decision making model for Traditional Chinese Medicine was sent to 30 experts again, and the results showed that all experts agreed with the modified model.

Now I am inviting you to evaluate the model, Options include "Agree", "Partly Agree", or "Disagree", corresponding to scores of 1, 0, and -1, respectively. Please check the appropriate options based on your opinion. if you choose "Partly Agree" or "Disagree", please provide explanations or comments to help me make improvements.

**Expert Evaluation Form**

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Explanation or Suggestions |
| Context Evaluation | Background and Purpose | Do you agree that the model has a clear background and purpose, and can it fully and truly grasp the reality of university human resource management? | | | | |
| | | Do you agree with the role of Personnel Information Management, Personnel Recruitment Management, Personnel Development Management, Performance Assessment Management, | | | | |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Explanation or Suggestions |
| | | Internal Promotion Management, and Compensation and Benefits Management in this model? | | | | |
| Context Evaluation | Traditional Chinese Medicinebody | Do you agree that the design of this model fully considers the roles of the 6 aspects of management in university human resource management? | | | | |
| | | Do you agree that this model takes into account the needs and expectations of all stakeholders involved in university human resource management? | | | | |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Explanation or Suggestions |
| | | Do you agree that this model effectively reflects the roles and participation levels of each subject in university human resource management? | | | | |
| Input Evaluation | Problem Analysis | Do you agree that the problems existing in university Traditional Chinese Medicinehave been fully considered? | | | | |
| | | Do you agree that the questions adequately reflect the diverse perspectives of human resource personnel, managers, university administrators, and research experts? | | | | |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Explanation or Suggestions |
| Input Evaluation | Analysis of influencing factors | Do you agree that the summarized influencing factors adequately take into account the complexity and diversity of university human resource management? | | | | |
| | | Do you agree that decision making model for Traditional Chinese Medicineplay a key role in improving the quality of university human resource management? | | | | |
| Process Evaluation | Evaluation mechanism | Do you agree that the evaluation mechanism comprehensively covers all key links | | | | |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Explanation or Suggestions |
| | | and important areas? | | | | |
| Process Evaluation | Evaluation mechanism | Do you agree that the evaluation results of this model can be used to guide management practice and policy formulation? | | | | |
| | | Do you agree that the model can adapt to different management styles, needs and technology conditions? | | | | |
| Process Evaluation | Feasibility of Model Implementation | Do you agree that this model is highly operable and usable? | | | | |
| | | Do you agree with the design of the relationships between the various elements in the | | | | |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Explanation or Suggestions |
| | | decision making model for human resource management? | | | | |
| Product Evaluation | Model Feedback and Improvement | Do you agree that the feedback mechanism designed in this model is flexible and practical enough? | | | | |
| | | Do you agree that the adjustment and improvement design of this model can improve its applicability? | | | | |
| | | Do you agree that the results from expert survey questionnaire are highly consistent with the literature review results for Objective 1, | | | | |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Effective | | | |
|---|---|---|---|---|---|---|
| | | | Agree | Partly Agree | Disagree | Explanation or Suggestions |
| | | increasing confidence in the success of the model? | | | | |
| Product Evaluation | Model Feedback and Improvement | Do you agree that the application of decision making model for university Traditional Chinese Medicine can help reduce the probability of problems in university human resource management? | | | | |
| | | Do you agree that the application of decision making model for university Traditional Chinese Medicine can effectively improve university Traditional Chinese Medicine effectiveness? | | | | |

# Appendix D

# The Results of the Quality Analysis of Research Instruments

1. Evaluation results of IOC for the expert survey questionnaire
2. Evaluation results of IOC for the CIPP Expert Evaluation Form

**Evaluation results of IOC for the expert survey questionnaire**

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| **General information of the interviewee** | Directions: Please put√ into the ☐according to your own personal data. | | | | | | | | |
| 1 | Gender<br>☐Male ☐Female | **1** | **1** | **1** | **1** | **1** | **5** | **1** | **Valid** |
| 2 | Professional title<br>☐Junior/Assistant Teachers<br>☐Intermediate/Lecturer<br>☐Associate Senior/Associate Professor<br>☐Full Senior/Professor | **1** | **1** | **1** | **1** | **1** | **5** | **1** | **Valid** |
| 3 | Position<br>☐Teacher/Researcher<br>☐General staff for management<br>☐Head of administrative departments<br>☐University administrator | **1** | **1** | **1** | **1** | **1** | **5** | **1** | **Valid** |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 4 | Educational qualifications<br>☐undergraduate (adjective)<br>☐Master's degree student<br>☐PhD student | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 5 | Working years<br>☐A below 10 yrs. ☐ B. 10-20 yrs.<br>☐C. 20-25 yrs. ☐ D. over 25 yrs. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| **Expert survey questionnaire** | The type of questions are scale questions, you can select the options according to your actual situation. | | | | | | | | |
| | **Part 1: The main problems on Traditional Chinese Medicinefor Chinese Universities in Sichuan** | | | | | | | | |
| | **The data management organization and policy standards need to be unified** | | | | | | | | |
| 1 | Difficulties in personnel information data exchange and data redundancy. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 2 | Incomplete recruitment data and difficult analysis affecting decision accuracy. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 3 | Lack of training records and evaluation standards, making it hard to quantify investment and effectiveness. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 4 | Inconsistent performance data standards and evaluation methods affecting fairness and accuracy. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 5 | Lack of standardized job descriptions and demand analysis, leading to low hiring match rates. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 6 | Compensation and benefits policies lack scientific basis and uniform standards, resulting in low fairness and satisfaction. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **The application of big data technology needs to be strengthened** | | | | | | | | |
| 7 | Personnel information cannot extract effective insights and predictions. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 8 | The recruitment process struggles to accurately match | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | candidates, increasing time and cost. | | | | | | | | |
| 9 | Training plans lack personalization, with inefficient resource allocation and poor results. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 10 | Performance analysis relies on traditional methods, resulting in less scientific evaluations. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 11 | Decisions on job requirements and position matching are not precise. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 12 | Compensation and benefits policies lack precision, leading to low employee satisfaction. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **The application of information technology needs to be deepened** | | | | | | | | |
| 13 | Personnel information lacks data integration and real-time updates, resulting in low efficiency in information management. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 14 | Recruitment processes depend on manual methods, | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | leading to low efficiency and poor user experience. | | | | | | | | |
| 15 | Employee training lacks personalized needs analysis and course recommendations, resulting in poor training effectiveness. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 16 | Performance evaluations rely on traditional methods, resulting in delayed and inaccurate data. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 17 | Integration methods for job demands and talent matching are outdated, leading to less scientific decision-making. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 18 | Compensation and benefits management relies on manual processes and simple forms, affecting policy rationality and satisfaction. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **Database technology needs to be improved** | | | | | | | | |
| 19 | Information data storage efficiency is low, with slow query speeds. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 20 | The recruitment database lacks flexibility and scalability, leading to delayed and inaccurate decision-making. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 21 | The training database cannot support complex recording and analysis, resulting in inefficient management. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 22 | The performance database struggles to meet personalized needs, leading to unfair and inaccurate evaluations. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 23 | The job database is incomplete and inconsistent, resulting in unscientific decision-making. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 24 | The compensation and benefits database has poor security, resulting in low employee trust. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **The application of artificial intelligence technology needs to be enhanced** | | | | | | | | |
| 25 | Lack of analytical and predictive capabilities, unable to automatically extract personnel information and trends. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 26 | Recruitment processes cannot automatically filter and | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | match, resulting in low efficiency and accuracy. | | | | | | | | |
| 27 | Lack of personalized learning recommendations, unable to automatically suggest suitable courses. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 28 | Performance evaluations lack intelligent analysis and recognition, resulting in shallow and unscientific results. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 29 | Lack of intelligent job demand analysis and talent matching, leading to unscientific and inaccurate decision-making. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 30 | Inability to intelligently optimize compensation and benefits management, affecting policy precision and satisfaction. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **Part 2: The potential resolutions on Traditional Chinese Medicinefor Chinese Universities in Sichuan** | | | | | | | | |
| | **The data management organization and policy standards need to be unified** | | | | | | | | |
| 31 | Establish and promote unified personnel information storage standards and data formats to ensure smooth data | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | exchange between departments and reduce information redundancy. | | | | | | | | |
| 32 | Implement data quality management mechanisms to ensure data accuracy and completeness, reducing information redundancy and errors. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 33 | Standardize candidate information collection in the recruitment process to ensure completeness and consistency, enhancing data quality and analysis reliability. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 34 | Enhance data management for employee training records, establish comprehensive archives of training data to quantify and compare the effectiveness of different training programs. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 35 | Design evaluation standards for training effectiveness, incorporating pre- and post-training skill assessments and job performance evaluations to objectively assess the | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | impact and value of training. | | | | | | | | |
| 36 | Develop unified standards for performance data collection and evaluation methods to ensure consistency and accuracy in performance evaluations. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 37 | Establish detailed and unified job description standards, introduce job requirement analysis tools or systems to facilitate accurate matching of recruitment needs and actual positions, reducing failure rates. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 38 | Regularly update and review job descriptions to ensure alignment with organizational development and talent needs, enhancing efficiency and accuracy in job appointments. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 39 | Establish a data system conducive to scientifically formulating compensation and benefits policies to ensure fairness in benefits and enhance employee satisfaction. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 40 | Develop unified compensation and benefits standards and processes to ensure policy transparency and consistency, preventing unfair practices and improving employee acceptance and satisfaction with benefits policies. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **The application of big data technology needs to be strengthened** | | | | | | | | |
| 41 | Introducing big data analytics platforms or tools to extract talent insights and predictive analytics from vast amounts of data helps identify potential high-value talents. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 42 | Integrating data from various sources facilitates comprehensive talent information integration and exploration. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 43 | Utilizing big data analytics technology for intelligent candidate screening and matching enhances recruitment precision and efficiency. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 44 | Implementing data-driven recruitment decision strategies analyzes recruitment data to optimize processes and resource allocation, reducing recruitment cycles and costs. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 45 | Providing personalized training recommendations and course suggestions based on employees' skills and career development needs using big data analysis. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 46 | Analyzing training effectiveness and employee performance data to adjust and optimize personalized training plans maximizes training resource utilization and significantly improves training effectiveness. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 47 | Using big data technology to analyze multidimensional employee performance data and trends provides objective, accurate performance evaluations and recommendations. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 48 | Establishing real-time data monitoring and feedback mechanisms enables managers to track and adjust | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | performance evaluation processes promptly, ensuring fairness and transparency. | | | | | | | | |
| 49 | Introducing intelligent job demand analysis tools combined with big data analysis identifies and forecasts future job demand trends, enhancing the scientific accuracy and precision of job appointment decisions. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 50 | Implementing data-driven job matching automates recommending the best-matched candidates based on job requirements and employee skill characteristics, optimizing job appointment efficiency and quality. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 51 | Analyzing compensation data and employee benefit preferences using big data analysis tools to formulate scientifically-based compensation and benefits policies improves policy accuracy and employee satisfaction. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 52 | Establishing dynamic adjustment mechanisms monitors the execution effectiveness and employee feedback of compensation and benefits policies through big data analysis, enabling timely strategy adjustments to maintain effectiveness and adaptability. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **The application of information technology needs to be deepened** | | | | | | | | |
| 53 | Implementing comprehensive human resources information management ensures support for multiple data sources and real-time updates, enhancing efficiency and accuracy in information management. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 54 | Deploying a complete recruitment management system integrates various online resources to improve recruitment efficiency and candidate experience. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 55 | Introducing artificial intelligence and big data analytics automate candidate screening and matching, reducing manual operations and enhancing the scientific accuracy and precision of recruitment decisions. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 56 | Implementing intelligent employee learning management integrates employee skill profiles and career development plans to provide personalized training needs analysis and course recommendations. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 57 | Strengthen staff information literacy training, improve staff information technology level. | 1 | 0 | 1 | 1 | 1 | 5 | 0.8 | Modify |
| 58 | Establishing a performance evaluation management system that supports diverse evaluation methods and customized evaluation criteria improves the accuracy and timeliness of evaluation data. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 59 | Using big data technology to analyze employee performance data identifies trends and optimization suggestions, enhancing the objectivity and scientific nature of the evaluation process. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 60 | Implementing intelligent talent management combines big data analytics to automatically match the best candidates for different positions, enhancing the scientific accuracy and precision of recruitment decisions. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 61 | Using intelligent analysis tools to quickly and accurately understand and respond to recruitment needs optimizes recruitment processes and reduces Traditional Chinese Medicinecosts. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 62 | Implementing integrated compensation and benefits management supports various benefit schemes and flexible benefit options, enhancing the scientific nature of | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | compensation and benefits policies and employee satisfaction. | | | | | | | | |
| 63 | Introducing intelligent compensation analysis tools optimizes compensation based on data-driven decisions, increasing organizational attractiveness and retention rates for talent. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **Database technology needs to be improved** | | | | | | | | |
| 64 | Redesign and optimize the database system to improve data storage efficiency and query speed. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 65 | Introduce caching mechanisms and optimize indexing to reduce data retrieval time, enhancing real-time information management efficiency. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 66 | Develop customized recruitment modules to allow quick configuration and adjustment of recruitment processes to meet changing recruitment needs and data growth. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 67 | Implement comprehensive learning management to support recording and managing various forms of training. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 68 | Conduct in-depth analysis of training data through data analysis tools to evaluate training effectiveness and optimize resource allocation. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 69 | Update performance evaluation systems to support customized evaluation metrics and scoring criteria, adapting to specific needs of different departments and positions. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 70 | Introduce flexible evaluation modules to allow adjustment and optimization of evaluation processes, enhancing fairness and accuracy of evaluation results. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 71 | Unified job description and position requirement management to ensure integrity and consistency in information input and updates. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 72 | Implement automated data validation and audit | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | mechanisms to promptly identify and correct inaccuracies, improving the scientific accuracy and precision of hiring decisions. | | | | | | | | |
| 73 | Strengthen security measures of the compensation and benefits database, including data encryption, access control, and real-time monitoring. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 74 | Implement regular data backup and recovery strategies to mitigate risks of accidental data loss or damage, enhancing reliability of compensation and benefits management and employee trust. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **The application of artificial intelligence technology needs to be enhanced** | | | | | | | | |
| 75 | Introducing artificial intelligence and machine learning algorithms to analyze talent information in big data, extract key talent characteristics and trend analysis, supporting | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | talent prediction and strategic planning. | | | | | | | | |
| 76 | Introducing intelligent talent analysis tools, integrating natural language processing (NLP) and data mining technology, automating the identification and evaluation process of key talents. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 77 | Implementing intelligent personnel recruitment management to achieve automatic resume screening and smart matching of candidates, improving recruitment efficiency and accuracy. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 78 | Developing machine learning-based recruitment recommendation engines to automatically recommend the best-matched candidates based on job requirements and candidate skills and experience. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 79 | Implementing intelligent learning management to personalize recommendations for suitable training courses | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | and learning paths based on employees' learning history, interests, and abilities. | | | | | | | | |
| 80 | Combining data analysis to continuously optimize learning content and resource allocation, enhancing training effectiveness and employee development quality. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 81 | Introducing artificial intelligence algorithms to analyze performance data, identify and predict performance patterns, uncover hidden performance trends, and associated factors. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 82 | Using machine learning technology to establish personalized performance evaluation models, supporting fair evaluations across departments and positions, and providing real-time feedback and improvement suggestions. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 83 | Introducing intelligent job demand analysis tools to automatically match job requirements with candidate skills | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | and experience using big data and machine learning. | | | | | | | | |
| 84 | Combining data mining technology to analyze historical recruitment data and successful cases, optimizing the recruitment decision-making process to enhance scientific accuracy and precision. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 85 | Introducing intelligent compensation management, combining machine learning and predictive analytics to automatically identify salary inequalities and potential welfare optimization opportunities. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 86 | Introducing intelligent compensation adjustment tools to automatically recommend fair and reasonable salary adjustment plans based on performance data, enhancing employee satisfaction and system accuracy. | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **Part 3: The factors influencing Traditional Chinese Medicine for Chinese Universities in Sichuan** | | | | | | | | |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | **Personnel Information Management** | | | | | | | | |
| 87 | Unified data management standards | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 88 | Complete data storage | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 89 | Accurate data recording | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 90 | Smooth data sharing | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 91 | Secure data management | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **Personnel Recruitment Management** | | | | | | | | |
| 92 | Personalized recruitment process | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 93 | Intelligent recruitment strategies | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 94 | Unified data storage management | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 95 | Automated recruitment process implementation | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 96 | Intelligent candidate matching and screening | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | **Personnel Development Management** | | | | | | | | |
| 97 | Investment in information technology resources | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 98 | Identification of training needs | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 99 | Personalized development of training plans | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 100 | Reasonable allocation of resources | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 101 | Targeted guidance | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **Performance Assessment Management** | | | | | | | | |
| 102 | Intelligent performance assessment | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 103 | Accurate data management | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 104 | In-depth analysis of performance data | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 105 | Unified assessment standards | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 106 | Sound feedback mechanism | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| No. | Item | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | | | |
| | **Internal Promotion Management** | | | | | | | | |
| 107 | Unified hiring criteria | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 108 | Complete data information | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 109 | Intelligent job matching | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 110 | Transparent decision-making process | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 111 | Clear promotion channels | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | **Compensation and Benefits Management** | | | | | | | | |
| 112 | Centralized unified data management | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 113 | Intelligent analysis of compensation and benefits | 1 | 0 | 1 | 1 | 1 | 5 | 0.8 | Modify |
| 114 | Personalized incentive measures | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| 115 | Scientific policy making | 1 | 0 | 1 | 1 | 1 | 5 | 0.8 | Modify |
| 116 | Fair compensation and benefits system | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

**Evaluation results of IOC for the CIPP Expert Evaluation Form**

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | | | |
| Context Evaluation | Background and Purpose | Do you agree that the model has a clear background and purpose, and can it fully and truly grasp the reality of university human resource management? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree with the role of Personnel Information Management, Personnel Recruitment Management, Personnel Development Management, Performance Assessment Management, Internal Promotion Management, and Compensation and Benefits Management in this model? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | Traditional Chinese Medicine body | Do you agree that the design of this model fully considers the roles of the 6 aspects of management in university human resource management? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree that this model takes into account the needs and expectations of all stakeholders involved | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | | | |
| Context Evaluation | Traditional Chinese Medicine body | in university human resource management? | | | | | | | | |
| | | Do you agree that this model effectively reflects the roles and participation levels of each subject in university human resource management? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| Input Evaluation | Problem Analysis | Do you agree that the problems existing in university Traditional Chinese Medicinehave been fully considered? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree that the questions adequately reflect the diverse perspectives of human resource personnel, managers, university administrators, and research experts? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | Analysis of influencing factors | Do you agree that the summarized influencing factors adequately take into account the complexity and diversity of university human resource management? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | | | |
| | | Do you agree that decision support system model for Traditional Chinese Medicine play a key role in improving the quality of university human resource management? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| Process Evaluation | Evaluation mechanism | Do you agree that the evaluation mechanism comprehensively covers all key links and important areas? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree that the evaluation results of this model can be used to guide management practice and policy formulation? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree that the model can adapt to different management styles, needs and technology conditions? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | | | |
| | Feasibility of Model Implementation | Do you agree that this model is highly operable and usable? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree with the design of the relationships between the various elements in the decision support system model for human resource management? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| Product Evaluation | Model Feedback and Improvement | Do you agree that the feedback mechanism designed in this model is flexible and practical enough? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree that the adjustment and improvement design of this model can improve its applicability? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree that the results from expert survey questionnaire are highly consistent with the literature review results for Objective 1, increasing confidence in the success of the model? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

| CIPP Evaluation | Evaluation Indicators | Specific Evaluation Contents | Expert | | | | | Total | IOC | Result |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | | | |
| | | Do you agree that the application of decision support system model for university Traditional Chinese Medicine can help reduce the probability of problems in university human resource management? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |
| | | Do you agree that the application of decision support system model for university Traditional Chinese Medicine can effectively improve university Traditional Chinese Medicine effectiveness? | 1 | 1 | 1 | 1 | 1 | 5 | 1 | Valid |

# Appendix E

# Certificate of English

BANSOMDEJCHAOPRAYA
RAJABHAT UNIVERSITY

This is to certify that

***Mr. Li Rul***

Achieved BSRU English Proficiency Test (BSRU-TEP) level

**C1**

Given on 9th October 2022

(Assistant Professor Dr Kulsirin Aphiratvoradej)

Director

# Appendix F

# The Document for Acceptance Research

# Research Profile

**Name-Surname:** **LI RUI**

**Birthday:** 9 12, 1985

**Place:** yunnan, China

**Educational background:**

- Doctor of Philosophy Program in Digital Technology Management for Education, Bansomdejchaopraya Rajabhat University, in 2024
- Master of siam University, in2013
- Bachelor of siam University, in 2010

**Work experience:**

- huang jia yiquan hospital, from 2017 to the now

**Office Location:**

Yunnan huang jia yiquan hospital, yun nan Province, China

**Current Contact Location:**

No. 286, chuncheng Road, Yunnan huang jia yiquan hospital, kunming City, yunnan Province, China